

NUCLEAR REGULATORY COMMISSION ISSUANCES

OPINIONS AND DECISIONS OF THE NUCLEAR REGULATORY COMMISSION WITH SELECTED ORDERS

July 1, 1990 – December 31, 1990

Volume 32
Pages 1 – 496



Prepared by the
Division of Freedom of Information and Publications Services
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, DC 20555
(301/492-8925)

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PREFACE

This is the thirty-second volume of issuances (1 - 496) of the Nuclear Regulatory Commission and its Atomic Safety and Licensing Appeal Boards, Atomic Safety and Licensing Boards, and Administrative Law Judges. It covers the period from July 1, 1990 to December 31, 1990.

Atomic Safety and Licensing Boards are authorized by Section 191 of the Atomic Energy Act of 1954. These Boards, comprised of three members conduct adjudicatory hearings on applications to construct and operate nuclear power plants and related facilities and issue initial decisions which, subject to internal review and appellate procedures, become the final Commission action with respect to those applications. Boards are drawn from the Atomic Safety and Licensing Board Panel, comprised of lawyers, nuclear physicists and engineers, environmentalists, chemists, and economists. The Atomic Energy Commission first established Licensing Boards in 1962 and the Panel in 1967.

Beginning in 1969, the Atomic Energy Commission authorized Atomic Safety and Licensing Appeal Boards to exercise the authority and perform the review functions which would otherwise have been exercised and performed by the Commission in facility licensing proceedings. In 1972, that Commission created an Appeal Panel, from which are drawn the Appeal Boards assigned to each licensing proceeding. The functions performed by both Appeal Boards and Licensing Boards were transferred to the Nuclear Regulatory Commission by the Energy Reorganization Act of 1974. Appeal Boards represent the final level in the administrative adjudicatory process to which parties may appeal. Parties, however, are permitted to seek discretionary Commission review of certain board rulings. The Commission also may decide to review, on its own motion, various decisions or actions of Appeal Boards.

The Commission also has Administrative Law Judges appointed pursuant to the Administrative Procedure Act, who preside over proceedings as directed by the Commission.

The hardbound edition of the Nuclear Regulatory Commission Issuances is a final compilation of the monthly issuances. It includes all of the legal precedents for the agency within a six-month period. Any opinions, decisions, denials, memoranda and orders of the Commission inadvertently omitted from the monthly softbounds and any corrections submitted by the NRC legal staff to the printed softbound issuances are contained in the hardbound edition. Cross references in the text and indexes are to the NRCI page numbers which are the same as the page numbers in this publication.

Issuances are referred to as follows: Commission--CLI, Atomic Safety and Licensing Appeal Boards--ALAB, Atomic Safety and Licensing Boards--LBP, Administrative Law Judges--ALJ, Directors' Decisions--DD, and Denial of Petitions for Rulemaking--DPRM.

The summaries and headnotes preceding the opinions reported herein are not to be deemed a part of those opinions or to have any independent legal significance.

CONTENTS

Issuances of the Nuclear Regulatory Commission

LONG ISLAND LIGHTING COMPANY (Shoreham Nuclear Power Station, Unit 1) Docket 50-322 Memorandum and Order, CLI-90-8, October 17, 1990	201
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, <i>et al.</i> (Seabrook Station, Units 1 and 2) Dockets 50-443-OL, 50-444-OL Order, CLI-90-10, October 26, 1990	218
STATE OF ILLINOIS Docket PR 90-1-MISC Memorandum and Order, CLI-90-9, October 17, 1990	210
Memorandum and Order, CLI-90-11, November 8, 1990	333
VERMONT YANKEE NUCLEAR POWER CORPORATION (Vermont Yankee Nuclear Power Station) Docket 50-271-OLA Memorandum and Order, CLI-90-7, September 21, 1990	129

Issuances of the Atomic Safety and Licensing Appeal Boards

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, <i>et al.</i> (Seabrook Station, Units 1 and 2) Dockets 50-443-OL, 50-444-OL Decision, ALAB-934, July 9, 1990	1
Decision, ALAB-935, August 20, 1990	57
Decision, ALAB-936, August 20, 1990	75
Decision, ALAB-937, September 18, 1990	135
Memorandum and Order Regarding Referred Questions, ALAB-939, September 28, 1990	165
Decision, ALAB-941, November 21, 1990	337
Decision, ALAB-942, December 21, 1990	395
Dockets 50-443-OL-1, 50-444-OL-1 Memorandum and Order, ALAB-940, October 18, 1990	225
VERMONT YANKEE NUCLEAR POWER CORPORATION (Vermont Yankee Nuclear Power Station) Docket 50-271-OLA Notice, ALAB-938, September 21, 1990	154

Issuances of the Atomic Safety and Licensing Boards

ALL CHEMICAL ISOTOPE ENRICHMENT, INC.	
Dockets 50-603, 50-604	
Memorandum and Order, LBP-90-26, July 24, 1990	30
CLEVELAND ELECTRIC ILLUMINATING COMPANY, et al.	
(Perry Nuclear Power Plant, Unit 1)	
Docket 50-440-OLA-2	
Memorandum and Order, LBP-90-25, July 23, 1990	21
Initial Decision, LBP-90-39, November 1, 1990	368
COMMONWEALTH EDISON COMPANY	
(Quad Cities Nuclear Power Station)	
Dockets 50-254-OM, 50-265-OM	
Memorandum and Order, LBP-90-28, August 1, 1990	85
COMMONWEALTH EDISON COMPANY, et al.	
(Carroll County Nuclear Station, Units 1 and 2)	
Dockets 50-599-ESR, 50-600-ESR	
Order Approving Withdrawal and Terminating Proceeding, LBP-90-37, October 31, 1990	270
CURATORS OF THE UNIVERSITY OF MISSOURI	
Dockets 70-00270, 30-02278-MLA	
Memorandum and Order, LBP-90-23, July 9, 1990	7
Memorandum and Order, LBP-90-27, July 30, 1990	40
Memorandum and Order, LBP-90-30, August 24, 1990	95
Memorandum and Order, LBP-90-33, October 3, 1990	245
Memorandum and Order, LBP-90-34, October 15, 1990	253
Memorandum and Order, LBP-90-35, October 20, 1990	259
Memorandum and Order, LBP-90-38, November 1, 1990	359
Memorandum and Order, LBP-90-41, November 16, 1990	380
Memorandum and Order, LBP-90-45, December 19, 1990	449
FLORIDA POWER & LIGHT COMPANY	
(Turkey Point Nuclear Generating Plant, Units 3 and 4)	
Dockets 50-250-OLA-5, 50-251-OLA-5	
Memorandum and Order, LBP-90-24, July 18, 1990	12
Memorandum and Order, LBP-90-32, September 25, 1990	181
GEORGIA POWER COMPANY, et al.	
(Vogtle Electric Generating Plant, Units 1 and 2)	
Dockets 50-424-OLA, 50-425-OLA	
Memorandum and Order, LBP-90-29, August 16, 1990	89

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, <i>et al.</i>	
(Seabrook Station, Units 1 and 2)	
Dockets 50-443-OLR, 50-444-OLR	
Memorandum and Order, LBP-90-44, December 18, 1990	433
Dockets 50-443-OLR-3, 50-444-OLR-3	
Memorandum and Order, LBP-90-40, November 7, 1990	376
ROBERT L. DICKHERBER	
Docket 55-5043-SC	
Memorandum and Order, LBP-90-28, August 1, 1990	85
ST. MARY MEDICAL CENTER—HOBART and	
ST. MARY MEDICAL CENTER—GARY	
Dockets 030-31379-OM, 030-01615-OM	
Memorandum and Order, LBP-90-36, October 31, 1990	267
Memorandum and Order, LBP-90-46, December 26, 1990	463
TULSA GAMMA RAY, INC.	
Docket 30-12319-CivP	
Notice of Hearing and Other Matters,	
LBP-90-31, August 29, 1990	107
Prehearing Conference Memorandum and Order,	
LBP-90-42, October 29, 1990	387
Memorandum and Order, LBP-90-43, November 15, 1990	390

Issuances of Directors' Decisions

ARIZONA PUBLIC SERVICE COMPANY, <i>et al.</i>	
(Palo Verde Nuclear Generating Station, Units 1, 2, and 3)	
Dockets 50-528, 50-529, and 50-530	
Partial Director's Decision, DD-90-7, October 31, 1990	273
CLEVELAND ELECTRIC ILLUMINATING COMPANY, <i>et al.</i>	
(Perry Nuclear Power Plant, Unit 1)	
Docket 50-440	
Director's Decision, DD-90-6, September 25, 1990	195
LONG ISLAND LIGHTING COMPANY	
(Shoreham Nuclear Power Station, Unit 1)	
Docket 50-322	
Director's Decision, DD-90-8, December 20, 1990	469
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, <i>et al.</i>	
(Seabrook Station, Unit 1)	
Docket 50-443	
Director's Decision, DD-90-4, July 9, 1990	45
Director's Decision, DD-90-5, August 31, 1990	109

Issuances of Denials of Petitions for Rulemaking

CITIZENS TASK FORCE OF CHAPEL HILL, *et al.*

Dockets PRM 50-31, PRM 50-45, PRM 50-46

Denial of Petition for Rulemaking,

DPRM-90-1, February 13, 1990 281

MARVIN LEWIS

Docket PRM 50-52

Denial of Petition for Rulemaking,

DPRM-90-3, July 17, 1990 326

SIERRA CLUB

Docket PRM 40-23

Denial of Petition for Rulemaking,

DPRM-90-2, June 8, 1990 317

Indexes

Case Name Index	I-1
Legal Citations Index	I-5
Cases	I-5
Regulations	I-13
Statutes	I-23
Subject Index	I-25
Facility Index	I-39

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Willber

In the Matter of

Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

July 9, 1990

The Appeal Board affirms that portion of the Licensing Board decision in LBP-90-12, 31 NRC 427 (1990), that dismissed intervenor Seacoast Anti-Pollution League from the proceeding being conducted by the Licensing Board on certain remanded issues.

RULES OF PRACTICE: RIGHT TO PARTICIPATE; WITHDRAWAL OF INTERVENOR

Notwithstanding a subsequent endeavor to preserve appellate rights, an intervenor's announcement of its intention to walk away from issues on remand before a licensing board because of disagreement over the effect of the remand upon full-power license authorization forecloses any entitlement that it may have had to participate on those issues by way of a later appeal.

RULES OF PRACTICE: DISMISSAL OF PARTIES

The Appeal Board's affirmance of the dismissal of a party relating to the issues arising in one major segment of a case does not affect that party's entitlement to participate in the adjudication of *other* issues that are now pending or might arise in other portions of the case.

APPEARANCES

Robert A. Backus, Manchester, New Hampshire, for intervenor Seacoast Anti-Pollution League.

Thomas G. Dignan, Jr., George H. Lewald, Kathryn A. Selleck, and Jeffrey P. Trout, Boston, Massachusetts, for the applicants Public Service Company of New Hampshire, *et al.*

Edwin J. Reis and Richard G. Bachmann for the Nuclear Regulatory Commission staff.

DECISION

Before us is the appeal of the intervenor Seacoast Anti-Pollution League (SAPL) from so much of the Licensing Board's May 3, 1990 memorandum and order as dismissed it from the proceeding being conducted by the Board on certain remanded issues.¹ That action was based on the Licensing Board's view that, in effect at least, SAPL had sought leave to withdraw. For the reasons that follow, we affirm.

A. The facts underlying the controversy are summarized in ALAB-933, in which we concluded that this appeal would lie.² As there noted, on January 11, 1990, the Licensing Board issued an order in which it sought the advice of the parties respecting how to proceed in its consideration of four issues that we remanded to the Board in ALAB-924.³ Responding to that order in a letter, SAPL counsel informed the Board that it "could not expect SAPL to have the least interest whatsoever in any further proceedings before the Board, given the

¹LBP-90-12, 31 NRC 427. In ALAB-933, 31 NRC 491 (1990), we recently determined that that portion of LBP-90-12, but no other, is subject to appeal at this time.

²See *supra* note 1.

³30 NRC 331 (1989). Those issues are identified in ALAB-933. All involved aspects of the New Hampshire Radiological Emergency Response Plan applicable to the portion of the Seabrook plume exposure pathway emergency planning zone (EPZ) located in that State.

fact that the Board has decided the issue in the case by directing the 'immediate authorization' for a full power nuclear license."⁴

SAPL's pronouncement prompted a motion from the applicants seeking to have the Board dismiss as abandoned three of the issues remanded in ALAB-924 in light of SAPL's sponsorship and purported abandonment of them.⁵ Answering the motion, SAPL stated that it had never manifested an intent to "abandon" the remanded issues but, rather, had indicated in the January 19 letter simply that it did not "intend to participate in litigation on any issues that are unrelated to licensing."⁶ Asserting that the Board had made clear that it considered the remanded issues "irrelevant to licensing" because they are not "safety significant," SAPL maintained that, so long as that determination remained in effect, it had "no reason to participate in further proceedings before the Board."⁷

The Licensing Board took this explanation of SAPL's purpose to mean that, once the Commission approved the issuance of a full-power license for Seabrook, there would no longer be any possible issue "related to licensing" on which SAPL might participate.⁸ That approval having occurred on March 1,⁹ and the license having issued shortly thereafter (on March 15),¹⁰ the Board concluded that SAPL had effectively elected to withdraw and, accordingly, dismissed the intervenor from the proceeding before it.¹¹

B. In its appellate brief, SAPL insists that it neither sought leave to withdraw from the proceeding nor abandoned the remanded issues. To the contrary, essentially repeating what it said to the Licensing Board, SAPL tells us that, depending upon the disposition made of those issues by the Board below, it may well wish to pursue them before "other tribunals" (i.e., "the Appeal Board, the Commission or perhaps even a reviewing court").¹²

⁴ Letter from Robert A. Backus to Administrative Judge Ivan W. Smith *et al.* (January 19, 1990) at 1. Mr. Backus was referring to the Board's November 9, 1989 decision on, *inter alia*, the radiological emergency response plans for the Massachusetts portion of the Seabrook EPZ, which decision concluded with an authorization for the issuance of a full-power operating license. See LBP-89-32, 30 NRC 375, 651 (1989), *appeals pending*. That authorization required Commission endorsement upon an "immediate effectiveness" review (see 10 C.F.R. § 2.764), which was forthcoming on March 1, 1990. See CLI-90-3, 31 NRC 219 (1990), *petitions for review pending sub nom. Massachusetts v. NRC*, Nos. 90-1132, 90-1218 (D.C. Cir. filed March 7 and April 27, 1990).

⁵ See Applicants' Motion to Dismiss Abandoned Remand Issues (January 26, 1990) at 3-4. The applicants pointed to SAPL contentions 15, 18, and 25 as the genesis of those issues. *Id.* at 1-2.

⁶ Seacoast Anti-Pollution League's Objection to Applicants' Motion of January 26, 1990 (February 1, 1990) at 1.

⁷ *Id.* at 1-2. As sources of the view it attributed to the Licensing Board, SAPL cited both LBP-89-32, 30 NRC 375, and LBP-89-33, 30 NRC 656 (1989), *appeals pending*, a subsequent decision in which the Licensing Board gave its reasons why the full-power license could issue despite the pendency of the remanded issues.

⁸ LBP-90-12, 31 NRC at 429.

⁹ See *supra* note 4.

¹⁰ See letter from Mitzi A. Young, staff counsel, to members of this Board (April 26, 1990) at 2.

¹¹ LBP-90-12, 31 NRC at 429-30.

¹² Brief of Seacoast Anti-Pollution League on Appeal of LBP-90-12 (June 15, 1990) at 2.

Any endeavor along that line before this Board would, however, be unsuccessful. We have made abundantly clear our view that “[a]n administrative hearing would be a meaningless charade if those with ample opportunity to participate were allowed to stand idly by and then, nevertheless, demand a replay when they do not like the result.”¹³ The force of that axiomatic proposition is not affected by SAPL’s apparent disagreement with the Licensing Board respecting the significance of the remanded issues with regard to an authorization of full-power operation. As we also long ago observed, “intervention in an NRC adjudicatory proceeding does not carry with it a license to step into and out of the consideration of a particular issue at will.”¹⁴ Or, as stated another way, “[p]arties may not dart in and out of proceedings on their own terms and at their convenience and still expect to enjoy the benefits of full participation without the responsibilities.”¹⁵

In short, insofar as the issues remanded in ALAB-924 are concerned, the governing principle comes down to this: One who plays “dog in the manger” before the Licensing Board may not bark on appeal. This being so, the result reached below was correct. Whether, as the Board believed, SAPL had sought leave to withdraw from the proceeding that the Board was conducting on the remanded issues is not of crucial significance. Nor is it important whether, as the applicants claimed, SAPL formally “abandoned” those issues. The dispositive fact is that SAPL announced in unmistakable terms its intention to walk away from the remanded issues before the Licensing Board. SAPL’s unavailing endeavor to preserve appellate rights notwithstanding, under settled principles that announcement brought to a conclusion any entitlement it may have had to participate on those issues.

We thus *affirm* SAPL’s dismissal from the proceeding *on the remanded issues*. To avoid any possible misunderstanding as to the impact of this affirmance, it must be stressed that we neither need nor do pass at this time on the question of the effect that SAPL’s dismissal might have upon the disposition of the remanded issues. As we determined in ALAB-933, any such question is not as yet ripe for appellate review.¹⁶

¹³ *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-583, 11 NRC 447, 448 (1980) (footnote omitted) (holding that the failure of the Governor of California to participate before the Licensing Board on certain issues precluded his appeal from that Board’s disposition of those issues).

¹⁴ *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-288, 2 NRC 390, 393 (1975) (holding that an intervenor had forfeited any further entitlement to party status with respect to the adjudication of a particular issue because of his failure to participate in the proceedings on remand of that issue).

¹⁵ *Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-691, 16 NRC 897, 907 (1982) (dismissing the appeal of an intervenor for the failure to participate before the Licensing Board), *sua sponte review declined*, 17 NRC 69 (1983). See also *Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-851, 24 NRC 529, 530-31 (1986); *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-244, 8 AEC 244, 251 (1974).

¹⁶ See *supra* note 1.

Similarly, the conclusion we reach today has no bearing upon the matter of SAPL's entitlement to participate in the adjudication of any *other* issues that are now pending or might arise prior to the falling of the final curtain in the overall Seabrook operating license proceeding. Manifestly, the SAPL pronouncements that prompted the Licensing Board's dismissal action were confined to the remanded issues. And the Board's declaration carries no hint that it was following the lead of the Commission in *Shoreham* and imposing the sanction of dismissal from the entire proceeding because of SAPL's nonparticipation on the remanded issues.¹⁷ Rather, as we have seen, the Board left no doubt that it deemed the dismissal to constitute the grant of relief that was sought by SAPL itself.¹⁸

It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

¹⁷ See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-89-2, 29 NRC 211 (1989).

¹⁸ In ALAB-933, 31 NRC at 496-97, we concluded that the appeal at hand was timely because it terminated SAPL's right to participate in the proceeding on the remanded issues. Although we did not explicitly so state, undergirding that conclusion was the premise that this proceeding represented a major segment of the case. That premise rested in turn on the fact that, at the time (as now), the remand was essentially all that the Licensing Board had before it.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(TRUMP-S Project)
(Byproduct License
No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

July 9, 1990

The Presiding Officer denies Intervenor's motion for directed certification because they failed to show a *prima facie* case that there were special circumstances requiring the waiving of the procedural regulation, 10 C.F.R. § 2.1205(l), that permits the Staff to issue licenses during the pendency of special materials cases.

RULES OF PRACTICE: SUBPART L; EXCEPTIONS OR WAIVERS

Intervenor has the burden of proof to establish a *prima facie* case that there are special circumstances justifying a waiver of a Commission regulation. They cannot carry their burden through mere assertion, without accompanying affidavits.

RULES OF PRACTICE: SUBPART L; ALLEGED RIGHT TO PRIOR HEARING

An alleged right to a prior hearing does not, by itself, provide grounds for an exception to or waiver of 10 C.F.R. § 2.1205(l), which permits the Staff of the Commission to issue license amendments during the pendency of a proceeding. Furthermore, there is no regulation requiring the Staff to issue "positive findings" as a prerequisite to issuing an amendment. There must, therefore, be an evidentiary showing of why it is inappropriate in a particular case that the Staff take the authorized action before an exception or waiver might be granted.

MEMORANDUM AND ORDER (Intervenors' Motion for Directed Certification)

"Petitioners'¹ Motion for Certification of Question" (Motion), June 25, 1990, has been responded to in "Licensee's² Response in Opposition . . ." (Response), July 3, 1990.

I. BACKGROUND

Prior to filing the Motion, Petitioners had been granted status as Intervenors. Before they were formally admitted, Intervenors had sought a "stay" (an order setting aside the contested amendments to Licensee's license) on the grounds that they were entitled to a *prior* hearing: that is, that they were entitled under the Atomic Energy Act to challenge the issuance of a special materials license and to have a hearing *before* the license became effective. LBP-90-18, 31 NRC 559, 574 (1990). With respect to that argument, I ruled:

I find that Licensee is correct in arguing that the Commission's regulations and prior practice do not appear to contemplate prior notice or hearings in all cases. 10 C.F.R. §§ 2.103, 2.104, 2.1205(l); *West Chicago, supra*, 701 F.2d at 638, n.3. Hence, Petitioners' argument is a challenge to the Commission's regulations and — even if it may have merit

¹ Petitioners are the Missouri Coalition for the Environment, the Mid-Missouri Nuclear Weapons Freeze, Inc., and the Physicians for Social Responsibility/Mid-Missouri Chapter.

² Licensee is the University of Missouri, which holds its license through its Curators. Its applications for license amendments were granted before the petition for a hearing was filed.

— it is beyond my purview. 10 C.F.R. § 2.1239(a).³ [Footnote in original; moved from improper placement.]

The only open avenue when a regulation is challenged is 10 C.F.R. § 2.1239(b), which provides for certification because “special circumstances exist.” If Petitioners choose to use this avenue, then they should file promptly.

A fuller explication of my prior logic is that Intervenors were seeking a ruling invalidating a license issued before this hearing began. They argued that they had a right to a hearing and that a license whose issuance is challenged cannot remain effective during the hearing because the hearing would lose its meaning. However, a Commission regulation, 10 C.F.R. § 2.1205(l), permits the Staff of the Commission to issue a license even after a request for a hearing is filed. Hence, it follows that issuance of a license before a hearing is completed is expressly authorized by the regulations and, as a result, it would also be inconsistent with the principle embodied in the regulations to invalidate a license issued before the hearing was requested.

II. LEGAL GROUNDS FOR THE MOTION

In the pending Motion, Petitioners — who are now Intervenors — seek a waiver or exception to 10 C.F.R. § 2.1205(l), which states that:

The filing or granting of a request for a hearing or petition for leave to intervene need not delay NRC staff action regarding an application for a licensing action covered by this subpart.

Presumably, if this waiver were granted, I would then be free to determine whether to grant Intervenors’ request that I suspend the Licensee’s already-issued license until after this proceeding is concluded.

The sole ground for which an exception can be granted is that “special circumstances exist so that the application of the regulation to the subject matter of the proceeding would not serve the purposes for which the regulation was adopted.” 10 C.F.R. § 2.1239(b). The standard for proceeding with a request for an exception is that I must determine whether a *prima facie* showing of “special circumstances” has been made. If so, I must certify the matter to the Commission. *Id.* As with other motions, the proponent of the order to certify — in this case, Intervenors — have the burden of proof (concerning the existence of a *prima facie* case). 10 C.F.R. § 2.1237(b).

³ Although it is not entirely clear from the face of the regulation whether the procedural rules of the Commission are covered by the phrase, “any regulation of the Commission issued in its program for the licensing and regulation of . . . special nuclear material,” I conclude that it is appropriate to prohibit any challenge to a procedural regulation that affects the issuance of special nuclear material licenses.

III. DISCUSSION OF THE MERITS

A. Prior Hearing and Staff's "Positive Conclusion"

In their first argument Intervenor's seem to combine two ideas by stating that the purpose of the regulations is not being served because, in essence: (1) there has not been a hearing prior to the issuance of the license, and (2) the Staff has not reached "a positive conclusion about the safety and environmental consequences" of issuing the license. They cite the Statement of Considerations for Subpart L, 54 Fed. Reg. at 8273, which is part of the history of the adoption of the regulations and may therefore appropriately be used to help to interpret the regulations.

Although Intervenor's do not cite a particular portion of the Statement of Considerations, the first relevant portion appears to contradict ground (1), for it says:

[T]he Commission . . . concluded it would not require the completion of any requested hearing before the NRC staff could take the licensing action requested by the applicant. . . .

The second relevant portion appears to be the one on which Intervenor's rely for ground (2); it says:

[I]n the face of a hearing request it [is] . . . permissible for the staff to proceed to act in a particular proceeding if, in its judgment, the action was appropriate. As indicated previously, the Commission certainly contemplates that when the staff is able to reach a *positive conclusion about the safety and environmental consequences of a proposed licensing request*, it will take action despite a pending hearing request. The determination about whether or not it is appropriate to proceed with a particular licensing action prior to the conclusion of the proceeding before the presiding officer is left to the NRC staff, based on its technical and administrative judgment. [Emphasis added to reflect Intervenor's concerns.]

Apparently, Intervenor's would have us rule that there are special circumstances because the Staff has not made any formal finding⁴ concerning their "positive conclusion about the safety and environmental consequences of a proposed licensing request." However, the Commission went on to state that the determination of appropriateness is the Staff's, and they did not suggest in the Statement of Considerations or enact in the regulations any requirement for a

⁴ My review of the license amendments the Staff issued persuades me that there were no accompanying findings whatsoever. License No. 24-00513-32, Amendment No. 74; and License No. SNM-247, Amendment No. 12. See also letter from Colleen Woodhead, Counsel for NRC Staff, to me, June 21, 1990, explaining that

The Staff reviewed the University's applications according to the guidance in Regulatory Guide 10.3. No safety evaluation report or environmental assessment was written. The hearing file consists solely of the two applications and the two amendments described above.

formal finding to support the Staff's determination.⁵ Consequently, I do not find that the absence of a formal positive conclusion is the kind of "special circumstance" that provides the ground for an exception.

B. Special Hazard

Intervenors assert that 10 C.F.R. § 2.1205(l) is "designed for the routine materials handling license amendment, in which the materials involved present no substantial hazard." They cite, without further reference, 52 Fed. Reg. 20,090. After reading all of section "e. *Staff licensing action during pendency of a hearing*," I have failed to find any support for the assertion concerning the intention of the regulation. Furthermore, I agree with Licensee's statement in its Response that Intervenors have not provided any accompanying evidentiary support for their assertion that the materials being used are "extremely hazardous" under the circumstances under which they are being used. Hence, I conclude that there has been no showing of special circumstances relating to the hazard involved in the contested license amendments.⁶

IV. CONCLUSION

Accordingly, I conclude that there has been no *prima facie* showing that the purposes for which 10 C.F.R. § 1205(l) was adopted would not be served in this case.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 9th day of July 1989, ORDERED, that:

Petitioners' Motion for Certification of Question, June 25, 1990, is DENIED.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

⁵Intervenors have not indicated that any requirement for a formal finding exists.

⁶The showing of special circumstances seems, on reflection, to be similar to the requirement for a stay. A slightly weaker showing may be made with respect to the immediacy and irreparability of injury, since the conduct may continue while the motion for certification is pending.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

**Peter B. Bloch, Chair
Dr. George C. Anderson
Elizabeth B. Johnson**

In the Matter of

**Docket Nos. 50-250-OLA-5
50-251-OLA-5
(ASLBP No. 90-602-01-OLA-5)
(Technical Specifications
Replacement)
(Facility Operating License
Nos. DPR-31, DPR-41)**

**FLORIDA POWER & LIGHT
COMPANY
(Turkey Point Nuclear Generating
Plant, Units 3 and 4)**

July 18, 1990

The Board dismisses the sole Intervenor as a party based on changed circumstances. Standing for the Intervenor was based on one member, who was employed within the zone of interest of the plant, but who was dismissed from his job. Given the prior history of the case, in which the sole Intervenor already had the opportunity to show that it had bases for standing additional to that of this one member, the Board did not afford any further opportunity to show new bases for standing. The decision was without prejudice to a motion to reopen should the member demonstrate in his pending Department of Labor action in which that Applicant was responsible for his wrongful discharge from employment.

RULES OF PRACTICE: STANDING; DISMISSAL

When an organization suffers a change of circumstances such that its standing is affected, ordinarily it may demonstrate an alternative ground for standing. However, when the organization already had the opportunity to demonstrate an alternative ground for standing and failed to do so, it will not be afforded a second opportunity. (This rule may not apply, however, to the later stages of a proceeding after extensive litigation has already occurred.)

RULES OF PRACTICE: DISMISSAL; *SUA SPONTE* ISSUE (10 C.F.R. § 2.760a)

When the only participating intervenor is dismissed, a Board may retain jurisdiction to determine whether or not to exercise its authority to make one or more of the pending contentions a *sua sponte* issue because it is an issue important to safety or the environment. 10 C.F.R. § 2.760a. It may ask for a brief on the issue from the remaining parties.

MEMORANDUM AND ORDER (Motion to Dismiss)

This Memorandum addresses a motion to dismiss the sole remaining Intervenor because a change in circumstances has deprived it of the basis for standing. We have decided to grant the motion to dismiss, for reasons we will discuss in this Memorandum, and to request further information from the Staff of the Nuclear Regulatory Commission (Staff) and from Florida Power and Light Company (Applicant) before deciding whether to declare a *sua sponte* issue pursuant to 10 C.F.R. § 2.760a.

Applicant filed a "Motion for Reconsideration and Dismissal" (Motion) on June 22, 1990, to which Intervenor, Nuclear Energy Accountability Project ("NEAP"),¹ filed its "Response of Nuclear Energy Accountability Project" (Response) on July 11, 1990. The Staff filed the "NRC Staff Response to Applicant's Motion for Reconsideration" (Staff Response) on July 12, 1990.

¹ Thomas J. Saporito, who had been a petitioner in this case, attempted to join in the Response. However, he was dismissed from this case in LBP-90-16, 31 NRC at 514. We inadvertently failed to include an ordering paragraph on this subject and will do so in this Order.

I. STANDING AS OF RIGHT

Applicant's Motion is based on a material change of circumstances that has occurred since the March 23, 1990 prehearing conference and which affects the basis for LBP-90-16, 31 NRC 509 (1990) (Standing Decision). In our Standing Decision, we determined that the sole ground for the admission of NEAP as a party was the standing of its officer, Thomas J. Saporito. His standing was based on his employment in the geographical zone of interest of the Turkey Point facility, at the ATI Career Training Center (ATI) in Miami, Florida. However, Mr. Saporito was discharged by ATI on May 10, 1990, and has not presented any other claim to activity that could be a basis for standing.

In its response, NEAP admits that there are changed circumstances that eliminate the basis of standing for NEAP.² The Response asserts that Mr. Saporito is seeking employment wherever he can find it, including within the Miami area; but there is insufficient information with which to consider the job-seeking activity a basis for standing.³

However, NEAP differs from Applicant in its assessment of the consequences of this changed circumstance. It seeks permission to submit additional facts and legal argument that could establish its standing on other grounds.⁴ In the alternative, it asks that we hold the hearing in abeyance pending a determination in an allegedly related Department of Labor Action as to whether or not Applicant was responsible for Mr. Saporito's dismissal by ATI.⁵

However, we find that the facts NEAP would have us address have already been fully litigated, resulting in our denying Mr. Saporito's motion to withdraw as the basis for NEAP's standing. His motion was based on an allegation of intimidation that we considered frivolous and we considered as struck all allegations of intimidation. LBP-90-16, 31 NRC at 538.

Mr. Saporito filed a "Notice of Withdrawal from Proceeding" on April 1, 1990. We read the notice of withdrawal, which included Mr. Saporito's notice that he was withdrawing as the basis for NEAP's standing. The alleged reason for withdrawal was that he was harassed by Applicant. But we were not satisfied with the factual basis for the alleged harassment and we also were concerned that should the motion be granted NEAP would be deprived of its standing. Out of solicitousness for Mr. Saporito, who is not a lawyer, we issued a Memorandum and Order in which we requested further information about the

² Response at 2.

³ *Id.* In the context of this case, we are considering the effect of these changed circumstances at an early stage of litigation, before discovery has commenced. We do not address in this opinion whether or not a change of residence in a more fully litigated case would destroy standing.

⁴ *Id.* at 3.

⁵ *Id.* at 4-7.

alleged harassment and about the standing of NEAP.⁶ Then, after having received NEAP's filing — which included an affidavit that attempted to show that its standing could be based on an individual other than Mr. Saporito — we ruled that NEAP's standing was based solely on Mr. Saporito's standing and stating that "NEAP has already had all the opportunity it needs to establish standing; it may not file any further documents alleging a new basis for standing."⁷

We adhere to our prior rulings. We note that until this time Mr. Thomas J. Saporito, who is not a lawyer, has appeared on behalf of NEAP, as is his right under the procedural regulations. 10 C.F.R. § 2.1215(a). As the representative of NEAP, Mr. Saporito had the full authority and responsibility to represent it, on both technical and procedural matters. He could win or lose the case on complex issues of science, engineering, and law. He also could make arguments that impose the costs of response on opposing parties and the costs of decision on the Nuclear Regulatory Commission. While we have been patient and protective of his needs as a nonlawyer, he has now had all the protection he can properly be afforded.

NEAP has had ample opportunity to demonstrate that it has standing independent of Mr. Saporito, and it has not done so.

II. PERMISSIVE STANDING

In reviewing the record, we have noticed that we never made a clear ruling concerning whether or not NEAP was entitled to discretionary standing, pursuant to its argument that it be permitted discretionary intervention pursuant to *Portland General Electric Co.* (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 612, 614-17 (1976); *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-363, 4 NRC 631 (1976); *Public Service Co. of Oklahoma* (Black Fox Station, Units 1 and 2), ALAB-397, 5 NRC 1143, 1145 (1977); *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1422 (1977).⁸

The test for discretionary intervention is set forth in *Pebble Springs, supra*, 4 NRC at 616, and in the following significant passage, at 617:

As a general matter, however, we would expect practice to develop, not through precedent, but through attention to the concrete facts of particular situations. Permission to intervene should prove more readily available where petitioners show significant ability to contribute on substantial issues of law or fact which will not otherwise be properly raised or presented,

⁶ Unpublished Memorandum of April 24, 1990.

⁷ Standing Decision, LBP-90-16, 31 NRC at 514.

⁸ Petitioner's Amended Petition for Intervention and Brief in Support Thereof, March 6, 1990, at 21-22.

set forth these matters with suitable specificity to allow evaluation, and demonstrate their importance and immediacy, justifying the time necessary to consider them.

In applying that standard to this case, the principal evidence that NEAP offers that it can make a valuable contribution is the Affidavit of Thomas Saporito, Jr.⁹ The principal factor weighing in favor of the admission of Mr. Saporito is his statement of concern about “relaxed safety margins in the revised technical specifications.” This concern, as evidenced by the voluminous contentions filed by him, has the potential for creating the incentives for the Staff and the Applicant to take a closer look than they previously had done.

However, Mr. Saporito also discloses that he needs to be employed full time and that he does his research primarily on Fridays, Saturdays, and Sundays.¹⁰ There is no indication that any other member of NEAP plans to help him or that NEAP has any financial resources with which to hire technical or legal assistance.¹¹ Mr. Saporito appeared at the prehearing conference entirely by himself.

Mr. Saporito’s expertise is “in the technical field of analog and digital electronics related to *instrument repair and calibration* for a period of about seventeen (17) years.”¹² He has 7 years’ experience in Applicant’s plant in repairing and calibrating a wide variety of systems.¹³ In addition, he has an Associates Degree in Electronics Technology and has attended various technical training seminars.¹⁴ He is an instructor in digital electronics and microprocessor technology and has a patent for a Renal Dialysis Concentrate Delivery System, which he designed and built.¹⁵

We know Mr. Saporito, from our brief experience, as reasonable and intelligent. Furthermore, he has shown substantial integrity in withdrawing many of his contentions after we asked him to identify errors or omissions in Applicant’s analysis that he thought created a safety concern.

Nevertheless, and despite these positive factors, Mr. Saporito has brought little technical expertise to his presentation of his contentions. His primary contribution has been to review Applicant’s technical specification changes and to identify those in which Applicant said that some “relaxation” has occurred. When he has specified that there are omissions in Applicant’s analysis, the

⁹ Petitioner’s Amended Petition at 21, attached affidavit.

¹⁰ Affidavit at 2, ¶ 7.

¹¹ Although Ms. Billie Garde has now entered an appearance with respect to standing and intimidation issues, her commitment appears to be limited to this portion of the case — which is related to the Department of Labor case with which Ms. Garde also is concerned.

¹² Affidavit at 2, ¶ 10 (emphasis added).

¹³ *Id.* at 3, ¶¶ 11, 12.

¹⁴ *Id.* ¶¶ 13, 14.

¹⁵ *Id.* ¶¶ 13-15.

specification was based on careful scrutiny and reason but did not show any independent expertise. As we said in LBP-90-16, 31 NRC at 515:

Although Petitioner submitted lengthy contentions that purported to comply with the contention requirements now in effect, on examination we find that they consist primarily of allegations — based on Applicant's own admissions — that Applicant has in some instances relaxed requirements in the course of amending its technical specifications. Generally, Petitioner failed to advance an independent basis for any of its contentions. Instead, Petitioner relied entirely on alleged omissions in Applicant's analyses and said it intended to support its proposed contentions by Mr. Saporito's expert opinion, by interrogation of Applicant's witnesses, and by discovery, without any indication of the analytical basis for further inquiry. These allegations of omission were always based on assertion, without any specific source of evidence concerning the importance of the alleged omission.

When we evaluate the nature of NEAP's contribution, using the standard for permissive intervention, we find that it is not entitled to permissive intervention.¹⁶ We are particularly concerned that NEAP has not brought to bear any substantial expertise to demonstrate the importance and immediacy of its concerns or to justify the necessity of considering them. Because of the way in which the case has been presented, it has been left to the Board to analyze the record and use its own expertise to determine the importance of NEAP's concerns.

Hence, we conclude that on balance it is not appropriate to use our discretion to admit NEAP as a party.

III. *SUA SPONTE* QUESTIONS

A. Legal Background

Pursuant to 10 C.F.R. § 2.760a,

Matters not put into controversy by the parties will be examined and decided by the presiding officer only where he or she determines that a serious safety, environmental, or common defense and security matter exists.

This authority to raise matters on our own or "*sua sponte*" gives rise to the responsibility to determine whether or not to use the authority.

¹⁶ We have examined all six factors listed in *Pebble Springs*, 4 NRC at 616. Of these, the first weighs moderately in favor of admission. The second and third have very little positive effect since NEAP's members have not demonstrated that they have substantial interests within the zone of interest for this power plant. Factors four through six have little effect. There is now an increased awareness in the Staff of NEAP's concerns and they may therefore to some extent protect Petitioner's interest, but that is always true of the Staff and has little effect on the balance. There are no other parties to protect Petitioner's interest. There is little reason to believe that the "broadening" or initiating of this proceeding is in any way inappropriate, so that factor has little weight.

In dismissing NEAP after having reached a determination that some of its contentions were litigable, we have a responsibility to consider whether or not to retain jurisdiction of one or more of its contentions as a *sua sponte* matter. In reaching this determination, we must consider the seriousness of each contention. However:

The mere acceptance of a contention does not justify a board to assume that a serious safety, environmental, or common defense or security matter exists or otherwise relieve it of the obligation under 10 CFR 2.760a to affirmatively determine that such a matter exists.¹⁷

Furthermore, if the matter has already been spotlighted for serious consideration by the Staff, apart from the hearing process, then the seriousness of the issue is mitigated and a Board need not declare it to be a *sua sponte* issue.¹⁸

B. Consideration of the Admitted Contentions

After reviewing the admitted contentions in light of our present knowledge, some might be considered serious safety or environmental issues.¹⁹ Therefore, we request the comments of the Staff of the Nuclear Regulatory Commission and of the Applicant concerning whether any of the admitted contentions raise issues requiring admission by the Board as *sua sponte* issues. We provide 20 business days from this opinion's date of issuance for the Staff to respond to our request and we provide the Applicant 10 additional business days to comment on the Staff response. Staff and Applicant are invited to discuss the Board's reasons for admitting these contentions and each of the criteria we have discussed above as relevant to the admission of a *sua sponte* issue.

IV. POSSIBLE EFFECT OF DEPARTMENT OF LABOR PROCEEDING

We have been informed of the pendency of a Department of Labor Proceeding concerning whether or not Applicant was responsible for having Mr. Thomas

¹⁷ *Texas Utilities Generating Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-81-36, 14 NRC 1111, 1114 (1981).

¹⁸ *Cincinnati Gas and Electric Co.* (William H. Zimmer Nuclear Power Station, Unit 1), CLI-82-20, 16 NRC 109, 110 (1982). As Commissioner Asseltine points out in his dissent in that case, at 116, even the Staff agreed that the particular issue met the criteria for admission as a *sua sponte* issue because it was "a most serious issue." Although the Commission itself appears not to offer a rationale for how it could take the action it did, in face of the regulation — and Chairman Palladino made it clear at 112 that he did not intend to revoke the *sua sponte* authority — we believe that our explanation in the text of this decision provides an appropriate rationale sympathetic to the intent of the Commission.

However, in this case we are uninformed of the Staff's evaluation of the importance of the issues before us or of the extent of its followup of these issues, so the proper application of the *Zimmer* rule is not apparent.

¹⁹ See LBP-90-16, 31 NRC at 526-27, 528-29, 532-34; NUREG-1410, "Loss of Vital AC Power and the Residual Heat Removal System During Mid-Loop Operations at Vogtle Unit 1 on March 20, 1990" (June 1990).

J. Saporito dismissed from his present job²⁰ and therefore causing the loss of standing for NEAP. There is nothing in our record to support that allegation, and Mr. Saporito had adequate opportunity to support the allegation had he chosen to do so. So we have no reason to grant NEAP's request to hold our hearing in abeyance pending the DOL determination of this case.

On the other hand, we have not fully adjudicated the facts of the allegations being litigated in the DOL case. Should that agency determine that Mr. Saporito was wrongfully dismissed, at Applicant's hands, then it would seem improper that through that wrongful action Applicant would have succeeded in having this case dismissed. Hence, we wish to state that this case is being dismissed without prejudice to a motion to reopen should the DOL uphold Mr. Saporito's allegation of wrongful discharge at the hands of Applicant.

Based on our record, we have no reason to suspect Applicant in any way. We have even ruled that allegations of harassment or intimidation against Applicant should be stricken from our record. Nevertheless, we would not close the NRC's doors should the DOL uphold Mr. Saporito's allegation.²¹

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 18th day of July 1990, ORDERED, that:

1. The Nuclear Energy Accountability Project (NEAP) is dismissed as a party.

2. NEAP's dismissal is without prejudice to a motion to reopen our record should Mr. Thomas J. Saporito obtain a final judgment in a Department of Labor proceeding that he was wrongfully dismissed from his job at ATI Career Training Center at the hands of Florida Power and Light Company.

3. The Staff of the Commission is requested to comment, within 20 business days from the issuance of this decision, on whether the admitted contentions contain any serious issues that should be admitted into this proceeding *sua sponte*. Applicant may have 10 additional business days within which to comment on the Staff's filing.

4. Mr. Thomas J. Saporito is dismissed as a party.²²

5. Because NEAP and Mr. Saporito are dismissed as parties, this is an initial decision pursuant to 10 C.F.R. § 2.760. NEAP may appeal its dismissal

²⁰ Response at 4-7.

²¹ Staff agrees, in Staff Response at 2 n.1, that NEAP may file a motion before the Commission to reopen the proceeding should Mr. Saporito prevail before the Department of Labor. (Staff has argued that we cannot take up a matter involving intimidation because of a Memorandum of Understanding Between NRC and the Department of Labor, Employee Protection (47 Fed. Reg. 54,585 (Dec. 3, 1982)). We do not address this point as it is no longer a live issue in this proceeding.)

²² See note 1, above.

as a party pursuant to 10 C.F.R. § 2.762, which provides for a notice of appeal within 10 days after service of an initial decision and for the appellant's brief to be filed within 30 days after the filing of the notice of appeal.

**THE ATOMIC SAFETY AND
LICENSING BOARD**

**Dr. George C. Anderson (by PBB)
ADMINISTRATIVE JUDGE**

**Elizabeth B. Johnson (by PBB)
ADMINISTRATIVE JUDGE**

**Peter B. Bloch, Chair
ADMINISTRATIVE JUDGE**

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

John H Frye, III, Chairman
Dr. Jerry R. Kline
Frederick J. Shon

In the Matter of

Docket No. 50-440-OLA-2*
(ASLBP No. 90-605-02-OLA)

THE CLEVELAND ELECTRIC
ILLUMINATING COMPANY, *et al.*
(Perry Nuclear Power Plant,
Unit 1)

July 23, 1990

This Memorandum and Order denies motions for reconsideration filed by Licensee and Staff of LBP-90-15, 31 NRC 501. LBP-90-15 reviewed a petition to intervene and contention filed in response to a notice indicating that Licensee had applied for an amendment to its operating license that would delete cycle-specific parameter limits and other cycle-specific fuel information from the Perry Technical Specifications and substitute a provision allowing Licensee to set these limits in accord with NRC-approved methodology. The contention raised an argument that grant of the amendment will unlawfully deprive Petitioner of its hearing rights under § 189a of the Atomic Energy Act. In this Memorandum and Order, the Board affirmed its holding that if the license amendment vested any substantial discretion in Licensee in determining the cycle-specific parameter limits, it might well deprive Petitioner of hearing rights conferred by § 189a of the Atomic Energy Act. The Board admitted the Petitioner and its contention in

*Reserved on 50-440-OLA-2 docket in accordance with Chief, Docketing and Service Branch memo of 6/14/90.

order to afford Petitioner the opportunity to confront Staff's factual argument that the amendment would not have this effect.

ATOMIC ENERGY ACT: CONTENT OF POWER REACTOR TECHNICAL SPECIFICATIONS

Section 50.36 of the Commission's regulations requires that power reactor Technical Specifications must include those matters as to which the imposition of rigid conditions or limitations is necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Cycle-specific parameter limits are such matters. The Commission may not abdicate its responsibility to review and approve license amendment applications that raise such matters by granting licensees substantial discretion in determining them.

ATOMIC ENERGY ACT: §189a HEARING RIGHTS

An interested member of the public is entitled to an opportunity for hearing on an application for an amendment to a power reactor license.

MEMORANDUM AND ORDER **(Denying Staff's and Licensee's Motions for Reconsideration)**

This proceeding results from a petition to intervene and request for a hearing filed on March 8, 1990, by Ohio Citizens for Responsible Energy, Inc. (OCRE).¹ OCRE petitioned in response to a notice² that NRC was considering the issuance of a license amendment to The Cleveland Electric Illuminating Company (CEI).³ The license amendment in question removes cycle-specific core operating limits and other cycle-specific fuel information from the plant's Technical Specifications (TS) and replaces them with NRC-approved methodology for determining these limits. These limits provide the technical rules under which the reactor may be operated. OCRE wishes to litigate a single contention which states:

¹ OCRE is a private, nonprofit corporation that specializes in research and advocacy on issues of nuclear reactor safety and promotes the application of the highest safety standards to such facilities. It was an intervenor in the Perry operating license proceeding. In this proceeding, it seeks to intervene on behalf of its member and representative, Susan L. Hiatt, who resides within 15 miles of the Perry plant. CEI and Staff do not question OCRE's representations in this regard.

² See 55 Fed. Reg. 4282 (Feb. 7, 1990).

³ CEI is lead applicant for itself and Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and the Toledo Edison Company, co-owners of the Perry Nuclear Power Plant.

The Licensee's proposed amendment to remove cycle-specific parameter limits and other cycle-specific fuel information from the plant Technical Specifications to the Core Operating Limits Report violates Section 189a of the Atomic Energy Act (42 USC 2239a) in that it deprives members of the public of the right to notice and opportunity for hearing on any changes to the cycle-specific parameters and fuel information.

In its petition OCRE agreed with CEI and Staff that the amendment involves purely an administrative matter that raises no significant hazards considerations as the latter term is defined in 10 C.F.R. § 50.92(c). It stated that its intent is to raise a legal issue, viz.: that the grant of the amendment will deprive OCRE members of the legal means to participate in the consideration of significant changes to the plant's cycle-specific operations.

In LBP-90-15, 31 NRC 501 (1990), we tentatively determined that OCRE had standing to intervene and had stated a valid contention. There we stated:

It may be that the amendment at issue would improperly deprive OCRE of hearing rights with respect to future changes in cycle-specific parameter limits.

The answer to that question depends on whether the changes that the amendment would make are in accord with § 50.36 and the *Trojan* decision [*Portland General Electric Co.* (*Trojan Nuclear Plant*), ALAB-531, 9 NRC 263, 271-74 (1979)]. As noted above, that decision interprets § 50.36 to require that

those matters as to which the imposition of rigid conditions or limitations upon reactor operations is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety

must be included in the Technical Specifications. Clearly, cycle-specific parameter limits are necessary to obviate the possibility of an event that could immediately threaten the public health and safety. Staff states that the amendment in question is not contrary to the *Trojan* decision because it will not result in any reduction in safety margins. However, in our view that is the issue raised by OCRE's contention.

Leaving it to CEI (or any other licensee) to determine cycle-specific parameter limits in accord with approved methodology but without prior Staff approval would only be proper, in our view, if the methodology by which they are determined does not allow for excessive discretion or judgment on the part of CEI. We are unable to determine from the license amendment application or from Generic Letter 88-16 whether such discretion would be permitted. If excessive discretion were permitted the licensee, the amendment could constitute an unlawful abdication of Commission responsibility to pass on the question of whether a licensee's activities meet the standards of the Atomic Energy Act and the concomitant responsibility to provide the public an opportunity to participate in that process.

The question here at issue, while ostensibly only a question of law, is not barren of subtle factual content. The legal issue is whether the change will unlawfully deprive OCRE of participation in the setting of the safety-significant cycle-specific parameter limits. But if the methodology specified for the calculation of those parameters and the specification of fuel design are such as to rigidly determine the cycle-specific parameter limits without the use of engineering judgment, OCRE would lose no legal rights by the change. (OCRE's greatest loss would be the dubious privilege of checking CEI's arithmetic.) On the other hand, if, as a matter of fact, substantial engineering judgment is needed to derive the parameters from the bases to be included in the new tech specs, the change would indeed deprive OCRE of its

legal right to participate in the setting of safety-significant parameters. Thus we see wrapped within the outer layer of the legal question a more recondite question of fact: To what extent does the material to be included within the new Technical Specifications inexorably specify the cycle-specific parameter limits that would be removed? If some engineering judgment is permitted, is it permissible under the Atomic Energy Act for CEI to exercise it? We believe that these issues would benefit from expert testimony.⁴

Because our reasoning went beyond the arguments that had been raised by the parties, we did not issue an order admitting OCRE as a party, but rather permitted CEI and Staff to move for reconsideration. Both have done so, and OCRE has responded to those motions.

In its motion of June 28, CEI makes three arguments. First, it repeats its position that OCRE lacks standing to participate because it has not demonstrated that it will suffer an injury in fact from the amendment and has not asserted an interest protected by the Atomic Energy Act. CEI's argument is that OCRE's alleged injury is wholly speculative, raising only the possibility that, at some future time, OCRE may be unsuccessful in seeking a hearing on certain unspecified CEI modifications to the cycle-specific parameter limits. CEI also argues that OCRE's claimed injury, the improper denial of hearing rights, does not raise a health and safety interest that is protected by the Atomic Energy Act.⁵

In its July 12 response, OCRE denies that the loss of hearing rights is in any way speculative. OCRE correctly points out that that loss is one of the intended results of the license amendment at issue.⁶ We agree with OCRE that this is a direct and immediate injury. If OCRE does not assert it as a basis for standing now, but rather permits the license amendment to go into effect, there will be no future opportunity to raise the issue before the Commission. We also agree with OCRE that the hearing right it asserts is protected by the Atomic Energy Act. After all, it makes no sense for Congress to have provided for a right to a hearing before an administrative agency, and not to have provided a remedy to one deprived of that right by the agency.

Second, CEI complains of our statement, quoted above, that:

Clearly, cycle-specific parameter limits are necessary to obviate the possibility of an event that could immediately threaten the public health and safety.

CEI believes that this statement illustrates that we have prejudged the merits of OCRE's contention because it suggests that we have already concluded "that

⁴ LBP-90-15, 31 NRC 506-07.

⁵ CEI's June 28 Motion at 2-4.

⁶ July 11 Response at 2-4. OCRE also states that it has certain "specific safety concerns about the adequacy of the computational methodologies used to support the reload analyses and to calculate the core operating limits." OCRE states that it may wish to raise these concerns in future proceedings.

under certain circumstances the information that Licensees propose to remove from Technical Specifications cannot be removed without violating 10 CFR § 50.36. . . .”⁷ CEI’s quoted statement is absolutely correct. We have concluded that CEI’s proposal to remove information from the Technical Specifications may violate § 50.36 if it would vest too much discretion in CEI. The statement from LBP-90-15 quoted above states the obvious and provides the basis for that conclusion. We reached that conclusion in the context of considering whether “the contention, if proven, would be of no consequence in the proceeding because it would not entitle petitioner to relief.” 10 C.F.R. § 2.714(d)(2)(ii). Thus we concluded that under certain circumstances, the contention might entitle the Petitioner to relief in this proceeding. This conclusion in no way indicates a prejudgment of the merits of the contention on our part.

CEI’s last argument is that we have in effect raised a *sua sponte* issue without following the procedure required by 10 C.F.R. § 2.760a. CEI bases this argument on the facts that OCRE characterized its contention as raising purely an issue of law, stated that no significant hazards were involved, and never suggested that safety concerns might be raised. CEI states that we have transformed that contention from the purely legal issue put forward, i.e., the amendment would improperly deny hearing rights, to

a more recondite question of fact: To what extent does the material to be included within the new Technical Specifications inexorably specify the cycle-specific parameter limits that would be removed? If some engineering judgment is permitted, is it permissible under the Atomic Energy Act for CEI to exercise it?⁸

CEI believes that the question whether the setting of cycle-specific parameter limits involves substantial engineering judgment is beyond the scope of the contention advanced by OCRE.⁹

Although it does not phrase the issue in terms of 10 C.F.R. § 2.760a, Staff also believes that we have incorrectly interpreted OCRE’s contention. Like CEI, Staff points out that OCRE has consistently maintained that the contention does not raise an issue of safety significance. Staff urges that we reconsider our interpretation of OCRE’s contention.¹⁰

For its part, OCRE states that we have not raised a *sua sponte* issue, but have merely recognized the need for factual analysis in order to resolve the contention. However, OCRE goes on to express concern that our analysis limits its hearing rights to the degree of engineering judgment accorded CEI by the proposed amendment. OCRE states that those rights also encompass the Staff-

⁷ CEI’s June 28 Motion at 5-6.

⁸ LBP-90-15, 31 NRC at 507.

⁹ CEI’s June 28 Motion at 6-8.

¹⁰ Staff’s Motion of July 3 at 4.

approved methodologies applied by CEI, noting that these are not contained in the Commission's regulations and consequently are subject to challenge.¹¹

We believe that Staff and CEI are incorrect in stating that our analysis has strayed far beyond the contention that OCRE put forward. That contention raises a legal issue, *viz.*, whether the amendment improperly would deprive OCRE of hearing rights under § 189a of the Atomic Energy Act "on any changes to the cycle-specific parameters and fuel information." While OCRE advanced no argument in support of its contention which centered on the safety implications of the change, but argued that § 189a and the judicial decisions interpreting it prohibit the Commission from depriving OCRE of the right to a hearing on such changes, the terms of the contention inexorably raise a safety consideration. The contention asserts that § 189a prohibits the elimination of an opportunity for hearing on these changes. Section 189a requires a hearing on license amendments, and changes in Technical Specifications require such amendments. Thus OCRE's contention is correct *if* cycle-specific parameter limits and fuel information are of such a nature as to be required to be in the Technical Specifications. Clearly, the *Trojan* decision requires that some such limitations must be included in the Technical Specifications.¹²

The amendment would both remove these limitations from the Technical Specifications and permit CEI to calculate them according to approved methodology. From this we assume that CEI would be permitted to implement the new cycle-specific parameter limits so calculated without prior Staff approval. Given the safety significance of the cycle-specific parameter limits, this would only be proper if the methodology required to be applied does not permit substantial discretion on the part of CEI. In that circumstance, the Commission will exercise its statutory responsibilities through approval of the methodology, thereby removing the need to include cycle-specific parameter limits in the Technical Specifications. Indeed, the Notice to which OCRE responded indicates that the methodology is specifically referenced in the Technical Specifications. Presumably, OCRE could have raised a challenge to the methodology in response to the notice that the instant amendment was under consideration. Permitting such a challenge would satisfy the hearing requirements of § 189a.¹³

¹¹ OCRE's July 11 Response at 7-9.

¹² Staff's affiant, Mr. Fieno, confirms this. Mr. Fieno states that "[a]n example of a cycle-specific parameter for a boiling water reactor is the minimum critical power ratio . . . that protects the fuel cladding from overheating." Fieno Affidavit at 2.

¹³ OCRE has expressed concern that our interpretation of its contention was too narrow because it does not contemplate that, if OCRE's contention is granted, it would be able to challenge the Staff's methodology in future hearings. While we believe that the answer to the question posed by OCRE's contention depends on the narrow issue of the amount of discretion that the amendment would vest in CEI, we do not believe that any future hearing that might be held would be limited by that narrow issue. Rather, we believe that the scope of any such hearing would be controlled by existing Commission practice.

This brings us to the substance of Staff's motion. Staff views LBP-90-15 as raising several questions. Staff characterized the questions raised as whether:

[C]ycle-specific parameter limits are conditions of operation required to be in the technical specifications (TS) by 10 CFR § 50.36;

[T]he methodology of calculating cycle-specific parameters required by the TS allows for "excessive Judgment" by the Licensee;

[T]he proposed amendment constitutes an unlawful abdication of Commission responsibility to pass on the question of whether a licensee's activities meet the standards of the Atomic Energy Act; and

[T]he cycle-specific parameters are conditions or limitations necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.¹⁴

In order to answer these questions, Staff has supported its motion with the affidavit of Daniel Fieno. Staff characterizes Mr. Fieno's affidavit as demonstrating that the proposed amendment will not vest excessive discretion in CEI, that relocation of the cycle-specific parameter limits from the Technical Specifications to the Core Operating Limits Report "does not involve conditions of reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to public health and safety as described in 10 CFR § 50.36." Staff notes that this change does not involve any change in the regulatory limits for operation. The latter remain the same and continue to govern the cycle-specific parameter limits through the application of approved methodology.

OCRE notes that the affidavit provides some of the factual information that we sought but does so without providing it an opportunity to confront the witness. OCRE maintains that Mr. Fieno does not answer our question regarding the degree of discretion afforded CEI because he asserts only that Generic Letter 88-16 does not allow for any discretion on a licensee's part that differs from that previously allowed. OCRE also believes that Mr. Fieno's affidavit confirms its opinion that the only change that would be accomplished by the amendment is the elimination of the requirement for a public hearing on changes to the cycle-specific parameter limits. Finally, OCRE points out that Mr. Fieno's observation that the approved methodology is contained in Topical Reports, rather than the

¹⁴ Staff's July 3 Motion at 1-2. Staff also states that we characterized OCRE's contention as raising an issue of the reduction of safety margins. We did comment in LBP-90-15, in response to Staff's assertion that the amendment in question did not run afoul of the *Trojan* decision because it would result in no reduction in safety margins, that in our view, that was the issue. By that comment, we meant only to convey our opinion that the amendment in question would meet the *Trojan* standard if in fact the methodology for setting the cycle-specific parameter limits is so tightly drawn as to preclude discretion on the part of a licensee that could result in the reduction of safety margins.

regulations, and requires that a hearing be afforded to permit challenges not only to the application of the methodology, but to the methodology itself.

We believe that Staff bases its opinion that the proposed change does not implicate § 50.36 on the ground that nothing is being changed, but rather is being relocated. However, as noted above, that relocation entails important procedural changes. Previously, cycle-specific parameter limits were calculated by the Licensee and approved by the Staff. Under the amendment, Staff approval is no longer necessary.

The current method of controlling reactor physics parameters to assure conformance to 10 CFR 50.36 is to specify the specific value(s). . . . The alternative contained in [Generic Letter 88-16] controls the values of cycle-specific parameters and assures compliance with 10 CFR 50.36 . . . by specifying the calculational methodology and acceptance criteria."¹⁵

Staff may well be correct that the change contemplated by the proposed amendment makes no change in the degree of control exercised by Staff over CEI's activities.¹⁶ If so, the proposed amendment does not contravene § 189a as claimed by the contention. But OCRE is correct that it is entitled to an opportunity to confront that factual conclusion at an evidentiary hearing. Consequently, we are scheduling an evidentiary hearing to afford OCRE that opportunity.

We emphasize that this hearing is to be strictly limited in scope. The only factual issue before us concerns the amount of discretion that would be vested in CEI by the proposed amendment. The related question raised by OCRE concerning the propriety of stating the approved guidance for setting cycle-specific parameter limits in topical reports is outside the scope of the contention and the hearing. Given the limited scope of the hearing, at most only limited discovery is necessary. Any interrogatories are to be propounded promptly and excessive numbers of interrogatories will be looked upon with disfavor. Should the parties wish to take depositions, it is suggested that they be scheduled the day before the hearing. If necessary, we will hold a prehearing conference to dispose of any outstanding matters immediately prior to commencing the hearing.

In consideration of the foregoing, it is this 23d day of July 1990, ORDERED:

1. CEI's and Staff's motions for reconsideration are denied;
2. OCRE is admitted as a party to this proceeding and its contention is accepted for litigation in accord with the terms of this Memorandum and Order;
3. Any interrogatories that the parties wish to propound are to be served no later than August 3, 1990;
4. Answers to interrogatories are to be served no later than August 17, 1990;

¹⁵ Enclosure to Generic Letter 88-16 at 1-2.

¹⁶ Indeed, on cursory examination Mr. Fieno's affidavit appears to substantiate this claim.

5. Any depositions are to be completed on or before August 27, 1990;
6. The evidentiary hearing, immediately preceded by a prehearing conference, if necessary, will commence at 9:00 a.m., August 28, 1990, at a location in the vicinity of the plant to be announced, and will be completed no later than 5:00 p.m., August 30, 1990; and
7. In accord with 10 C.F.R. § 2.714a, an aggrieved party may appeal this Memorandum and Order within 10 days after its service by the filing of a notice of appeal and accompanying supporting brief with the Atomic Safety and Licensing Appeal Board. Within 10 days after service of an appeal, any other party may file a brief in support of or in opposition to the appeal.

**THE ATOMIC SAFETY AND
LICENSING BOARD**

**Frederick J. Shon
ADMINISTRATIVE JUDGE**

**Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE**

**John H Frye, III, Chairman
ADMINISTRATIVE JUDGE**

Bethesda, Maryland
July 23, 1990

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Morton B. Margulles, Chairman
Oscar H. Paris
Frederick J. Shon

In the Matter of

Docket Nos. 50-603
50-604
(ASLBP No. 89-596-01-OM/SC)
(Construction Permit
Nos. CPEP-1 and CPEP-2)

ALL CHEMICAL ISOTOPE
ENRICHMENT, INC.

July 24, 1990

ATOMIC ENERGY ACT: REVOCATION OF LICENSES

Section 186(a) of the Atomic Energy Act, as amended, makes licenses for nuclear facilities subject to revocation for post-licensing failures. If the post-licensing conditions would have warranted the Commission to refuse to grant a license on an original application, the license can be revoked.

RULES OF PRACTICE: SUMMARY DISPOSITION ON PLEADINGS

Section 2.749 of 10 C.F.R. permits summary disposition to be used to decide the ultimate issue in all types of proceedings except in the case of the issuance of construction permits for a production facility. There, summary disposition only may be used for the determination of specific subordinate issues but not to determine the ultimate issue as to whether the permit shall be issued.

MEMORANDUM AND ORDER
(Ruling on NRC Staff Motion for Summary Disposition
and Dismissal of Proceeding)

I. INTRODUCTION

NRC Staff (Staff), on May 18, 1990, filed a motion requesting summary disposition of the issues of material fact in dispute and dismissal of the proceeding.

Licensee All Chemical Isotope Enrichment, Inc. (AlChemIE) had been ordered to show cause on August 18, 1989, why its Construction Permit No. CPEP-1, allowing modification of an existing U.S. Department of Energy (DOE) facility at Oak Ridge, Tennessee, for operation as a stable isotope enrichment production plant, and Construction Permit No. CPEP-2, allowing construction of an additional facility at Oliver Springs, Tennessee, using DOE-furnished equipment for the same production purpose, should not be revoked.

The Staff alleges that AlChemIE had failed to fully and accurately disclose to Staff or the Licensing Board its true financial condition during the original licensing review period, that it had not demonstrated that it is financially qualified to conduct the activities under its license, and that AlChemIE cannot obtain from DOE the classified centrifuge equipment upon which the projects depend.

Staff claims that it would not have recommended issuance of the permits had these matters been known. Revocation is sought under section 186(a) of the Atomic Energy Act.

Licensee denied the allegations and requested a hearing on the issues. Based on its request for a hearing, this proceeding was instituted. AlChemIE has not filed a response to the subject motion.

In this Memorandum and Order, we grant the motion for summary disposition, find that an order for the revocation of the construction permits should be sustained, and dismiss the proceeding.

II. BACKGROUND

A. The Construction Permits

Construction Permit No. CPEP-1 was issued to AlChemIE on February 10, 1989. It authorizes the Licensee to modify the existing Centrifuge Demonstration Facility at DOE's Oak Ridge Gaseous Diffusion Plant for operation as a stable isotope enrichment production plant. AlChemIE is permitted to acquire ownership and take possession of DOE security-classified gas centrifuge

machines and associated classified equipment capable of enriching uranium. They are to be used in the production of the stable isotopes. Licensee is also allowed to possess uranium as calibration sources and as contamination on the machines. The license provides for AIChemIE to implement security and safeguard measures at the facility.

Construction Permit No. CPEP-2 was issued to AIChemIE on February 10, 1989. It is similar to CPEP-1 in that it permits the same type of operation, under similar conditions, using DOE security-classified gas centrifuge machines obtained from the agency's Gas Centrifuge Enrichment Plant at Piketon, Ohio. AIChemIE is authorized to construct a new facility at Oliver Springs, Tennessee, to house the operation.

The enrichment of stable isotopes is not ordinarily within the Commission's regulatory authority. However, the classified gas centrifuge machines that were to be obtained from DOE are made to enrich uranium, thereby bringing them under the definition of a production facility subject to the Atomic Energy Act and NRC's regulations.

B. The Construction Permit Hearing

The application for the construction permits was filed November 17, 1987. Also filed was an application for an operating license for the Oak Ridge facility. A Licensing Board was appointed on May 3, 1988, to consider the applications. AIChemIE and Staff were the only parties to the mandatory hearing on the construction permits. The hearing was held on January 4 and 17, 1989. An initial decision authorizing the granting of the construction permits was issued February 1, 1989. LBP-89-5, 29 NRC 99. The Appeal Board affirmed the decision on March 20, 1989. ALAB-913, 29 NRC 267.

Because the operating license application was unopposed and a hearing unwarranted, the Licensing Board informed the Commission that the operating license should be issued upon AIChemIE's modification of the Oak Ridge facility in accordance with its construction permit.

On hearing, the Licensing Board took evidence and made findings in accordance with the Commission's hearing notice. In its decision, the Licensing Board, as a conclusion of law, *inter alia*, found that AIChemIE was technically and financially qualified to modify the existing facility at Oak Ridge, Tennessee, and to construct the facility at Oliver Springs, Tennessee, in such a way as to ensure adequate protection of the common defense and security. LBP-89-5, *supra*, 29 NRC at 121, 122. It was a requisite finding for the issuance of the licenses under the Commission's Notice of Opportunity for Hearing. *Id.* at 104.

The conclusion of law was based in part on the following findings of fact:

23. Staff concluded in its review that Applicant demonstrated that it possesses or has reasonable assurance of obtaining the funds for the modifications to Facility 1 and that it is financially qualified to make the modifications. Funding would come from saleable surplus equipment (appraised at \$28 million) and from bank financing, if needed. Staff Exh. 10.

* * *

25. . . . Staff concluded that if the events do occur as planned, [success of isotope production at Facility 1, profitable sales of isotopes and additional sales of substantial surplus equipment] then the Applicant has a reasonable financing plan for Facility 2 construction costs and would be financially qualified to construct the facility under 10 C.F.R. § 50.33(f) and Appendix C to Part 50. Staff Exh. 10.

Id. at 111-12.

Staff had found that AIChemIE was financially qualified to construct the proposed facilities in such a way as to ensure adequate protection of the common defense and security. Its finding was based on AIChemIE-furnished information including the identification of sources upon which AIChemIE was relying for necessary funding. *Id.*

The construction permit applications were premised on the expectation that DOE would lease its facility at Oak Ridge to AIChemIE and sell it the classified gas centrifuge machines to be used at Oak Ridge and Oliver Springs for enriching the stable isotopes. The proposed operations were based on the expectation that DOE would provide one of its facilities and the essential technology that would make the operation possible. *Id.* at 103.

C. The Order to Show Cause

The Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support on August 8, 1989, issued the subject Order to Show Cause Why the Licenses Should Not Be Revoked.¹ 54 Fed. Reg. 35,544-46.

The Order to Show Cause alleges that the Licensee failed to fully and accurately disclose to the Staff or the Licensing Board its true financial condition during the licensing review period when it was presenting documents and testimony before the Licensing Board. It further alleges that the incomplete and inaccurate information that the Licensee supplied led the Staff to find that the Licensee was financially qualified to modify and construct the facilities in such a way as to ensure adequate protection of the common defense and security, and

¹The order also modified the licenses to require 30 days notice to the Commission prior to the Licensee's taking possession of classified equipment. The modification was made immediately effective under 10 C.F.R. § 2.201(c) because of the public interest. AIChemIE was permitted to show cause why its construction permits should not have been modified but it chose not to do so. The modification of the construction permits is not a matter at issue in this proceeding.

to issue the construction permits. Had the Staff known Licensee's true financial condition, the Staff would not have issued construction permits to AIChemIE.

Staff cites certain events and information that "materially affect the findings and conclusions required for issuance of the construction permits."

Staff claims that AIChemIE failed to notify the Staff or the Licensing Board that its loans with the Anderson County Bank were delinquent during the period of the licensing review. The Order to Show Cause cites a letter of June 14, 1989, from the bank to AIChemIE asserting that certain loans were due and payable on November 4, 1988, and that they were 7 months delinquent on June 4, 1989. The Order to Show Cause further states that, contrary to the assertions, the Licensee's submittals to the NRC Staff and the Licensing Board of November and December 1988 and January 1989 consistently presented an optimistic picture of its ability to obtain bank loans.

Further reliance is placed on a letter dated June 26, 1989, by which AIChemIE notified the Commission that, for protection from creditors, Licensee had filed for reorganization in the United States Bankruptcy Court for the Eastern District of Tennessee. Pursuant to NRC request, AIChemIE on August 15, 1989, submitted documents for the purpose of determining whether or not AIChemIE was in compliance with the licensing basis for the construction permits. Based on a review of the documents, Staff concluded that AIChemIE had not demonstrated that it was financially qualified to conduct the activities under the licenses.

The Order to Show Cause further alleges that the issuance of the construction permits to AIChemIE was based upon the Licensee's taking possession of the classified gas centrifuge equipment from DOE. It is asserted that AIChemIE failed to take possession of the equipment and, based upon a decision of DOE not to extend the agreement with AIChemIE, the projected activities for which AIChemIE sought licenses cannot occur. Thus, there is no longer any purpose for the construction permits.

In support of the allegation, Staff relies on a letter of August 11, 1989, in which DOE advised AIChemIE that the contract for the transfer of gas centrifuge machines that was to expire on August 15, 1989, would not be extended because of AIChemIE's failure to meet contractual commitments. DOE further stated that in addition to not extending the sales agreement with AIChemIE, it would discontinue any discussions on the sale of the centrifuge equipment and the lease of the Oak Ridge Plant.

In seeking revocation, Staff relies on 10 C.F.R. § 50.9(a) which specifies that information provided to the Commission shall be complete and accurate in all material respects. It also relies on section 186(a) of the Atomic Energy Act, that provides for revocation of any license for any material false statement in the application or upon obtaining other information that would warrant the Commission to refuse to grant a license on an original application.

III. THE MOTION

Staff filed its motion pursuant to 10 C.F.R. § 2.749. As required by section 2.749(a), it attached a statement of the material facts as to which it contends that there is no genuine issue to be heard. They are as follows:

1. The Licensee's creditors have successfully converted the reorganization of AlChemIE, under Chapter 11 of the Bankruptcy Act, which AlChemIE had sought in the United States Bankruptcy Court for the Eastern District of Tennessee, to a liquidation proceeding to dispose of AlChemIE's assets, under Chapter 7 of the Bankruptcy Act.
2. As a result of the Chapter 7 bankruptcy proceeding, the Licensee has ceased to exist as a legal entity. A windup of its affairs and sale of its assets has been assigned to a Trustee in Bankruptcy, who is in the process of liquidating the Licensee's assets.
3. DOE, by letter of February 8, 1990, reconfirmed the August 15, 1989 expiration of the agreement to transfer gas centrifuge machines to AlChemIE.
4. The DOE access permit to all DOE technology regarding all Gas Centrifuge Enrichment Plant technology expired on March 10, 1990.
5. As a result of DOE's action, the Staff's finding made in the August Order to Show Cause is uncontroverted. This finding stated that

the issuance of the construction permits to the [Licensee] was based on the licensee taking possession of the classified gas centrifuge equipment under the terms of the Sales Agreement. [Licensee] has failed to take possession of the equipment and, based upon DOE's decision not to extend the said Sales Agreement, has no further opportunity to take possession of said equipment. Without possession of the gas centrifuge machines, the projected activities for which AlChemIE sought licenses cannot occur. Thus, there is no longer any purpose for Construction Permits CPEP-1 and CPEP-2.

6. If the above-described events had occurred at or during the Staff's review of the construction permit applications, the Staff would not have recommended issuance of said permits.

The motion is supported by an affidavit from the NRC Project Manager for the AlChemIE licenses. He attests that, to the best of his knowledge and belief, the matters recited in the Statement of Material Facts as to Which There Is No Genuine Issue are true and correct.

Staff asserts that the Order to Show Cause was issued because it lacked reasonable assurance that the Licensee could proceed with operations in compliance with the Commission's requirements and in such a way as to ensure adequate protection of the common defense and security of the United States.

Staff points to its alleged Statement of Material Facts as to Which There Is No Genuine Issue, which is supported by affidavit, as establishing that AIChemIE has not demonstrated that it is financially qualified to conduct the activities authorized under its construction permits, presently or the future, because of its being liquidated by a Trustee in Bankruptcy under Chapter 7 of the Bankruptcy Act.

Further, Staff claims that the record establishes that the DOE technology, upon which both projects are dependent, is no longer available to AIChemIE as the result of the expiration of its contract. Because the gas centrifuge machines are no longer available, there is no purpose for Construction Permits CPEP-1 and CPEP-2.

Staff's position is that if the bankruptcy and unavailability of equipment had occurred during the Staff's review of the construction permit applications, it would not have recommended issuance of the permits. It cites section 186(a) of the Atomic Energy Act as authority for revoking the permits under the circumstances.

AIChemIE did not file a response to or otherwise oppose the Staff's motion for summary disposition and dismissal of the proceeding.

IV. DISCUSSION

Section 2.749 grants presiding officers the authority to dispose of all or part of the matters at issue in a proceeding by way of summary disposition.

Summary disposition provides a way to avoid unnecessary hearings and their various attendant costs. Section 2.749(d) states that a motion for summary disposition shall be granted where the supporting record shows that there is no genuine issue as to material fact and the moving party is entitled to a decision as a matter of law.

The section permits summary disposition to be used to decide the ultimate issue in all types of proceedings except in the case of the issuance of construction permits for a production or utilization facility. There, summary disposition only may be used for the determination of specific subordinate issues but not to determine the ultimate issue as to whether the permit shall be issued. Because the future issuance of a construction permit is not at issue in this revocation proceeding, the exception is inapplicable, and the ultimate issue may be decided by summary disposition.

Staff relies on section 186(a) of the Atomic Energy Act, 49 U.S.C. § 2236(a), as the statutory basis for revocation of the licenses. As pertinent it provides:

Any license may be revoked for any material false statement in the application or any statement of fact required under section 2232 of this title or because of conditions revealed by

such application or statement of fact or any report, record, or inspection or other means which would warrant the Commission to refuse to grant a license on an original application

Section 2232, as pertinent provides:

Each application for a license hereunder shall be in writing, and shall specifically state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the technical and financial qualifications of the applicant

Section 2236(a) not only permits license revocation for material misrepresentation during the licensing process but it renders licenses for nuclear facilities subject to post-licensing review and revocation for post-licensing failures. *Ft. Pierce Utilities Authority of City of Ft. Pierce v. United States*, 606 F.2d 986, 996 (1979), *cert. denied*, 444 U.S. 862; *Cities of Statesville v. AEC*, 441 F.2d 962, 974 (1969).

Section 2236(a) would permit revocation of the AIChemIE licenses on any of the three grounds alleged by Staff. They are the failure to disclose its true financial condition during the original review period; that it has not demonstrated that it is financially qualified to conduct the activities under the license; and that AIChemIE cannot obtain from DOE the classified centrifuge equipment upon which the projects depend.

At the time of the licensing and presently, NRC regulations require that an applicant for a construction permit for a production facility shall submit information that demonstrates, *inter alia*, that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs. It must submit estimates of the total construction costs and shall indicate the sources of funds to cover those costs. 10 C.F.R. § 50.33(f) and Appendix C to Part 50.

Staff's allegation that the Licensee misrepresented the status of its bank loans and its ability to obtain others during the licensing period could provide a valid basis for revoking the license, if proven. However, Staff never gave any consideration to this aspect of the case in its motion for summary disposition and dismissal. It remains as an unproven allegation for the purpose of deciding the motion and would be a matter to be decided on hearing if one were to be held.

Staff's case for revocation rests on the claims that AIChemIE has not demonstrated financial qualifications to conduct the activities and that the inability of the Licensee to obtain the DOE equipment renders meaningless the need for the licenses.

Through its Statement of Material Facts as to Which There Is No Genuine Issue, which is supported by affidavit, Staff has established the underlying facts that support its claim.

The affidavit-supported Statement proves that AlChemIE is an involuntary bankrupt in liquidation, only looking to have its assets sold. It also proves that the DOE classified gas centrifuge equipment, which was to provide the means for conducting the operations at the facilities for which the construction permits were issued, is not available for use by the Licensee.

The affidavit of the Project Manger alone was sufficient to establish the foregoing. It was not necessary to rely on the provision of 10 C.F.R. § 2.749 that states that all material facts contained in the Statement of Material Facts as to Which There Is No Genuine Issue will be deemed to be admitted unless controverted by the statement required to be served by the opposing party. AlChemIE never filed a statement in opposition, thus providing another basis to find that the cited facts are not at issue.

It is patent on its face that an involuntary bankrupt undergoing liquidation and looking to its dissolution not only does not have the financial means to remain in business but is not financially qualified to perform the licensed activity. AlChemIE's post-hearing financial condition is such that it would not be possible to find that it is financially qualified to modify the existing facility at Oak Ridge, Tennessee, and to construct the facility at Oliver Springs, Tennessee, in such a way as to ensure adequate protection of the common defense and security. It cannot demonstrate that it is financially qualified to modify or construct the facilities as provided by 10 C.F.R. § 50.33(f) and Appendix C to Part 50. These were requisite findings to the issuance of the licenses.

If AlChemIE's financial condition were the same as it is today at the time of the original application, it would have warranted the Commission to refuse to grant the construction permit on the original applications. Staff has satisfied the requirement of 49 U.S.C. § 2236(a) for revocation of AlChemIE's construction permits.

Equally patent on its face is that without the availability of the DOE classified equipment, with which AlChemIE was to conduct its operations, there is no need for the facilities to house the equipment and for the licenses to permit their modification or construction. The reason for licensing has entirely disappeared. This too is a sound basis for revocation of the licenses.

Certainly, the absence of the need for the facilities because the production equipment is no longer available would have warranted the Commission to refuse to grant the construction permits on the original applications. Thus Staff has established a second and separate basis under 49 U.S.C. § 2236(a) for revocation of the AlChemIE construction permits.

We find that, on the basis of undisputed fact, Staff is entitled to a decision as a matter of law under 10 C.F.R. § 2.749, in that it has satisfied the requirements of 49 U.S.C. § 2236(a) for revocation of the construction permits on the separate grounds that AlChemIE is not financially qualified to conduct the licensed activity and the need for the construction permits no longer exist.

Order

Based upon all of the foregoing, it is hereby ORDERED:

That Staff's motion for summary disposition is granted;

That an order revoking Construction Permits CPEP-1 and CPEP-2 shall be sustained; and

That the proceeding is dismissed.

THE ATOMIC SAFETY AND LICENSING BOARD

**Morton B. Margulies, Chairman
ADMINISTRATIVE LAW JUDGE**

**Oscar H. Paris
ADMINISTRATIVE JUDGE**

**Frederick J. Shon
ADMINISTRATIVE JUDGE**

**Dated at Bethesda, Maryland,
this 24th day of July 1990.**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(TRUMP-S Project)
(Byproduct License
No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

July 30, 1990

The presiding officer issued an order requiring the Staff of the Nuclear Regulatory Commission to comply with the guidance initially issued in LBP-90-22 and to complete the hearing file by including in it all reports and documents that Intervenors might reasonably consider relevant to their admitted areas of concern.

**RULES OF PRACTICE: SUBPART L; PRESIDING OFFICER'S
AUTHORITY OVER THE HEARING FILE**

The presiding officer is responsible for determining the content of the hearing file. The Staff may not refuse to be a party, thereby permitting decisions to be made concerning the concerns to be admitted, and then refuse to complete the hearing file with respect to those concerns.

RULES OF PRACTICE: SUBPART L; INCLUSION IN THE HEARING FILE OF DOCUMENTS IN THE PUBLIC DOCUMENT ROOM

The presence of a document in the public document room in Washington, D.C., does not excuse its being served on the parties when there is no local public document room.

SPECIAL NUCLEAR MATERIALS: EMERGENCY PLANNING OR FIRE PREVENTION

Section 30.32(i)(1) of 10 C.F.R. appears to require that applications to possess radioactive materials in unsealed form should demonstrate that the maximum dose to a person off site will be no more than 1 rem effective dose equivalent or 5 rems to the thyroid or should contain an emergency plan for responding to a release of radioactive materials. This section does not seem relevant to whether an application must demonstrate that the materials being used will not be dispersed by fire or explosion.

MEMORANDUM AND ORDER
(Completeness of the Hearing File)

Memorandum

Today I received the July 27, 1990 Memorandum of the Staff of the Nuclear Regulatory Commission (Staff), "University of Missouri — Trump-S Project Board Orders of June 27 and June 29, 1990."¹ In that memorandum, the Staff presented its reasons for not complying with my suggestions, pursuant to authority granted me by 10 C.F.R. § 2.1231(b), that the record be completed in a fashion I described.

Attached to the Staff Memorandum is an Affidavit of William J. Adam, who reviewed and issued the contested licenses for the Staff. In Mr. Adam's affidavit, I was for the first time informed of the possible relevance of 10 C.F.R. § 30.32(i)(1) and 10 C.F.R. § 51.22(c)(14)(v)² to this proceeding. Until that time,

¹ LBP-90-22, 31 NRC 592 (1990).

² My first impression, subject to revision in light of later argument, is that under 10 C.F.R. § 30.32(i)(1), possessors of unsealed radioactive materials must demonstrate compliance with subsection (i) or (ii) to that section. The applicable passages are:

(i)(1) Each application to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in § 30.72, "Schedule C — Quantities of Radioactive Materials" (Continued)

no explanation for the Staff's action in granting the licenses was given in any document available to me.³

The governing procedural regulation is 10 C.F.R. § 2.1231(b), which provides:

Hearing file documents already in an established local public document room or the NRC Public Document Room when the hearing request is granted may be incorporated into the hearing file *at those locations* by a reference indicating where at those locations the documents can be found. [Emphasis added.]

This section does not appear to relieve the Staff of its obligation, pursuant to 10 C.F.R. § 2.1231(a)(1), either to serve a party or to establish a local public document room. The only thing they are relieved of is the duplication of material in *the same location*.

Nor do I find the Staff's citation of *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), CLI-79-8, 10 NRC 141, 147-48 (1979), persuasive.⁴ That was a formal proceeding in which documents were required to be kept both "at the Commission's Public Document Room and the TMI Local Document Room in Harrisburg." Under the circumstances, the Commission sought to limit the burden on the parties of producing documents by permitting them to rely on *local* availability.

In this case, however, there is no local availability of documents that may be relevant to the Intervenor's theory of the case and the burden to the Staff of providing the Intervenor's one attorney with a copy of a few documents already publicly available is *minuscule*. It may also be admitted that had Staff chosen

Requiring Consideration of the Need for an Emergency Plan for Responding to a Release." [emphasis added] must contain either:

- (i) An evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or 5 rems to the thyroid; or
- (ii) An emergency plan for responding to a release of radioactive materials.

If my interpretation were not intended, then (i)(1) could merely have said that "Each application to possess radioactive materials in excess of the quantities in . . . Schedule C . . . must contain either:". Apparently, this view was not taken. The introductory language appears to subject all materials in unsealed form to the requirements of the subsections.

My first impression is that whether or not an emergency plan is required, there is no apparent connection between the applicability of 10 C.F.R. § 30.32(i)(1) and the need for adequate assurance that the radioactive materials in unsealed form will not be dispersed through fire or explosion.

I have another impression that 10 C.F.R. § 51.22(c)(14)(v) does exempt this license amendment from the requirement of an environmental assessment.

³ Although nothing in Subpart L appears to require the Staff to explain the basis for its action, it is the Staff that is most likely to be familiar with applicable regulations and this delay in providing some explanation of the basis for the licensing action did not contribute to the expedition of this case. There does not appear to be any requirement of Subpart L that keeps the Staff from issuing licensing documents or subsequent affidavits that explain the basis for licensing action; and I would encourage the Staff to issue such documents in order to expedite future cases.

⁴ Even less persuasive is the citation to *Rockwell International Corp.* (Rocketdyne Division), ALAB-925, 30 NRC 709 (1989), *aff'd*, CLI-90-5, 31 NRC 337 (1990), which does not discuss at all a presiding officer's interpretation of the clearly delegated authority to complete the hearing record.

to be a party to this case, its theory of relevance might have prevailed and it might have succeeded in excluding some of the admitted concerns through legal argumentation. However, the Staff did not do so and the areas of concern were admitted and are subject to litigation. It is not up to the Staff to decide by itself at this time what is and what is not relevant to the Application; that job is mine.

Since the Staff has already reviewed the relevant documents and knows which are arguably relevant to admitted concerns (and since it is a nonparty with no interest in restricting Intervenors' access to publicly available documents), it shall forthwith include in the record and serve on the parties all documents that comply with my Memorandum and Order of June 29. I continue to adhere to the standard set forth before. Staff should include in the file all documents that Intervenors may reasonably believe relevant to the admitted areas of concern. This should prevent recurrent litigation concerning this "nondiscovery" phase of this Subpart L proceeding.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 30th day of July 1990, ORDERED, that:

The Staff of the Nuclear Regulatory Commission shall forthwith comply with the guidance I have issued concerning the proper content of the Hearing File. This may be accomplished at the NRC public document room by an appropriate reference to documents already in that file. However, the Staff shall also serve the new documents to be included in the file on the parties and the presiding officer.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Thomas E. Murley, Director

In the Matter of

Docket No. 50-443
(License No. NPF-86)

**PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, et al.**
(Seabrook Station, Unit 1)

July 9, 1990

The Director, Office of Nuclear Reactor Regulation, denies a Petition filed by Patricia Pierce-Bjorklund requesting denial of a license to operate Seabrook Nuclear Station. As grounds for the request, the Petitioner had asserted that none of the safety issues raised in a July 11, 1989 letter to the NRC's Advisory Committee on Reactor Safeguards (ACRS) from the Board of Selectmen of the Town of Essex, Massachusetts, had been resolved. In denying the Petition, the Director found that, contrary to the Petitioner's assertion, all of the allegations raised by the Petitioner had been addressed in the Final Environmental Statement for the Seabrook facility, and in a memorandum from the Staff to the ACRS subcommittee.

EMERGENCY PLANS: EVACUATION

Evacuation decisions are made by state and local governments, not the NRC.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: Release of radioactive materials in effluents to unrestricted areas; loss-of-coolant accidents; release of radioactive materials to groundwater; emergency planning and evacuation.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

INTRODUCTION

By letter dated January 11, 1990, Patricia Pierce-Bjorklund submitted to the Atomic Safety and Licensing Appeal Board a letter dated July 11, 1989, previously sent by the Board of Selectmen of the Town of Essex, Massachusetts, to the NRC's Advisory Committee on Reactor Safeguards (ACRS). In her January 11 letter, Ms. Pierce-Bjorklund advised that she had prepared the Essex letter, which requested that the reactor safety issues cited therein be addressed and resolved prior to licensing the Seabrook Nuclear Station. Ms. Pierce-Bjorklund further requested that, as no response to the July 11, 1989 letter had been received other than acknowledgment of the letter in an ACRS meeting held September 7, 1989, and none of the safety issues had been resolved, the Appeal Board consider the issues raised in that letter as grounds for denial of a license to operate the Seabrook facility.

By Memorandum and Order dated January 23, 1990 (unpublished), the Appeal Board stated that it was treating Ms. Pierce-Bjorklund's letter as a request for action pursuant to 10 C.F.R. § 2.206, and, accordingly, referred the letter (hereinafter Petition) to the Executive Director for Operations (EDO) for disposition under that regulation.

By letter dated February 9, 1990, I informed Ms. Pierce-Bjorklund (hereinafter Petitioner) that her request had been referred to me for action pursuant to section 2.206. In that letter, I indicated that a preliminary review of her January 11, 1990 letter, including the appended Essex letter of July 11, 1989, did not provide a basis that would preclude a decision regarding issuance of a full-power license to the Seabrook facility, since the Staff had addressed the areas raised in the Petitioner's request in the Seabrook Final Environmental Statement (FES), NUREG-0895 (December 1982). In that letter, I concluded that the requirements of the National Environmental Policy Act (NEPA) and 10 C.F.R. Part 51 had been met and that an operating license for the facility could be issued subject to certain conditions that had already been imposed as part of the low-power license. For this reason, I informed the Petitioner that her request that the issues she cited be addressed before the NRC considered a decision regarding a full-power license for the facility was denied. However, I indicated that a decision addressing the Petitioner's technical concerns would be issued in a reasonable time. A notice was published in the *Federal Register* on February 21, 1990, indicating that the Petition was under consideration. 55 Fed. Reg. 6137.

The Staff has now completed its review of the Petition. For the reasons set forth below, the concerns raised in the Petition do not provide a basis for the action requested by the Petition, and the Petition is denied.

DISCUSSION

The bases for the Petitioner's request, as set forth in the Essex letter, are that certain reactor operating procedures, if allowed, will cause predictable and permanent damage to the Town of Essex. In this connection, the Petitioner alleges that operating discharges to air and ocean from Seabrook will accumulate in the northerly portion of the marshes extending south of the facility and will cause long-lived isotopes to enter nutrient cycles, and that the Town of Essex will suffer irreparable injury by reason of permanent contamination caused by certain unresolved reactor safety issues, which are specified in the Petition.

By way of background, the Final Environmental Statement (FES) related to the operation of the Seabrook Station, Units 1 and 2, was issued in December 1982. In addition, a safety review was conducted by the ACRS, as required pursuant to NRC regulations, as part of the review of whether an operating license should be granted to a utility. During an ACRS subcommittee meeting on August 17, 1989, the NRC Staff was requested to respond to the issues raised in the Petitioner's July 11, 1989 letter. By Memorandum dated September 6, 1989, the Staff provided the subcommittee its responses to the safety issues raised in that letter. A copy of that memorandum is available in the Public Document Room and is being provided to the Petitioner. Therefore, contrary to the Petitioner's assertion, the safety issues that she raised were considered.

On September 13, 1989, the ACRS issued its report to the Chairman of the Commission. In this report, it concluded that

subject to the satisfactory resolution of issues that arose during low power testing, and corrective actions recommended by FEMA (the Federal Energy [*sic*] Management Agency), there is reasonable assurance that Seabrook Station, Unit 1, can be operated at core power level up to 3411 MWt (megawatts thermal) without undue risk to the health and safety of the public.

The issues that arose during low-power testing (which are not relevant to the issues raised by the Petitioner) and the corrective actions recommended by FEMA were subsequently fully resolved, as discussed in section 19 of Supplement 9 to the Safety Evaluation Report issued in March 1990, in conjunction with the issuance of the full-power license for the Seabrook facility. Thus, all of the allegations raised by the Petitioner have generally been addressed in the FES and, more specifically, in the Staff's September 6, 1989 Memorandum to the ACRS subcommittee.

Each of the specific issues raised by the Petitioner is set forth below, followed by the Staff's response:

A. Issue

Venting of fission gases to the atmosphere in the form of "planned operating emissions" will release partially decayed gases, iodines and other unstable particles which will cool and fall over coastal temperature interfaces within the first hour after discharge leaving permanent toxic residues on coastal marshes and meadows. Deposition of long-lived particles airborne with the gases will typically occur in corridors where wind velocity decreases due to topography, i.e., behind barrier beaches, coastal uplands and islands. The Essex marshes twelve miles south lie precisely in the first hour deposition path.

Response

As discussed in the Staff's Final Environmental Statement (FES, NUREG-0895) § 4.2.4, "Radioactive-Waste-Management System," and § 5.9.3, "Radiological Impacts from Routine Operations," the environmental consequences of "planned operating emissions" have been considered by the NRC. While small amounts of radioactive gases are expected to be released to the atmosphere from the Seabrook Station during normal operations, these amounts will be kept as low as reasonably achievable, in accordance with NRC regulations in 10 C.F.R. Part 20 and 10 C.F.R. Part 50, Appendix I. (See also the Response to Issue E, below).

As explained in the Staff's September 6, 1989 memorandum to the ACRS, the Staff concluded in the FES:

The risks to the general public from exposure to radioactive effluents and transportation of fuel and wastes from the annual operation of the Seabrook facility are very small fractions (less than one part in a billion) of the estimated normal incidence of cancer fatalities and genetic abnormalities in the year 2000 population.

FES at 5-30. The Staff also concluded that no measurable adverse impacts are expected on biotic populations due to normal operations (*id.*).

The plant Technical Specifications (NUREG-1386), in sections 3/4.11 and 3/4.12, require that releases of radioactive gases be continuously monitored and that appropriate corrective actions be instituted to reduce or prevent a high rate of release from the plant.

As the NRC Staff stated in the FES

In establishing the Technical Specification limits for the Seabrook Station, the NRC staff took into consideration the fluctuations in atmospheric conditions and the oceanic dispersion

characteristics. The environmental data that were used in the Draft Environmental Statement (DES) also take into consideration fluctuations in dispersion in the environment.

FES at 9-33.

The Licensees are required by Technical Specification 3/4.12 to conduct a comprehensive offsite environmental monitoring program to verify that concentrations of plant-associated radioactive materials in the environment are within regulatory limits and to report its results to the NRC annually. A copy of each such report is placed in the Public Document Room, where it is available to the public. The *Seabrook Station Offsite Dose Computational Manual* (ODCM; Accession No. 8808170080, Public Document Room) provides greater details regarding the in-plant and offsite radiological monitoring program.

Moreover, the NRC conducts its own, independent, environmental dosimetry monitoring program in the environs of the Seabrook site, as it does at all nuclear power reactor sites (*see* NUREG-0837, "NRC TLD Direct Radiation Monitoring Network"). Also, as a check on the Licensees' radiological monitoring program, the NRC Staff periodically conducts an Independent Measurements Program (sample splitting and comparative analyses between NRC and the Licensees) at the plant site, with accuracy in accordance with the standards of the U.S. National Institute of Standards and Technology. As a further check on Licensees' performances, the NRC has contracted with thirty-four states to conduct independent environmental surveillance programs in the environs of many nuclear power plants. New Hampshire, Massachusetts, and Maine have such contracts.

This program of radiological monitoring and controls has been successfully operating at all nuclear plant sites for many years. Experience from such monitoring programs across the nuclear power industry has shown that the Technical Specifications for effluents and emissions have limited environmental concentrations of plant-associated radionuclides to barely detectable levels even when the most sophisticated, sensitive, state-of-the-art measurement technology is used. It is expected (and predicted in the FES) that the same will be true at the Seabrook site.

The Licensees' environmental monitoring program, as outlined in Table 5.6 of the FES, is an acceptable, balanced program of monitoring of air, water, milk, ground, and food in the environs of the Seabrook site. With respect to the Essex marshes, the Licensees' radiological monitoring program includes monitoring stations at Ipswich Bay, Plum Island, and Rowley, Massachusetts, approximately 16 kilometers (10 miles) south of the Seabrook plant in the vicinity of the Essex marshes (Table B.4-1 and Figure B.4.3 of the ODCM). As shown in Table B.4-3, at B.4-7 of the ODCM, air, water, sediments, and fish and invertebrates at these locations will be monitored routinely for radioactivity.

B. Issue

Containment of fission gases produced during radiological emergency is only temporary. All gases produced will be vented after the emergency, there being no other means of disposal. Release of active fission gases during the emergency may be necessary to avoid build up of concentrations leading to breach of containment and breach of heat exchange cooling system and consequent contaminated discharge at ocean outlets.

Response

Fission gases are produced continuously in an operating nuclear power reactor, not just during emergencies. These fission gases produced during normal operation are held up in waste gas decay tanks. In addition, the containment building is designed and constructed to hold such fission gases that may be released from the fuel, such as during an emergency. Indeed, this is the very purpose of the containment. During this period of holdup, in the decay tanks as well as in the containment, most fission product gases rapidly decay away into solids.

During both normal, routine operations and during emergencies, only a very small fraction of these gases is expected to leak to the environment. Provisions are in place to adequately reduce the environmental impacts of such leaks during an emergency. The Seabrook Technical Specifications in sections 2.0, "Safety Limits and Limiting Safety System Settings," and 3.0/4.0 "Limiting Conditions for Operation and Surveillance Requirements," require isolation of the containment and effluent and emission vents, and shutdown of the reactor, under a variety of abnormal conditions, including emergency conditions. These provisions are adequate for the protection of the public and the environment. (See also the Response to Issue D, below.)

C. Issue

There is at present no means of disposal or storage of fission gases other than delayed discharge to the environment. There exists at present no method of accelerating decay for gases or solid wastes produced by atomic fission. There is no method for atomic fissioning that does not produce gases on a daily basis.

Response

Nuclear fissioning does produce radioactive gases (primarily xenon and krypton) continuously in an operating nuclear power reactor. However, most fission gases rapidly and naturally decay into solids or nonradioactive gases. Remaining gases are normally contained in the fuel cladding. Although small leaks are expected, as discussed above in response to Issue A, the plant Technical

Specifications severely restrict the amount of radioactivity that can be released from the plant during normal operations; the amounts permitted to be released do not pose a threat to public health and safety; i.e., they are within the limits established in 10 C.F.R. Part 50, Appendix I.

D. Issue

Class 9 catastrophic radiological emergency causing widespread permanent property contamination can occur at low or full power operation. Loss of coolant causing core fuel temperatures to rise from 600°F to 4000°F in seconds precludes timely warning of the public.

Response

The potential for accidents at nuclear power plants was adequately addressed in section 5.9.4 of the FES, "Environmental Impact of Postulated Accidents."¹ As the Staff concluded in paragraph 5.9.4.6 of this section:

The foregoing sections consider the potential environmental impacts from accidents at the Seabrook facility. These have covered a broad spectrum of possible accidental releases of radioactive materials into the environment by atmospheric and groundwater pathways. Included in the considerations are postulated design-basis accidents and more severe accident sequences that lead to a severely damaged reactor core or core melt The staff has concluded that there are no special or unique circumstances about the Seabrook site and environs that would warrant special mitigation features for the Seabrook plant.

FES at 5-71.

As explained in the Staff's September 6, 1989 memorandum to the ACRS, while the impacts of accidents could be severe, the likelihood of such accidents is judged to be small. Light-water reactor cores are protected in many ways from loss-of-coolant accidents. Conceptually, and as a practical matter, keeping a core cool is a relatively simple task. Reactors are made to boil water; so long as the heat energy is removed, the core will remain cool, the fuel will not be damaged and the fission products will not be released in quantity, let alone rapidly. In addition to the reservoir of water in the reactor vessel, there are abundant sources of water that can be pumped under high or low pressure into the core region by the emergency core cooling system (ECCS) to cool the

¹ On June 13, 1990, the Commission announced in an Interim Statement of Policy that it was abolishing its classification of accidents and stated that the Staff would thenceforth treat accident considerations in accordance with the guidance therein, in its NEPA review for any plant whose FES had not yet been issued. 45 Fed. Reg. 40,101. Prior to the Policy Statement, the Commission's policy and practice were not to consider Class 9 accidents under NEPA except for certain unique cases where special circumstances warranted it. *Porter County Chapter of the Isaac Walton League v. AEC*, 533 F.2d 1011 (7th Cir.), cert. denied, 429 U.S. 945 (1976). The Commission subsequently announced its intention to continue its 1980 policy. 50 Fed. Reg. 32,138 (Aug. 8, 1985).

core. Regulatory requirements for the ECCS are found in 10 C.F.R. Part 50, Appendix K.

A sudden, major loss-of-coolant accident and the simultaneous loss of all emergency core cooling systems were postulated in NUREG-1150, "Severe Accident Risks: An Assessment for Five U.S. Nuclear Power Plants," June 1989. Even then, the core would not melt instantaneously; the reservoir of water in the bottom of the reactor vessel would have to boil off first. This could require between 0.5 and 1.5 hours. Once the water is depleted, core fuel temperatures could rise rapidly, resulting in a rapid release of fission products from the fuel. However, even in such circumstances, the massive containment would be expected to contain the bulk of the fission products released from the core, providing a delay time sufficient for appropriate public emergency response.

E. Issue

Seabrook Reactor having 100 tons of uranium fuel will produce in one fuel replacement cycle, gases equal in volume to those produced by vaporization of 1000 Hiroshima bombs. These gases will be vented as "normal operating emissions" to the atmosphere. There is no possible assurance those gases will be fully decayed or clean at the time of discharge.

Response

As discussed above in Response to Issue A, normal, routine emissions of radioactivity from the Seabrook plant are kept as low as reasonably achievable, pursuant to 10 C.F.R. Part 50, Appendix I.

F. Issue

Discharges to air and ocean during radiological emergencies will instantly violate "permissible discharge limits" required for compliance with existing NPDES permit and FES required by EPA laws. Those permits were issued based on incomplete information which omits impact of Class 9 emergencies on environment. The NPDES permit expires in 1990 and should not be renewed.

Response

The NPDES (National Pollution Discharge Elimination System) permit pertains to discharges of waterborne, nonradioactive constituents or parameters (such as chlorine, temperature, and acidity) and not to radioactive materials. The NPDES permit is issued by state governments under authority delegated to them by the U.S. Environmental Protection Agency (EPA). The NRC has no authority over the issuance of such permits.

G. Issue

In a Class 9 catastrophic radiological emergency, the reactor core at Seabrook cannot be isolated from the marshes and meltdown debris moving with ground water would leach to marshes. The ocean discharge would also be thoroughly contaminated at the outfall.

Response

As stated above, the very purpose of the massive containment building at Seabrook is to contain fission products, especially during an emergency, so that they would not be released to the environment. Nevertheless, such a release has been postulated and this was considered by the Staff in the Seabrook FES at page 5-59, "Releases to Groundwater," where the Staff considered the potential environmental impacts from groundwater for the Seabrook site, including potential routes, travel times, and retardation and absorption factors for radionuclides released to groundwater, through the bedrock, moving from the reactor to the marshes. The Staff estimated that after a delay time of several months to several decades, almost all of the long-lived radionuclides, e.g., Sr-90 and Cs-137, would eventually reach the marshes. However, about 88% of the marsh water volume was estimated to be flushed to the ocean about twice a day by tide action. This would rapidly flush the radioactivity out of the marshes, through the Gulf of Maine, and into the Atlantic Ocean, where it is highly diluted and does not constitute a hazard to public health and safety or the environment.

H. Issue

Corrosion of heat exchange pipes can be expected to allow exchange of radioactive materials to contaminate ocean coolant discharged to ocean.

Response

Because of predictable small leaks in plant systems due to such factors as pipe corrosion and leaky valves, releases of very small quantities of radionuclides to air and water are expected during the operation of the Seabrook plant. However, absolute leaktightness is neither expected nor required. The plant Technical Specifications limit discharges, as required by NRC regulations (e.g., 10 C.F.R. Parts 20 and 50), and the regulations of the EPA (e.g., 40 C.F.R. Parts 190 and 61).

I. Issue

Each fuel cycle releases gases produced by fission of 100 tons of uranium to the atmosphere.

Response

As discussed in responses to Issues A and E, above, small amounts of fission product gases are expected to be released to the atmosphere because of the operation of the Seabrook plant, but are limited to low levels by the plant's Technical Specifications.

J. Issue

Evacuation is not safety. It is extreme hazard. Being forced out of one's home onto dangerous highways during radiological contamination and being unable to return home due to permanent contamination is a violation of basic constitutional rights.

Response

The Commission's regulations regarding emergency planning have been designed to provide reasonable assurance that adequate measures will be taken to protect the health and safety of the public during an emergency. As provided by 10 C.F.R. § 50.47(a)(2), the NRC's findings are based on a review of the Federal Emergency Management Agency (FEMA) findings as to whether state and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented. Under the NRC's emergency planning regulations, a range of protective actions is developed by the licensee in conjunction with state and local officials, which may include evacuation, and is evaluated by FEMA and the NRC to determine the sufficiency of the licensee's emergency response plans. Although evacuation per se is not required by NRC's regulations, often it is a key element in the licensee's emergency response plans, as is the case for Seabrook. In the event of an emergency, the decision as to whether to evacuate would be made by appropriate state officials.

As explained in the Staff's September 6, 1989 Memorandum to the ACRS, emergency planning requirements have been adopted as an added conservatism to the NRC's defense-in-depth safety philosophy. The added feature of emergency planning provides that, even in the unlikely event of an offsite fission-product release, there is reasonable assurance that protective actions can and will be taken to protect the population around nuclear power plants. Emergency response plans are required to provide for a range of protective action options (e.g., sheltering, partial evacuation of the emergency planning zone, or sheltering followed by relocation after a plume has passed). Evacuations occur often in the United States and have been analyzed extensively. A report by the EPA ("Evacuation Risks—An Evaluation," EPA-520/6-74-002, June 1974) concludes, in essence, that, although evacuation for cause can be traumatic, the

actual act of moving during an evacuation is not more hazardous, and perhaps less so, than moving routinely.

Finally, the Petitioner provides no basis for her assertion that evacuation and/or inability to return home would be unconstitutional. In any event, such an assertion relates to any state action involving evacuation or condemnation of property, not NRC action. As explained above, evacuation decisions are made by state and local governments, not the NRC.

CONCLUSION

As discussed above, the Petitioner has not raised any concerns that have not been already addressed by the Staff, or that would warrant the relief that she has requested. Consequently, the Petitioner's request is denied.

A copy of this Decision will be filed with the Secretary for the Commission's review as provided by 10 C.F.R. § 2.206(c).

FOR THE NUCLEAR
REGULATORY COMMISSION

Thomas E. Murley, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 9th day of July 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

August 20, 1990

The Appeal Board affirms the Licensing Board's determination in LBP-89-17, 29 NRC 519 (1989), that the applicants' emergency warning system for the Massachusetts portion of the Seabrook plume exposure pathway emergency planning zone (EPZ) is in compliance with applicable regulatory requirements and guidance.

EMERGENCY PLANNING: PUBLIC NOTIFICATION

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION);
NOTIFICATION REQUIREMENTS**

An offsite emergency response plan must establish "means to provide early notification and clear instruction to the populace within the plume exposure pathway [EPZ]." 10 C.F.R. § 50.47(b)(5). Moreover, subsequent to the time state and local government officials are notified of a situation that requires

urgent action, “[t]he design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the . . . EPZ within about 15 minutes.” 10 C.F.R. Part 50, Appendix E, § IV.D.3. *See also* NUREG-0654/FEMA-REP-1 (Rev. 1), “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants” (Nov. 1980), Appendix 3 (hereafter NUREG-0654).

EMERGENCY PLANNING: PUBLIC NOTIFICATION

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION);
NOTIFICATION REQUIREMENTS**

A proper warning system should consist of two separate components: (1) an “alerting signal” and (2) “notification by commercial broadcast (e.g., EBS).” NUREG-0654, App. 3, at 3-3. The “broadcast notification” component fulfills the regulatory requirement that the warning system provide the means for “clear instruction” to the public. *See* 10 C.F.R. § 50.47(b)(5).

EMERGENCY PLANNING: PUBLIC NOTIFICATION

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION);
NOTIFICATION REQUIREMENTS**

The term “initial notification” as incorporated in the “about 15 minute” requirement in 10 C.F.R. Part 50, Appendix E, § IV.D.3, was intended only to encompass completion of the signal that notifies the public that a radiological emergency exists so that they should take appropriate action to seek additional information (e.g., by tuning to a prescribed emergency broadcast station).

REGULATIONS: INTERPRETATION

REGULATORY GUIDES: APPLICATION

EMERGENCY PLANNING: PUBLIC NOTIFICATION

**EMERGENCY PLAN(S): CONTENT (NOTIFICATION);
NOTIFICATION REQUIREMENTS**

Appendix E to 10 C.F.R. Part 50 is the only regulatory timing requirement for warning systems, as such, it — not the NUREG-0654 guidance — is the standard with which applicants’ warning system must comply. *See, e.g., Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 290, *review declined*, CLI-88-11, 28 NRC 603 (1988).

REGULATORY GUIDES: APPLICATION

That regulatory guidance should be somewhat more demanding than a regulatory requirement is not untoward as it acts to assure compliance with the regulatory requirement.

EMERGENCY PLANNING: PUBLIC NOTIFICATION

EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS; FEMA VIEWS

Given the difference in language of NUREG-0654, App. 3, declaring that a warning system should include the “[c]apability for providing both an alert signal and an informational or instructional message . . . within 15 minutes” and the language of 10 C.F.R. Part 50, Appendix E, § IV.D.3, that the system have “the *capability to essentially complete the initial notification* of the public . . . within about 15 minutes” (emphases supplied), additional FEMA guidance requiring only that the siren signal and EBS message be activated (as opposed to completed) “within 15 minutes” is in conformity with the NUREG-0654 guidance.

EMERGENCY PLANNING: EMERGENCY PLANNING ZONE (SIZE)

EMERGENCY PLANS: EMERGENCY PLANNING ZONE (SIZE)

EPZ boundaries are to be drawn to conform generally to political jurisdictions rather than strictly at a radius of ten miles from the facility. *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987).

EMERGENCY PLANNING: PUBLIC NOTIFICATION

EMERGENCY PLAN(S): CONTENT (NOTIFICATION); NOTIFICATION REQUIREMENTS

While a warning system should assure direct coverage of essentially 100% of the population within five miles of the site within fifteen minutes, there is some flexibility in terms of the percentage of population coverage that must be obtained by the warning system for remote, low population areas at a distance of more than five miles from the facility. NUREG-0654, Appendix 3, Criteria B.2.b and c; *see* FEMA Guidance Memorandum AN-1, “FEMA Action to Qualify Alert and Notification Systems Against NUREG-0654/FEMA-REP-1

and FEMA-REP-10" (Apr. 21, 1987), Attach. I, at I-2 to -3. This flexibility, however, does not sanction a warning system whose design fails to provide an alert signal and an informational/instructional message to more populated areas throughout the entire EPZ, including the five to ten mile portion, within fifteen minutes.

APPEARANCES

John Traficonte, Boston, Massachusetts (with whom **Allan R. Fierce**, **Leslie B. Greer**, **Matthew T. Brock**, and **Pamela Talbot**, Boston, Massachusetts, were on the brief), for the intervenor **James M. Shannon**, Attorney General of Massachusetts.

Thomas G. Dignan, Jr., Boston, Massachusetts (with whom **George H. Lewald**, **Kathryn A. Selleck**, **Jeffrey P. Trout**, **Jay Bradford Smith**, **Geoffrey C. Cook**, **William Parker**, and **Barbara Moulton**, Boston, Massachusetts, were on the brief), for the applicants **Public Service Company of New Hampshire**, *et al.*

Mitzi A. Young (with whom **Edwin J. Reis**, **Richard G. Bachmann**, **Elaine I. Chan**, **Sherwin E. Turk**, and **Lisa B. Clark** were on the brief) for the **Nuclear Regulatory Commission** staff.

DECISION

As part of the pending appeals from the Licensing Board's final disposition of emergency planning issues relating to the Seabrook Station, the Massachusetts Attorney General (MassAG) has contested a Board determination, LBP-89-17,¹ concerning the efficacy of various aspects of the applicants' emergency warning system for the Massachusetts portion of the facility's plume exposure pathway emergency planning zone (EPZ). Because the subject matter of this portion of his appeal is related to that involved in a rejected motion to reopen from which

¹ 29 NRC 519 (1989). The MassAG previously sought to appeal this June 1989 decision. In an August 1, 1989 unpublished order, we dismissed his initial notice of appeal, holding that any review of LBP-89-17 must await a final determination on emergency planning matters. This occurred with the Licensing Board's November 1989 ruling that emergency planning for the Massachusetts portion of the Seabrook EPZ and the June 1988 full-scale emergency planning exercise were adequate to comply with emergency planning requirements so that the Seabrook full-power license should be authorized. See LBP-89-32, 30 NRC 375 (1989), *appeals pending*. The MassAG subsequently renewed his challenge to LBP-89-17 in a timely notice of appeal.

the MassAG took a separate appeal and upon which we rule today,² we now address his challenges to the particulars of the Licensing Board's decision on the emergency warning system as well.

I.

The emergency warning system to be employed for the Massachusetts portion of the Seabrook EPZ has been labeled the Prompt Alert and Notification System, or PANS.³ Like so many other aspects of emergency planning relating to Seabrook, it reflects the unique circumstances surrounding this facility. Following a December 1987 judicial indication that the Town of West Newbury, Massachusetts, was within its prerogatives to order the removal of pole-mounted warning sirens located within its jurisdiction, applicants decided to abandon entirely the use of such sirens within the Massachusetts portion of the EPZ.⁴ As a replacement, applicants established a system referred to as the Vehicle Alert Notification System, or VANS.

Under VANS, applicants will retain in excess of 100 workers to staff, on a twenty-four-hour basis, a fleet of trucks upon which warning sirens have been mounted.⁵ In the event of a radiological emergency at Seabrook, a truck will be dispatched from one of six staging areas to each of sixteen predetermined activation locations.⁶ Immediately upon arrival at the assigned activation site, the truck driver will start a hydraulic mechanism that extends a telescopic boom holding the siren, enabling it to reach a height of at least forty-five feet.⁷ Once a siren has reached an elevation of at least twenty-five feet, transmission of the appropriate control signal by emergency response authorities will cause it to sound for three minutes.⁸ Each siren's warbling call is intended to alert the public in the vicinity of the activation site of the existence of an emergency situation at Seabrook about which they should seek further information.

At the same time the sirens are sounded, the other main PANS component, the emergency broadcast system (EBS) utilized by applicants, is activated.

² See ALAB-936, 32 NRC 75 (1990).

³ A comprehensive description of the PANS is found in a system design report prepared by applicants for review by the Federal Emergency Management Agency (FEMA). See Applicants' Exh. 11-A (Seabrook Station Public Alert and Notification System FEMA-REP-10 Design Report (Apr. 30, 1988)); Applicants' Exh. 11-B (Seabrook Station Public Alert and Notification System FEMA-REP-10 Design Report (Addendum 1, Oct. 14, 1988)).

⁴ See ALAB-883, 27 NRC 43, 46-47, vacated in part on other grounds, CLI-88-8, 28 NRC 419 (1988).

⁵ See Applicants' Direct Testimony Regarding Remaining Prompt Alert and Notification System Issues, fol. Tr. 75, at 21-22 [hereinafter Applicants' Direct Testimony]; Tr. 254.

⁶ Applicants' Exh. 11-A at 2-5.

⁷ See Applicants' Exh. 11-B at 2-7, -12. Although the full extension height for the VANS sirens will be approximately 51 feet, the sound coverage analysis for the system was conservatively conducted for a siren height of 45 feet. See *id.* at 2-12; Tr. 155-57.

⁸ Tr. 88; see Applicants' Exh. 11-A at 2-17. See also *infra* note 53.

This system is to provide the public in the Massachusetts portion of the EPZ with information about the emergency condition and protective action instructions. As that system is designed, after receiving authorization from utility emergency response officials (who have, in turn, consulted with State officials), the local radio stations with which the applicants have an agreement to transmit EBS messages will begin broadcasting.⁹ Their initial transmission consists of an eight-second message informing listeners that what ensues is not a system test, followed by a twenty-two second announcement advising what local communities are affected by the emergency condition, and then a twenty-five second tone alert signal.¹⁰ Immediately after this initial fifty-five second period, in accordance with the directions of emergency response officials, the stations will broadcast an informational and instructional message detailing the nature of the emergency and recommended protective actions.¹¹ The length of this message varies with the emergency situation, but the Licensing Board, on the basis of its own timing of the proposed prerecorded EBS messages, found that the longest English-language message would last approximately two minutes and thirty-eight seconds.¹²

Two issues relating to applicants' warning system were litigated before the Licensing Board: (1) whether the sound level of the VANS sirens will be too high; and (2) whether the public will be warned quickly enough. With respect to the sound magnitude issue, on the basis of the testimony adduced during a two-day hearing, the Board found that while there could be instances of deviation from the guidance on sound levels set forth in NUREG-0654/FEMA-REP-1 (NUREG-0654),¹³ the sound levels are acceptable because of the short duration of the overage and the limited number of areas where building sound reflection would exceed guidance levels.¹⁴ The MassAG does not challenge this finding.

The MassAG does, however, contest the Licensing Board's findings relative to the second issue of "timely" notification.¹⁵ In addressing this matter, the Board — as do we — first canvassed the regulatory requirements and guidance applicable to apprising the public of an emergency event at a nuclear facility.¹⁶

In assessing the adequacy of applicants' emergency warning system, of central concern is 10 C.F.R. § 50.47(b)(5), which provides that an offsite

⁹ Applicants' Exh. 11-A at 1-2, -4; see Tr. 132-38.

¹⁰ Tr. 144, 147.

¹¹ Thereafter, the emergency broadcast communication is repeated twice. See Tr. 151.

¹² LBP-89-17, 29 NRC at 532; Tr. 285-86. The operation of the EBS utilized by applicants also is discussed in ALAB-936.

¹³ NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980), App. 3, at 3-8.

¹⁴ LBP-89-17, 29 NRC at 524-26.

¹⁵ Brief of the [MassAG] in Support of His Appeal of LBP-89-32 (Jan. 24, 1990) at 87-92 [hereinafter MassAG Brief].

¹⁶ LBP-89-17, 29 NRC at 527-29.

emergency response plan must establish “means to provide early notification and clear instruction to the populace within the plume exposure pathway [EPZ].” Also of major significance is the implementing proviso of 10 C.F.R. Part 50, Appendix E, § IV.D.3, which requires that, subsequent to the time state and local government officials are notified of a situation that requires urgent action, “[t]he design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes.” Of final note are the applicable criteria in NUREG-0654, the emergency planning guidance directive issued jointly by the Commission and the Federal Emergency Management Agency (FEMA). Appendix 3 of NUREG-0654, which addresses specifically the means for providing prompt emergency warning to the public, states in pertinent part:

B. Criteria for Acceptance

1. Within the plume exposure EPZ the system shall provide an alerting signal and notification by commercial broadcast (e.g., EBS) plus special systems such as [National Oceanographic and Atmospheric Administration] radio. . . .
2. The minimum acceptable design objectives for coverage by the system are:
 - a) Capability for providing both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10 mile EPZ, within 15 minutes.
 - b) The initial notification system will assure direct coverage of essentially 100% of the population within 5 miles of the site.
 - c) Special arrangements will be made to assure 100% coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure EPZ.¹⁷

In interpreting these various provisions, the Licensing Board declared that the focus of Appendix E, § IV.D.3, “on *capability* means to us a practical realization that the system must be able to comply with the regulations but that no system can guarantee results regardless of events” and that “[t]he use of the words ‘essentially complete’ and ‘about’ also indicates to us the appropriateness of some flexibility in interpretation.”¹⁸ The Board nonetheless found that this “flexibility does not . . . permit us to exclude the notification of the public, through an EBS system message, from the elapsed time. Based on both the regulations and the guidance, we interpret the regulation to include *both* alerting and notification of the public within the ‘about 15 minutes’ time period.”¹⁹

¹⁷ NUREG-0654, App. 3, at 3-3.

¹⁸ LBP-89-17, 29 NRC at 527 (emphasis in original).

¹⁹ *Ibid.* (emphasis in original).

Moreover, the Board rejected additional FEMA guidance indicating that agency would consider compliance with NUREG-0654, Appendix 3, Criterion B.2, had been attained during emergency planning exercises if, within fifteen minutes of system activation, the siren signal is triggered and an instructional/informational message is "on the air."²⁰ Instead, the Board interpreted the NUREG-0654 guidance "to require sequential alerting and notification since people will not know to receive the EBS notification until after they have heard the siren alerting signal."²¹

With this interpretation as its decisional basis, the Licensing Board went on to analyze each discrete element in the alerting and notification process, from the time of the decision to activate the VANS through the broadcast of the EBS message. It found these elements include: (1) the time to alert the VANS operators ("Alert" time); (2) the time for the VANS operators to get under way ("Dispatch" time); (3) the transit time to the activation site ("Route Transit" time); (4) the time to set up equipment at the activation site ("Setup" time); (5) the period during which the sirens operate ("Siren Sounding" time); and (6) the time for the public to tune to an EBS station and receive verbal instructions ("Tuning and Message" time).²² Of these components, the Board concluded that only one, "Route Transit" time, is a variable with respect to individual activation sites; therefore, the remaining time elements were treated as a constant quantity in determining the overall warning time.²³

Regarding the final timing elements of "Siren Sounding" and "Tuning and Message," however, based upon its reading of the regulations and guidance described above, the Board concluded that, "[u]ntil a person hears both the siren and the message, the person is not informed of the appropriate action to take."²⁴ In this light, the Board declared it appropriate to "add the length of time for the EBS message to all the previous times involved, so that those hearing the siren near the end of its sounding will have time to hear the EBS message."²⁵ On this basis, the Board found that at half of the sixteen siren activation sites, alert and notification times would be in excess of eighteen minutes and at three of the seven sites within five miles of the facility, the times would be in excess of nineteen minutes.²⁶ The Board held that "[u]nder all the circumstances of this

²⁰ FEMA Guidance Memorandum AN-1, "FEMA Action to Qualify Alert and Notification Systems Against NUREG-0654/FEMA-REP-1 and FEMA-REP-10" (Apr. 21, 1987), Attach. I, at I-4 [hereinafter FEMA Guidance Memorandum AN-1].

²¹ LBP-89-17, 29 NRC at 529.

²² *Id.* at 529-33.

²³ *Id.* at 533 (Table 1). The times assigned to the constant time elements were: "Alert" time — 20 seconds; "Dispatch" time — 50 seconds; "Setup" time — 1 minute; "Siren Sounding" time — 3 minutes; "Tuning and Message" time — 3 minutes and 58 seconds. *Ibid.*

²⁴ *Id.* at 532.

²⁵ *Ibid.*

²⁶ *See id.* at 535 (Table 2).

case, including the fact that concerned political jurisdictions can reduce alerting and notification times by making sites available for sirens permanently mounted on poles,” the “distribution” of times was “permissible” relative to the “about 15 minutes” standard in Appendix E and the “within 15 minutes” guidance of NUREG-0654, Appendix 3.²⁷

On appeal, the MassAG challenges two aspects of the Licensing Board’s findings. The first relates to the time required to turn on a radio and locate one of the EBS stations that is broadcasting the informational/instructional message. The MassAG claims that there was no evidence in the record to support the Licensing Board’s conclusion that twelve seconds, which were added to the “Tuning and Message” component of the warning process, is an appropriate amount of time for the public to adjust a radio to one of the stations broadcasting emergency messages. Also in this regard, the MassAG contends that, subsequent to the Board’s decision, the withdrawal of certain Massachusetts broadcasters from participation agreements acted to make the Board’s analyses “not only unfounded but also unlikely” because it now will take longer for the public to locate the radio stations that will be broadcasting the emergency messages.²⁸

Second, the MassAG claims that, even if they are correct, the Board’s findings on the alert and notification times are not adequate. He asserts that they do not meet the regulatory requirement of completion of initial notification “within about 15 minutes” because at half the sites the times exceed fifteen minutes by twenty percent or more.²⁹ Further, in an apparent reference to the Licensing Board’s specification of certain issues for litigation,³⁰ the MassAG maintains that the Board improperly relied upon the regulatory guidance in NUREG-0654, Appendix 3, Criterion B.2, to distinguish between alert and notification requirements within five miles of the facility and requirements for the area five to ten miles from the facility, making a “firm time limitation of fifteen minutes” applicable only within a five-mile radius of Seabrook.³¹ Moreover, the MassAG declares that, even if so limited, several of the siren activation sites serving the area within five miles of the facility fail to comply with the “15 minutes” criterion.³² The MassAG concludes that these various deficiencies make it apparent that the Licensing Board’s determination was based upon the application of an improper “best efforts” standard.³³

Applicants view the MassAG’s appeal as centering on two findings by the Board: the time required to adjust a radio to one of the EBS stations and the

²⁷ *Id.* at 534, 537-38.

²⁸ MassAG Brief at 88-90.

²⁹ *Id.* at 90-91.

³⁰ See LBP-89-17, 29 NRC at 522 (Issues A.5-3, -4).

³¹ MassAG Brief at 91.

³² *Id.* at 91-92.

³³ *Id.* at 92.

legal standard adopted by the Board relating to the "15 minutes" standard.³⁴ As to the first issue, while acknowledging there was no direct testimony on the time required to tune a radio to an EBS station, applicants insist that the time utilized by the Board had to be adequate because it was more conservative (i.e., longer) than that put forth by the MassAG in his proposed findings regarding the total tuning and message capability time.³⁵ On the second issue, applicants claim the expression "about 15 minutes" that is contained in the regulations is the controlling standard, rather than the "within 15 minutes" language set forth in the NUREG-0654 guidance that the MassAG asserts should be adopted as the requirement for alert and notification timing.³⁶ Applicants argue that this is an attempt by the MassAG to expand the litigated issues to include alerting time for all of the EPZ, and maintain that the MassAG is foreclosed from this course by his failure to appeal an earlier Licensing Board summary disposition ruling limiting the scope of the alert and notification issue to the first five miles of the EPZ.³⁷

II.

The MassAG's challenges to the Licensing Board decision go to whether it reaches the proper conclusion relative to the time mandated under NRC regulations and guidance for activating the Seabrook warning system. Because the Board's interpretation of what timing elements are relevant to compliance with the regulations and NUREG-0654 guidance has a direct role in any determination about the adequacy of the applicants' warning system, we necessarily must address those findings.

³⁴ Applicants' Brief (Mar. 5, 1990) at 116. Consistent with our earlier direction that the staff need not duplicate those arguments of applicants with which it agreed, in its brief the staff concurred in the applicants' assertions relative to the MassAG's appeal regarding LBP-89-17. NRC Staff Brief in Response to Intervenor Appeals from LBP-89-32 and LBP-89-17 (Mar. 21, 1990) at 131.

³⁵ Applicants' Brief at 117-20. Applicants note that the Board apparently made an arithmetic error in arriving at a time of 3:58 (minutes:seconds) for overall tuning and message time, which in fact should have been 3:48. *Id.* at 125. The Board, however, made another addition error with respect to this time component. It determined that there would be a three-second delay between the end of the three-minute siren sounding and the beginning of the next message on the basis that the initial messages, tone alert, and longest announcement would last 3:03. The initial announcement/tone alert and message times are 0:55 and 2:38, for a total of 3:33. The delay thus should be 33 seconds instead of three seconds. The entire "tuning time" of 15 seconds found necessary by the Board, *see* LBP-89-17, 29 NRC at 533 (although 15 seconds needed to tune radio, only 12 seconds added to "Tuning and Message" time because of three-second delay before beginning of message), and an extra 18 seconds as well, would be available in the 33-second delay between the time the siren stops and the time the next announcement sequence begins. As a consequence, if tuning time were a relevant timing factor, which we find it is not, *see infra* pp. 68-69, 71, there would be no need in these circumstances to include additional "tuning time," as did the Licensing Board.

³⁶ Applicants' Brief at 126.

³⁷ *Id.* at 126-27.

A. In providing guidance on compliance with the requirement of section 50.47(b)(5) that an emergency plan include "means to provide early notification" to the population within the EPZ, NUREG-0654 specifies that a proper warning system should consist of two separate components: (1) an "alerting signal" and (2) "notification by commercial broadcast (e.g., EBS)."³⁸ Both are necessary for a comprehensive warning system in that, as NUREG-0654 makes clear, "[a] system which expects the recipient to turn on a radio receiver without being alerted by an acoustic alerting signal or some other manner is not acceptable."³⁹ In the case of Seabrook, the VANS is intended to supply the "alerting signal" component, while the radio station broadcast system utilized by applicants furnishes the "broadcast notification" component.⁴⁰

As we have described previously, the Licensing Board's interpretation of the specific timing requirement of Appendix E, § IV.D.3, that a "prompt public notification system shall . . . have the capability to essentially complete the initial notification of the public within the . . . EPZ within about 15 minutes" mandates that both the alert signal and EBS components of the Seabrook warning system be completed within the allotted time frame. This construction, however, fails to acknowledge that the reference to "*initial* notification" in Appendix E, § IV.D.3 (emphasis supplied), implies that this timing requirement does not necessarily encompass the *totality* of the "notification" *process*. In fact, the Commission's explanation accompanying the final rule adopting Appendix E makes it apparent that this is indeed the case.

As initially proposed in 1979, the "15 minutes" requirement, which was to be contained in a footnote to Appendix E, evidenced the Commission's expectation "that the capability will be provided to essentially complete *alerting* of the public within the . . . EPZ within 15 minutes"⁴¹ Thereafter, in the Statement of Consideration for the final rule, the Commission noted this condition had been "removed as a footnote and placed in the body of Appendix E."⁴² In addition, in responding to objections that there might never be an accident requiring fifteen-minute notification, that the provision had the potential for significant financial impact, and that its technical basis was questionable, the Commission stated

³⁸ NUREG-0654, App. 3, at 3-3. Section 50.47(b)(5) also mandates that the warning system provide the means for "clear instruction" to the public. The "broadcast notification" component also fulfills this requirement by supplying messages containing protective action instructions. Further regarding the second component, NUREG-0654 suggests the utilization of "special systems such as [National Oceanic and Atmospheric Administration] radio." NUREG-0654, App. 3, at 3-3. The MassAG has not raised any issue concerning the applicants' utilization of special notification systems.

³⁹ NUREG-0654, App. 3, at 3-3.

⁴⁰ Although VANS sirens do have the capability to function as loudspeakers and provide an informational/instructional message, App. Exh. 11-A at 2-6, applicants have eschewed their use for this purpose, *see* LBP-89-9, 29 NRC 271, 292 (1989).

⁴¹ 44 Fed. Reg. 75,167, 75,173 n.3 (1979) (to be codified at 10 C.F.R. Part 50, App. E, § IV.D.3 n.3) (proposed Dec. 19, 1979) (emphasis supplied).

⁴² 45 Fed. Reg. 55,402, 55,407 (1980).

that the Appendix E directive was being retained as wholly consistent with the rationale behind emergency planning to “provide additional assurance for the public protection even during such an unexpected event.”⁴³ By way of additional explanation, the Commission declared:

Th[e] wide spectrum of potential accidents also reflects on the appropriate use of the offsite notification capability. *The use of this notification capability will range from immediate notification of the public (within 15 minutes) to listen to predesignated radio and television stations, to the more likely events where there is substantial time available for the State and local governmental officials to make a judgment whether or not to activate the public notification system.*

Any accident involving severe fuel degradation or core melt that results in significant inventories of fission products in the containment would warrant immediate public notification and consideration, based on the particular circumstances, of appropriate protective action because of the potential for leakage of the containment building. In addition, the warning time available for the public to take action may be substantially less than the total time between the original initiating event and the time at which significant radioactive releases take place. *Specification of particular times as design objectives for notification of offsite authorities and the public are a means of ensuring that a system will be in place with the capability to notify the public to seek further information by listening to predesignated radio or television stations.* The Commission recognizes that not every individual would necessarily be reached by the actual operation of such a system under all conditions of system use. However, the Commission believes that provision of a general alerting system will significantly improve the capability for taking protective actions in the event of an emergency.⁴⁴

With this explication, Appendix E, §IV.D.3, was adopted in its present form.

From this exposition, it is clear that, consistent with the proposed rule’s use of the term “alerting,” the term “initial notification” as incorporated in the “about 15 minute” requirement in Appendix E was intended only to encompass completion of the signal that notifies the public that a radiological emergency exists so that they should take appropriate action to seek additional information (e.g., by tuning to a prescribed emergency broadcast station). This corresponds to the first of the two warning system components described above, i.e., the VANS alert sirens. Compliance with the “about 15 minute” requirement therefore should be measured in this instance by adding the three-minute “Siren Sounding” period to the “Alert,” “Dispatch,” “Setup,” and “Route Transit” times. As a consequence, the time involved in tuning into and broadcasting the EBS

⁴³ *Ibid.*

⁴⁴ *Ibid.* (emphasis supplied).

message is not relevant to a determination of whether this regulatory directive has been fulfilled.⁴⁵

As illustrated in Table B (set forth in the Appendix to this opinion), when the three-minute "Siren Sounding" time is combined with the "Alert," "Dispatch," and "Setup" times of twenty seconds, fifty seconds, and one minute, respectively,⁴⁶ and the conservative winter "Route Transit" times set forth in Table A (also in the Appendix),⁴⁷ for all of the sixteen siren activation sites within the ten-mile EPZ, the total time falls within the Appendix E requirement that the initial notification be essentially complete "within about 15 minutes."⁴⁸

⁴⁵ The MassAG's concern about the effect upon notification timing of the low listenership at the stations utilized for emergency message broadcast thus also is irrelevant. In any event, as we have explained in ALAB-936, 32 NRC at 82-83, the size of the regular audience of these stations is not significant because we have been given no cause to believe that the measures applicants have taken to ensure that the public is aware of which stations provide Seabrook emergency information are inadequate.

⁴⁶ See *supra* note 23. Although we utilize the 20-second time for the "Alert" component as set forth by the Licensing Board, we harbor substantial doubt that it is a correct figure. Ten seconds was the time allowed in the system design, Memorandum in Support of Applicants' Motion for Summary Disposition of the [MassAG's] Amended Contention on Notification System (Sept. 17, 1988), Affidavit of Gary J. Catapano at 4 [hereinafter Applicants' Summary Disposition Memorandum], and was the time accepted by the Board as an issue of fact that was not in dispute, LBP-89-9, 29 NRC at 283-84. In adding another 10 seconds, the Board relied upon testimony that was directed not at showing the design objective of the system was incorrect, but rather at what might happen "if" the system failed totally to operate as designed. Given the language of Appendix E, §IV.D.3, and NUREG-0654, indicating that the regulatory focus should be on each warning system's "design objective" rather than its actual effectiveness in operation, see 45 Fed. Reg. at 55,407, absent a showing of a likelihood of failure sufficient to call into serious question the validity of applicants' design basis (including implementation time) for this "Alert" segment of the system, the Licensing Board's imposition of the additional time seems questionable. Nonetheless, in light of the minuscule period involved, the Board's action, even if erroneous, does no mischief sufficient to warrant correction.

⁴⁷ Although the Licensing Board set forth winter "Route Transit" times in its decision, see LBP-89-17, 29 NRC at 535 (Table 2), we have republished them as part of Table A in the appendix to this opinion in order to correct an additional mathematical error made by the Board. The need for correction arises from the Board's somewhat confusing analysis of the winter times. At one point, the Board declared that the conservative assumption was that winter weather would *reduce* transit times by 25%, *id.* at 534, when in fact in Table 2 the winter transit times have been increased by 25%. Putting this apparently inadvertent error aside, the Board's determination to impose a 25% increase in transit times is inconsistent with its earlier statement that it accepted the applicants' position that there will be a 25% reduction in the *speed* factor during the winter months. *Id.* at 531. As applicants' witness Edward B. Lieberman explained, a 25% reduction in speed mathematically converts to a 33% increase in transit time. Applicants' Summary Disposition Memorandum, Affidavit of Edward R. Lieberman at 5. Although this transit time effect previously was acknowledged by the Board, see LBP-89-9, 29 NRC at 288 (Finding A.5-1), the factor was not incorporated into the figures the Board utilized in Table 2 in its initial decision, an oversight we remedy.

Also with regard to winter "Route Transit" times, we note that these figures are inherently conservative. It again is not apparent to us, given the emphasis in the regulations and guidance on "design objectives," see *supra* note 46, why the average transit times put forth by applicants, which are based upon times for all four seasons including winter, Applicants' Direct Testimony at 28, are not sufficient for assessing the warning system's compliance with the Appendix E standard (and NUREG-0654 guidance). Indeed, on the basis of those average figures, which also are set forth in Table A, it is even more evident that the "initial notification" completion times for the 16 sites meet the regulatory requirement of "within about 15 minutes."

⁴⁸ As a review of Table B makes apparent, only five of the 16 time totals are in excess of 15 minutes and of those only one — that for site 16 — extends more than two minutes beyond a quarter-hour. As site 16's longer time total involves circumstances that, for reasons we detail more fully below, sanction its compliance with the guidance in NUREG-0654, see *infra* note 54, we conclude that it comports as well with the "about 15 minutes" requirement of Appendix E.

B. As applicants point out, because Appendix E is the only regulatory timing requirement for warning systems, it — not the NUREG-0654 guidance — is the standard with which applicants' warning system must comply.⁴⁹ Accordingly, the MassAG's assertion that the system cannot comply with the arguably more stringent "within 15 minutes" guidance of NUREG-0654 is of questionable significance.⁵⁰ Nonetheless, after reviewing this matter as well, we conclude that contrary to the MassAG's insistence, the applicants' warning system also meets the NUREG-0654 guidelines.

As previously noted, while NUREG-0654 indicates that a warning system should include the "[c]apability for providing both an alert signal and an informational or instructional message . . . within 15 minutes," the regulatory requirement of Appendix E is that the system have "the *capability to essentially complete the initial notification* of the public . . . within about 15 minutes." (Emphases supplied.) Although the Licensing Board apparently found no significance in the difference in the highlighted language of these two provisions, we conclude that this is an important distinction that must be taken into account in judging compliance with the NUREG-0654 guidance.

As we have previously noted, the Licensing Board explicitly rejected FEMA's additional guidance construing the language of NUREG-0654 as signifying only that the alert signal must be activated and the EBS message must be on the air; instead, the Board mandated that both the signal and the message be completed. We find, however, that the difference in terminology between the requirement of Appendix E, § IV.D.3, for the capacity "to essentially complete" the initial notification, and the guidance in NUREG-0654 that there be the "capability for providing," i.e., furnishing, the alert signal and the informational/instructional message to the public, supports the FEMA interpretation. In specifying that there need only be the "capacity for providing" the alert signal and message, as opposed to being "completed," we perceive no intent on the part of the drafters of NUREG-0654 to suggest that applicants need go beyond the activation of the sirens and the EBS broadcast in order to comply with its "within 15 minutes" guideline.

Certainly, this interpretation makes good sense. As applicants suggested before the Licensing Board,⁵¹ the Board's interpretation requiring that both the

⁴⁹ See, e.g., *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 290, *review declined*, CLI-88-11, 28 NRC 603 (1988).

⁵⁰ NUREG-0654 appears to be more stringent than Appendix E, § IV.D.3, because it does not contain the qualifier "about" found in section IV.D.3. That the NUREG-0654 guidance should be somewhat more demanding is not untoward as it acts to assure compliance with the regulatory requirement. In this instance, if applicants' siren signal (and EBS message) is *initiated* "within 15 minutes," which we find below is all that NUREG-0654 suggests, it seems unlikely that the limited period of time until that signal is concluded (i.e., three to five minutes, see *infra* note 52) could fail to conform with the Appendix E requirement that the signal be "essentially complete . . . within about 15 minutes."

⁵¹ See LBP-89-17, 29 NRC at 533.

siren and the EBS message be presented completely and sequentially penalizes the use of lengthy, albeit possibly more instructive, messages. As a result, the Board's interpretation could have the deleterious effect of dissuading an applicant whose warning system may have extended activation times from proposing more prolonged messages, even if longer messages would otherwise better serve the public interest.⁵² We thus find appropriate the FEMA guidance requiring only that siren signal and EBS message activation begin "within 15 minutes" in order to comply with NUREG-0654 guidance. And, as with the Appendix E requirement, the time involved in tuning into and broadcasting the EBS messages is not relevant in assessing the warning system's adequacy.

Because the activation of the siren and the EBS occurs essentially simultaneously in this instance,⁵³ in order to determine compliance with the NUREG-0654 guidance figure of "within 15 minutes" it is necessary to include fifty-five seconds after the "Setup" to account for siren activation and the start of the EBS informational/instructional message after the initial announcements and the tone alert signal. As is also illustrated in Table B (attached as part of the Appendix to this decision), when this fifty-five second time period is combined with the "Alert," "Dispatch," "Setup," and corrected winter "Route Transit" times, the total time for the sixteen siren activation sites within the ten-mile EPZ conforms with the NUREG-0654 guidance that a signal and a message be "provided . . .

⁵²The same thing would be true for the "Siren Sounding" time, which the guidance indicates should be from three to five minutes long. NUREG-0654, App. 3, at 3-12. To conform to the Licensing Board's reading of the NUREG-0654 guidance, an applicant faced with a warning system timing problem no doubt would choose three minutes as its siren sounding time even if, in the circumstances, something in excess of that time period might be better.

⁵³The testimony before the Board indicates that, when State officials have given permission for warning system activation, applicants' emergency response coordinator will inform the EBS stations that they should begin broadcasting a message at a specified time. The coordinator then listens to the stations and, when the EBS broadcast begins, he or she immediately sends out the signal that promptly activates the VANS sirens. Applicants' Direct Testimony at 30; see Tr. 135-38.

In a fast-breaking accident, there is the possibility that the siren activation signal could be given before all the VANS trucks are at their activation sites. In that circumstance, the activation signal is stored electronically and, when the truck reaches its destination and boom deployment takes the siren to a height of 25 feet, the siren will begin sounding. Tr. 87-88. Applicants, however, have designed the system so that the first VANS trucks to leave each staging area are those sent to the most distant activation sites served by that staging area, Applicants' Direct Testimony at 23, a measure the Licensing Board found (and we agree) is adequate to avoid or minimize any potential for delay, see LBP-89-17, 29 NRC at 531.

within 15 minutes.”⁵⁴ Thus, the MassAG’s challenge to the applicants’ emergency warning system under NUREG-0654 likewise is without basis.⁵⁵

For the reasons set forth herein, the Licensing Board’s determination in LBP-89-17, 29 NRC 519 (1989), that the applicants’ emergency warning system for the Massachusetts portion of the Seabrook EPZ is in compliance with applicable regulatory requirements and NUREG-0654 guidance is *affirmed*.

⁵⁴ As Table B indicates, the only activation site that even arguably falls outside the NUREG-0654 guidance is site 16, with a total time of 18:40. Because, in conformity with emergency planning requirements, *see Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 395 (1987)*, the Seabrook EPZ boundaries were drawn to conform generally to political jurisdictions rather than strictly at a radius of 10 miles from the facility, this activation site is located between 10 and 11 miles from the facility. Applicants’ Exh. 11-B at 2-9. In complying with the exhortation in FEMA Guidance Memorandum AN-1 that a warning system design submittal “should contain the rationale” for instances in which alert and notification will be provided beyond 15 minutes, FEMA Guidance Memorandum AN-1, Attach. I, at I-3, applicants’ design report states that the geographical area covered uniquely by the siren at site 16 “has a maximum population of 401 located within an area of approximately 3 square miles.” Applicants’ Exh. 11-B at 2-9. This siren thus appears to cover the type of low population zone for which NUREG-0654 guidance permits alert and notification to occur within 45 minutes, *see infra* note 55, and accordingly is in compliance with the NUREG guidelines.

⁵⁵ We also find without substance the MassAG’s additional argument that the Licensing Board, by applying different timing standards depending on the distance from the facility, engaged in error requiring reversal. Our conclusion in this regard also arises from our evaluation of the NUREG-0654 criteria.

The Commission previously has indicated that, as the guidance embodied in NUREG-0654, Appendix 3, Criteria B.2.b. and c., reflects, while a warning system should “assure direct coverage of essentially 100% of the population within 5 miles of the site,” there is some flexibility in terms of the percentage of population coverage that must be obtained by the warning system at a distance of more than five miles from the facility. Specifically, the Commission has declared that “[t]he lack of a specified percentage from 5 to 10 miles is to allow planners the flexibility to design the most cost-effective system to meet [the general objective of providing an alert signal and an informational/instructional message in the 10-mile EPZ within 15 minutes].” *Final Rule on Emergency Planning*, CLI-80-40, 12 NRC 636, 638 (1980). This theme is reiterated in NUREG-0654, which declares that “[t]he lack of a specific design objective for a specified percent of the population between 5 and 10 miles which must receive the prompt signal within 15 minutes is to allow flexibility in system design.” NUREG-0654, App. 3, at 3-4. Also recognizing this differentiation “based on geographic location within the emergency planning zone,” FEMA’s Guidance Memorandum AN-1, in addressing qualification of alert and notification systems under NUREG-0654, provides that “[a]lert and notification systems must also be capable of providing an alert signal and an instructional message within 15 minutes between 5 and 10 miles of the facility. However, in extremely rural, low population areas beyond 5 miles, up to 45 minutes may be allowed for providing an alert signal and an instructional message to the permanent and transient population.” FEMA Guidance Memorandum AN-1, Attach. I, at I-2 to -3.

As these various sources make apparent, the geographic distinction embodied in NUREG-0654, Appendix 3, Criteria B.2.b and c., affords some latitude in providing notification to the remote areas in the portion of the EPZ that is 5 to 10 (or more) miles away from the facility. It does not, however, sanction a warning system whose design fails to provide an alert signal and an informational/instructional message to more populated areas throughout the entire EPZ, including the 5 to 10 mile portion, within 15 minutes. To the extent the Licensing Board’s decision suggests the contrary, it is incorrect. Nonetheless, any misapprehension the Board may have harbored in this regard has no practical significance here because, as we have explained above, the record before us does not supply a basis for concluding that the alert signal and broadcast message supplied by the applicants’ warning system throughout the EPZ fails to comply with the timing and coverage guidelines set forth in NUREG-0654, Appendix 3.

It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

APPENDIX

TABLE A

Transit Times⁵⁶

Location	Average Transit Time (Min:sec) ⁵⁷	Winter Transit Time (Min:sec)
1	8:37	11:28
2	5:03	6:43
3	6:29	8:37
4	0:00	0:00
5	0:00	0:00
6	3:09	4:11
7	3:42	4:55
8	7:13	9:36
9	7:17	9:41
10	7:18	9:43
11	7:32	10:01
12	8:25	11:11
13	8:03	10:42
14	0:55	1:13
15	3:01	4:01
16	11:43	15:35

⁵⁶ Applicants' Direct Testimony at 28.

⁵⁷ Average Transit Time is based on measured times for all four seasons. *Ibid.*

TABLE B
Total Times Relative to Compliance
with 10 C.F.R. Part 50, App. E, § IV.D.3
and NUREG-0654, App. 3

Location	Time Under App. E (Min:sec)⁵⁸	Time Under NUREG-0654 (Min:sec)⁵⁹
1	16:38	14:33
2	11:53	9:48
3	13:47	11:42
4	5:10	3:05
5	5:10	3:05
6	9:21	7:16
7	10:05	8:00
8	14:46	12:41
9	14:51	12:46
10	14:53	12:48
11	15:11	13:06
12	16:21	14:16
13	15:52	13:47
14	6:23	4:18
15	9:11	7:06
16	20:45	18:40

⁵⁸ Computed for each site by adding "Alert" time (0:20), "Dispatch" time (0:50), "Setup" time (1:00), "Winter Transit" time (see Table A), and "Siren Sounding" time (3:00). See *supra* p. 69.

⁵⁹ Computed for each site by adding "Alert" time (0:20), "Dispatch" time (0:50), "Setup" time (1:00), "Winter Transit" time (see Table A), and time for initial announcements and tone alert signal (0:55). See *supra* pp. 71-72.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

**G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Wilber**

In the Matter of

**Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)**

**PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)**

August 20, 1990

The Appeal Board affirms the Licensing Board's decision in LBP-90-1, 31 NRC 19 (1990), denying intervenors' motion to reopen the record and admit a new contention relative to the adequacy of the emergency broadcast system for the Seabrook facility.

RULES OF PRACTICE: REOPENING OF RECORD

Each of the three criteria set forth in 10 C.F.R. § 2.734(a) for reopening of the record must be met before a reopening motion is granted.

RULES OF PRACTICE: REOPENING OF RECORD

If a reopening motion raises a contention not previously in controversy, it must also satisfy the requirements for the admission of untimely contentions set forth in 10 C.F.R. § 2.714(a)(1)(i)-(v). 10 C.F.R. § 2.734(d).

EMERGENCY PLANNING: PUBLIC NOTIFICATION

EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION)

The Commission's regulations require that emergency response plans "provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone." 10 C.F.R. § 50.47(b)(5).

EMERGENCY PLANNING: PUBLIC NOTIFICATION

EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION); NOTIFICATION REQUIREMENTS

Applicants for a full-power license are expected to "establish a system for disseminating to the public appropriate information . . . including the appropriate notification to appropriate broadcast media, e.g., the Emergency Broadcast System (EBS)." NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980), Criterion I.I.E.5.

EMERGENCY PLANNING: PUBLIC NOTIFICATION

EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION); NOTIFICATION REQUIREMENTS

Resort to an EBS is one recognized method of providing appropriate notification. An EBS customarily is a network of radio and television stations voluntarily organized, in accordance with and subject to the regulations of the Federal Communications Commission, to broadcast emergency messages to the public in the event of an emergency. *See* 47 C.F.R. §§ 73.901-962.

APPEALS BOARD(S): ADVISORY OPINIONS

The fact that a decision is issued as an advisory opinion does not necessarily preclude reliance on its reasoning.

EMERGENCY PLANNING: PUBLIC NOTIFICATION

EMERGENCY PLAN(S): CONTENT (NOTIFICATION; PUBLIC INFORMATION); NOTIFICATION REQUIREMENTS

It may be assumed that *in the absence of compelling contrary evidence*, no participant in a state-established EBS network will refuse to discharge its communication function in a timely manner upon the occurrence of a genuine emergency requiring public notification. *See Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-911, 29 NRC 247, 254-55 (1989).

EMERGENCY PLANNING: STATE AND LOCAL GOVERNMENT (PARTICIPATION)

EMERGENCY PLAN(S): STATE AND LOCAL GOVERNMENT PLANS (EFFECT OF ABSENCE); UTILITY PLAN AS SUBSTITUTE

For the situation in which there is a nonparticipating state or local government, the Commission has established a "best efforts presumption." Specifically, it assumes that there will be "some 'best effort' State and County response in the event of an accident . . . that . . . would utilize [the utility's] plan as the best source for emergency planning information and options." *Shoreham*, CLI-86-13, 24 NRC 22, 31 (1986). *See also* 10 C.F.R. § 50.47(c)(1)(iii); *Massachusetts v. United States*, 856 F.2d 378 (1st Cir. 1988).

RULES OF PRACTICE: REOPENING OF RECORD

The sponsors of a reopening motion have the burden of demonstrating that the criteria for the grant of the requested relief have been satisfied. *See Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), CLI-86-7, 23 NRC 233, 235 (1986), *aff'd sub nom. Ohio v. NRC*, 814 F.2d 258 (6th Cir. 1987); *Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 5, *aff'd sub nom. Oystershell Alliance v. NRC*, 800 F.2d 1201 (D.C. Cir. 1986).

RULES OF PRACTICE: REOPENING OF RECORD

If a Board finds that a reopening motion does not address a significant safety or environmental issue, it need not decide whether the motion was timely. *See* 10 C.F.R. § 2.734(a).

ADJUDICATORY BOARDS: BIAS

A party's claim of bias may not rest merely upon disenchantment with prior Board rulings. See, e.g., *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 246-48 (1974). See also *Seabrook*, ALAB-748, 18 NRC 1184 (1983); ALAB-749, 18 NRC 1195 (1983); ALAB-751, 18 NRC 1313 (1983).

APPEARANCES

Leslie B. Greer, Boston, Massachusetts, Robert A. Backus, Manchester, New Hampshire, and Diane Curran, Washington, D.C., for the intervenors, Attorney General of Massachusetts, Seacoast Anti-Pollution League, and New England Coalition on Nuclear Pollution.

Thomas G. Dignan, Jr., George H. Lewald, Jeffrey P. Trout, and Jay Bradford Smith, Boston, Massachusetts, for the applicants, Public Service Company of New Hampshire, *et al.*

Lisa B. Clark for the Nuclear Regulatory Commission staff.

DECISION

Before us in this operating license proceeding involving the Seabrook nuclear power facility is a joint appeal by intervenors Massachusetts Attorney General, Seacoast Anti-Pollution League, and New England Coalition on Nuclear Pollution from LBP-90-1.¹ In that decision, the Licensing Board denied the intervenors' November 9, 1989 motion (as supplemented on November 22) to reopen the record to admit a new contention addressed to the adequacy of one aspect of the facility's emergency response planning.

Under the Commission's Rules of Practice, a motion to reopen a closed record to consider additional evidence may not be granted unless, among other things, it satisfies *each* of the following criteria:

- (1) The motion must be timely, except that an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented.
- (2) The motion must address a significant safety or environmental issue.

¹31 NRC 19 (1990).

(3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.²

In this instance, the Licensing Board rested its denial of the motion on its finding that none of these criteria had been met. Being persuaded that, at the very least, the intervenors failed to establish the safety significance of the new issue they seek to present, we affirm the denial.

A.1. The controversy at bar is rooted in the Commission's regulations requiring emergency response plans for nuclear power reactors to "provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone [(EPZ)]."³ Accordingly, applicants for a full-power license are expected to "establish a system for disseminating to the public appropriate information . . . including the appropriate notification to appropriate broadcast media, e.g., the Emergency Broadcast System (EBS)."⁴ With respect to the time in which such notification should occur, the governing regulation states that "[t]he design objective of [this] system shall be to have the capability to essentially complete the initial notification of the public within the . . . EPZ within about 15 minutes."⁵

As thus seen, resort to an EBS is one recognized method of providing appropriate public notification. Customarily, an EBS is a network of radio and television stations voluntarily organized, in accordance with and subject to the regulations of the Federal Communications Commission, to broadcast emergency messages to the public in the event of an emergency.⁶ The Commonwealth of

² 10 C.F.R. § 2.734(a). Subsection (d) provides that, if (as here) it "relates to a contention not previously in controversy among the parties," the motion must also satisfy the requirements for the admission of untimely contentions set forth in 10 C.F.R. § 2.714(a)(1)(i)-(v).

³ 10 C.F.R. § 50.47(b)(5). See also 10 C.F.R. Part 50, App. E., § IV.D. The Commission and the Federal Emergency Management Agency (FEMA) jointly issued guidance for fulfilling the Commission's emergency planning requirements. See NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (Nov. 1980) [hereinafter NUREG-0654]. NRC and FEMA also developed a supplement to NUREG-0654 covering those situations in which state and/or local governments do not participate in emergency planning. NUREG-0654/FEMA-REP-1 (Rev. 1, Supp. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants: Criteria for Utility Offsite Planning and Preparedness (Final Report)" (Sept. 1988) [hereinafter NUREG-0654, Supp. 1] Both NUREG-0654 and its supplement carry over the terms concerning notification to the public that are found in 10 C.F.R. § 50.47(b)(5). See NUREG-0654, Criterion I.E. at 43; NUREG-0654, Supp. 1, Criterion I.E. at 11.

⁴ NUREG-0654, Supp. 1, Criterion I.E.3. Because the Commonwealth of Massachusetts is not participating in emergency planning, we refer to the supplement to NUREG-0654, rather than to the original document, where appropriate. See, e.g., LBP-89-32, 30 NRC 375, 381 (1989), *appeals pending*.

⁵ 10 C.F.R. Part 50, App. E., § IV.D.3. See also NUREG-0654, which states that the "minimum acceptable design objectives for coverage by the system [include the capability for providing both an alert signal and an informational or instructional message to the population on an area wide basis throughout the 10 mile EPZ, within 15 minutes." NUREG-0654, App. 3, at 3-3.

⁶ See 47 C.F.R. §§ 73.901-962.

Massachusetts has such a network in place.⁷ In the event of a radiological emergency at Seabrook, it can be activated through direct communication from the Governor of Massachusetts, the Massachusetts Civil Defense Agency, or other designated state officials to the “originating primary relay” station, WROR-FM in Boston. That station would be responsible for passing the messages on to the various area Common Program Control (CPC) stations, each of which, in turn, would undertake to disseminate the messages to all participating radio stations within its area. Alternatively, the official(s) activating the EBS might communicate directly with WCGY, the particular CPC station (located in Lawrence, Massachusetts) to which the local radio stations providing broadcast signal coverage in the Massachusetts portion of the EPZ are tuned.⁸

Quite apart from the general obligations it assumed when it became a participant in the Massachusetts statewide EBS, WCGY entered into an independent agreement with the applicants. That agreement was reflected in a September 14, 1987 letter signed by an official of the lead applicant and the WCGY station manager. In essence, WCGY assumed the responsibility of activating the state EBS for the Massachusetts portion of the Seabrook EPZ, should it be requested to do so by the applicants’ Offsite Response Director assigned to carry out the Seabrook Plan for Massachusetts Communities (SPMC) — the emergency response plan devised by the applicants in the absence of a Commonwealth-sponsored plan.⁹

Prior to this agreement with WCGY, the applicants entered into a separate compact with two “sister stations”: WLYT-FM and WHAV-AM, located in Haverhill, Massachusetts. In an August 12, 1987 letter to an official of the lead applicant, those stations committed themselves “to provide emergency information to the general public in the event of an emergency condition at the Seabrook Station.” To this end, the stations proposed to develop an “emergency communication link [with the applicants’ emergency response organization] so that in the event of any emergency [the stations] can confirm [the] accuracy of information and minimize the time necessary to alert the public to the circumstances at issue.”¹⁰

⁷ See Intervenor’s Motion to Admit a Late Filed Contention and Reopen the Record on the SPMC Based Upon the Withdrawal of the Massachusetts E.B.S. Network and WCGY (Nov. 9, 1989), Attach. D, Exh. 1, at 2, 4-5, App. 1, at 1-2 (Massachusetts [EBS] Operational Plan (Rev. May 1988)) [hereinafter Intervenor’s Reopening Motion].

⁸ See *id.*, Attach. D (Affidavit of Robert Boulay Regarding Voiding of the EBS Letters of Agreement (Nov. 9, 1989)); *id.*, Attach. D, Exh. 1, at 2-4, 6, App. 1, at 1-1, -6 (Massachusetts [EBS] Operational Plan).

⁹ See *id.*, Attach. F, Exh. A (Sept. 14, 1987 Letter of Agreement between Radio Station WCGY and New Hampshire Yankee’s Offsite Response Organization). This document is also an attachment to Exhibit III of Applicants’ Answer to Intervenor’s Motion to Admit a Late-Filed Contention and Reopen the Record Based upon the Withdrawal of the Massachusetts E.B.S. Network and WCGY (Nov. 15, 1989) [hereinafter Applicants’ Answer]. In addition, the Letter of Agreement is found in Appendix C of the Seabrook Plan for Massachusetts Communities (Rev. 0, Amend. 6) at C-66 to -67. The SPMC was admitted as Applicants’ Exhibit 42.

¹⁰ Applicants’ Answer, Exh. I, Attach. B (Aug. 12, 1987 Letter from William A. Gould to Edward A. Brown). This letter is also found in Appendix C of the SPMC. See SPMC at C-64 to -65.

2. The development that triggered the reopening motion at bar was an October 20, 1989 letter from the WCGY station manager to an official of the lead applicant, repudiating the September 14, 1987 Letter of Agreement on the ground that the applicants had failed to supply certain equipment that allegedly had been promised.¹¹ According to the motion, without the cooperation of WCGY, the applicants could not activate satisfactorily the Massachusetts EBS, with the further consequence that they would be unable to provide adequate public notification of an emergency.

As noted above, the Licensing Board denied the motion on the ground that it met none of the specified reopening criteria. On the matter of lack of safety significance, the Board relied in part upon our *Shoreham* opinion of last year,¹² which the Licensing Board took to stand for the proposition that the existence of a state EBS is, in and of itself, enough to presume adequate coverage for notification purposes, regardless of the presence or absence of a formal agreement.¹³ In this connection, the Board pointed to the intervenors' acknowledgment that, even without the agreement between WCGY and applicants, a direct communication from the Governor of Massachusetts or his or her delegate to either that station or WROR could activate the system.¹⁴

B. Nothing presented to us by the intervenors suggests that the Licensing Board erred in concluding that the reopening motion fails to raise a significant safety issue. The nub of their appellate position is that, as a result of WCGY's repudiation of the Letter of Agreement, the state EBS will be unable to fulfill the regulatory design objective of completing the initial notification of the public in the EPZ "within about 15 minutes."¹⁵ For a variety of reasons, that assertion falls wide of the mark.

To begin with, the fact that WCGY no longer has a separate agreement with the applicants does not perforce mean that it will not carry out its assigned EBS role should it be called upon to do so in the event of a radiological emergency at Seabrook. On this score, we adhere to our view in *Shoreham*: in a nutshell, we are prepared to assume, *in the absence (as here) of compelling contrary evidence*, that no participant in a state-established EBS network will refuse to discharge its communication function in a timely manner upon the occurrence of a genuine emergency requiring public notification — whether that emergency

¹¹ See Intervenor's Reopening Motion, Attach. F., Exh. C (Oct. 20, 1989 Letter from John F. Bassett to B. Boyd, Jr.). This letter is also attached to Exhibit III of Applicants' Answer. Although of no present significance, the applicants dispute the accuracy of the allegation concerning the equipment. See Applicants' Answer at 8.

¹² *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-911, 29 NRC 247 (1989). The fact that ALAB-911 was issued as an advisory opinion did not preclude the Licensing Board's reliance on its reasoning to the extent here applicable.

¹³ See LBP-90-1, 31 NRC at 27-29.

¹⁴ See *id.* at 29 & n.40.

¹⁵ See *supra* p. 79.

arises at a nuclear power facility or elsewhere.¹⁶ Stated otherwise, we see a crucial difference between, on the one hand, WCGY's change of heart respecting its willingness to assume special functions at the applicants' behest and, on the other hand, that station's refusal to perform in time of emergency a role that it accepted when it became a part of the *overall* state EBS network. In that connection, such a refusal would fly in the teeth of the directive of either the Governor or the other state official who would activate the network in his or her stead.¹⁷

In these circumstances, as part of their endeavor to meet the reopening criteria, it was the intervenors' obligation to establish that the fifteen-minute design objective could not be met if WCGY received the public notification message from WROR or a state official (as called for by the state EBS plan), rather than directly from the applicants' Offsite Response Director (as contemplated by the now-vitiated letter of agreement).¹⁸ This obligation clearly was not met. Even had it been, however, the intervenors' position would not be improved.

There is no claim that stations WLYT and WHAV, with which the applicants continue to have an agreement, are incapable of providing radio broadcast coverage throughout the Massachusetts portion of the EPZ. Moreover, in the context of their reopening motion, the intervenors at least implicitly concede that those stations could supply the messages in conformity with the fifteen-minute design objective.¹⁹ To be sure, as intervenors stress, the stations do not ordinarily enjoy a large audience. It is not important, however, how extensive their established listenership might be. Rather, of crucial significance

¹⁶ See ALAB-911, 29 NRC at 254-55.

¹⁷ For the situation in which there is a nonparticipating state or local government, the Commission has established a "best efforts presumption." Specifically, it assumes that there will be "some 'best effort' State and County response in the event of an accident . . . that . . . would utilize [the utility's] plan as the best source for emergency planning information and options." *Shoreham*, CLI-86-13, 24 NRC 22, 31 (1986). See also 10 C.F.R. § 50.47(c)(1)(iii), which states that "the NRC will recognize the reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public." (This regulation was explicitly upheld in *Massachusetts v. United States*, 856 F.2d 378 (1st Cir. 1988)). Given this presumption, we cannot doubt that such a directive would be forthcoming from the Commonwealth in the event of an emergency.

For reasons akin to those applicable to WCGY, we are similarly confident that the directive of a state official would be honored by the entire state EBS. This is so notwithstanding the attempt by the EBS Co-Chairman to repudiate a special agreement that the EBS had entered into with the applicants allowing them to seek EBS activation in the event of a Seabrook emergency. See *Intervenors' Reopening Motion*, Attach. F, Exh. B (Oct. 13, 1989 *Letter from Douglas J. Rowe to R. Boyd, Jr.*).

¹⁸ The sponsors of a reopening motion have the burden of demonstrating that the criteria for the grant of the requested relief have been satisfied. See *Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2)*, CLI-86-7, 23 NRC 233, 235 (1986), *aff'd sub nom. Ohio v. NRC*, 814 F.2d 258 (6th Cir. 1987); *Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3)*, CLI-86-1, 23 NRC 1, 5, *aff'd sub nom. Oystershell Alliance v. NRC*, 800 F.2d 1201 (D.C. Cir. 1986).

¹⁹ See *Intervenors' Brief in Support of Their Appeal of LBP-90-1* (Feb. 16, 1990) at 31 [hereinafter *Intervenors' Brief*]. The question of timeliness of the applicants' emergency notification system for the Massachusetts portion of the EPZ is one we deal with directly in ALAB-935, 32 NRC 57, issued this date.

is whether measures have been taken to prompt persons within the EPZ to tune in those stations when alerted to the emergency (by sirens or otherwise). To this end, the SPMC requires that information on emergency procedures, including which stations will carry emergency information, be provided to the public from sources such as calendars, fliers, and pamphlets.²⁰ This information is to be updated to keep the public abreast of relevant changes in emergency procedures.²¹ We have been given no cause to conclude that these requirements either will not be met or will not serve their intended purpose.²²

The short of the matter therefore is that the intervenors have simply failed in their reopening request to demonstrate that the repudiation of the WCGY letter of agreement puts the accomplishment of the regulatory objective of prompt public notification in substantial peril.²³ That being so, the reopening motion was correctly denied.²⁴

LBP-90-1, 31 NRC 19 (1990), is *affirmed*.
It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

²⁰ SPMC at 3.7-1 to -4.

²¹ See SPMC ¶7.5.

²² In this regard, at oral argument applicants' counsel assured us that the existing informational materials were updated to reflect the withdrawal of WCGY from the role it assumed under its special agreement. App. Tr. 151-52.

²³ This conclusion is mandated whether or not the fifteen-minute design objective imposes a rigid requirement, a question we address in ALAB-935.

²⁴ Given our conclusion on the lack of safety significance, manifestly the third reopening criterion (see *supra* p. 79) is not satisfied. We need not and do not decide whether the motion to reopen was timely.

We can dispose summarily of intervenors' complaint (Intervenors' Brief at 6) that due process required that the Licensing Board address the EBS issue raised by their reopening motion before rendition of the Board's decision in LBP-89-32, 30 NRC 375, authorizing the issuance of a full-power operating license. Whether or not such a due process right exists, our decision that the motion failed to satisfy the Commission's reopening criteria makes the asserted error on the Licensing Board's part harmless at most.

For its part, intervenors' related allegations of Licensing Board bias ignore the settled principle that claims of that nature may not rest (as apparently does the claim here) merely upon disenchantment with prior Board rulings. See, e.g., *Northern Indiana Public Service Co.* (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 246-48 (1974). See also, in the present proceeding, ALAB-748, 18 NRC 1184 (1983); ALAB-749, 18 NRC 1195 (1983); ALAB-751, 18 NRC 1313 (1983).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Jerry R. Kline
Gustave A. Linenberger, Jr.

In the Matters of

ROBERT L. DICKHERBER

Docket No. 55-5043-SC
(ASLBP No. 90-610-01-SC)
(EA 90-031)
(Senior Operator License
Limited to Fuel Handling,
No. SOP-2365-8)

COMMONWEALTH EDISON COMPANY
(Quad Cities Nuclear Power
Station)

Docket Nos. 50-254-OM
50-265-OM
(ASLBP No. 90-609-02-OM)
(EA 90-332)
(Facility Operating License
Nos. DPR-29, DPR-30)

August 1, 1990

The Licensing Board approves a Settlement Agreement between the parties and terminates two enforcement proceedings.

RULES OF PRACTICE: SETTLEMENT OF CONTESTED PROCEEDINGS

Where a Notice of Hearing has been issued, a Licensing Board is authorized to approve termination of an enforcement proceeding on the basis of a settlement agreement, "according due weight to the position of the staff." 10 C.F.R. § 2.203.

MEMORANDUM AND ORDER (Approving Settlement Agreement and Terminating Proceedings)

These proceedings involve two enforcement orders issued by the NRC Staff, both emanating from an incident occurring on October 17, 1989, during refueling operations at the Quad Cities Nuclear Power Plant, involving Mr. Robert L. Dickherber, holder of a Senior Operator License Limited to Fuel Handling. Mr. Dickherber allegedly directed a refueling crew to perform an unauthorized fuel manipulation to correct a fuel load error. Moreover, control room personnel allegedly were not notified of the fuel manipulation, as required by governing procedures. As a result, the NRC Staff issued the two enforcement orders: (1) an order suspending Mr. Dickherber's license and ordering him to show cause why his license should not be revoked; and (2) an order to modify the Quad Cities Nuclear Plant facility license to prohibit Mr. Dickherber from participating in "any licensed activity." 55 Fed. Reg. 7798, 7797 (Mar. 5, 1990).

Because we found Mr. Dickherber to be adversely affected by both orders, we admitted him to both proceedings by our Memorandum and Order dated May 4, 1990 (unpublished). On May 4, 1990, we also issued a Notice of Hearing for both proceedings. 55 Fed. Reg. 19,684-85 (May 10, 1990).

On April 13, 1990, Mr. Dickherber filed an answer to both enforcement orders. In the aforementioned May 4, 1990 Memorandum and Order, we provided that the NRC Staff should respond to Mr. Dickherber's answer by June 1, 1990. We also invited Commonwealth Edison Company to file a response. By Memorandum and Order dated May 9, 1990, and thereafter by Memorandum and Order dated July 2, 1990, we granted joint motions of all parties to defer the filing dates for answers to July 9, 1990, and July 30, 1990, respectively. The deferrals were to permit settlement negotiations between the parties and, in addition, would permit responses to a supplemental answer filed by Mr. Dickherber on June 1, 1990.

On July 30, the Staff forwarded for our approval a joint motion of Mr. Dickherber and the NRC Staff for approval of a Settlement Agreement. The motion states that Commonwealth Edison Company, the facility licensee, does not oppose the motion. In situations such as that presented by these proceedings, where a Notice of Hearing has been issued, we are authorized to approve

termination of a proceeding on the basis of a settlement agreement, "according due weight to the position of the staff." 10 C.F.R. § 2.203.

The Settlement Agreement forwarded to us provides several discrete conditions. First, Mr. Dickherber admits the allegations of fact set forth in both orders and withdraws his request for a hearing as to these orders.

Second, the Staff indicates that it has concluded that the October 17, 1989 incident appears to have been an isolated event, based on Mr. Dickherber's answer and supplemental answer, two letters (dated June 4, 1990, and July 11, 1990) to Region III, NRC, submitted by Commonwealth Edison concerning Mr. Dickherber's past performance and his acceptance of Commonwealth Edison's "Individual Performance Monitoring and Improvement Plan" (Remediation Program), and an enforcement conference on July 13, 1990. On the same basis, the Staff has concluded that Mr. Dickherber has properly carried out responsibilities in the past, understands the gravity of his actions on October 17, 1989, is committed to avoid a repetition of such actions and is willing to participate in the Remediation Program, and accordingly that Mr. Dickherber's license should not be revoked.

Third, the Staff finds that successful completion of the Remediation Program by Mr. Dickherber should provide the requisite reasonable assurance for Mr. Dickherber's resuming licensed activities and that the Regional Administrator of Region III will relax as necessary the condition in the Quad Cities plant operating licenses prohibiting Mr. Dickherber's participation in licensed activities, provided that Mr. Dickherber participates in the Remediation Program. The agreement further states that Commonwealth Edison has agreed to notify the Regional Administrator, Region III, promptly if Mr. Dickherber should cease participation in the Remediation Program.

Finally, the agreement states that upon successful completion of the Remediation Program, as determined by the Staff, but no sooner than March 17, 1991, the Staff will withdraw its order suspending Mr. Dickherber's license and the Region III Administrator will terminate the condition in the Quad Cities facility license precluding Mr. Dickherber from performing licensed activities.

At our request, the Staff on July 31, 1990, forwarded to the Board copies of the two letters from Commonwealth Edison, including the Remediation Program. The letters included an evaluation of Mr. Dickherber's work history for the past 25 years, together with the results of a satisfactory medical evaluation performed by Commonwealth Edison. The Remediation Program seeks to implement a staged return of Mr. Dickherber to various productive work activities, under diminishing levels of supervision. Commonwealth Edison states, however, that it will "most assuredly seek the concurrence of Region III before reassigning [Mr. Dickherber] to SROL [Senior Reactor Operator License] duties." (Letter to Region III, NRC, dated July 11, 1990, at 2.)

The Board regards this agreement as fair to both parties, taking into account the isolated nature of the incident as well as the seriousness of Mr. Dickherber's failure to notify appropriate officials promptly of the incident. With reference to the criteria in 10 C.F.R. § 2.203, the settlement accords due weight to the position of the Staff, which has stated that termination of the proceeding on the basis of the Settlement Agreement is in the public interest. On that basis, we are approving the Settlement Agreement and terminating both proceedings subject to that agreement.

For the foregoing reasons, it is, this first day of August 1990, ORDERED:

1. The Settlement Agreement between Mr. Robert L. Dickherber and the NRC Staff, governing both proceedings before us, is hereby *approved*.

2. Pursuant to 10 C.F.R. § 2.203, the two proceedings are *terminated*, subject to the *terms and conditions of the Settlement Agreement*.¹

3. This final order is effective immediately and, as provided by 10 C.F.R. § 2.760, becomes the final action of the Commission 30 days after its date.

THE ATOMIC SAFETY AND
LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Dr. Jerry L. Kline
ADMINISTRATIVE JUDGE

Gustave A. Linenberger, Jr.
ADMINISTRATIVE JUDGE

Bethesda, Maryland
August 1, 1990

¹ Because the form of the Settlement Agreement submitted for our approval had not yet been signed by all parties, our termination of the proceedings is subject to the approval (and signatures) of all parties or their representatives to the Settlement Agreement unchanged from that provided to us.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. James H. Carpenter
Dr. Emmeth A. Luebke

In the Matter of

Docket Nos. 50-424-OLA
50-425-OLA
(ASLBP No. 90-617-03-OLA)
(Facility Operating License
Nos. NPF-68, NPF-81)

GEORGIA POWER COMPANY, *et al.*
(Vogtle Electric Generating Plant,
Units 1 and 2)

August 16, 1990

In a proceeding involving a proposed amendment to an operating license technical specification, the Licensing Board considers the admissibility of a petition for intervention, establishes filing dates for further submissions, and schedules a prehearing conference to consider this question.

RULES OF PRACTICE: INTERVENTION

Under governing rules, to be admitted to a proceeding, a potential intervenor must demonstrate that it has standing to participate and must proffer at least one acceptable contention. Contentions need not appear in the intervention petition itself but, rather, are to be set forth in a supplement filed not later than 15 days before the first prehearing conference.

RULES OF PRACTICE: INTERVENTION PETITION

A potential intervenor may amend its intervention petition *without leave of the Board* until 15 days prior to the first prehearing conference. 10 C.F.R. § 2.714(a)(3).

RULES OF PRACTICE: STANDING TO INTERVENE

A petitioner for intervention in an NRC proceeding may not base its standing on reference to its participation in other proceedings, both NRC and otherwise.

RULES OF PRACTICE: STANDING TO INTERVENE

To establish standing to participate in a particular proceeding, a petitioner must show that the subject matter of the proceeding will cause "injury in fact" and that the injury is arguably within the "zone of interests" protected by the Atomic Energy Act of 1954, as amended, or the National Environmental Policy Act, as amended.

RULES OF PRACTICE: INTERVENTION PETITION (GROUP)

Where a petitioner for intervention is a group or organization, it may establish standing either through its own organizational interests or through the interests of its members. In past reactor licensing or license-amendment proceedings, residence or employment of a petitioner within 50 miles of a facility has been sufficient to demonstrate that a petitioner's interest may be affected by the proceeding.

RULES OF PRACTICE: INTERVENTION PETITION (GROUP)

If representing the interests of one of its members, a group must demonstrate by affidavit of that member that it is authorized to represent that member. The group must also demonstrate that it has authorized the representative appearing on its behalf to represent the group's interest.

MEMORANDUM AND ORDER
(Intervention Petition)

This proceeding involves the request of Georgia Power Co., *et al.* (hereinafter, Applicants) to amend the operating licenses for Vogtle Electric Generat-

ing Plant, Units 1 and 2, to revise the Technical Specification (TS) Surveillance Requirement § 4.8.1.1.2h(6)(c) to permit the high jacket water temperature trip to be bypassed to minimize the potential for spurious diesel generator trips in the emergency start mode. Pending before us is the petition to intervene filed on July 23, 1990, by Georgians Against Nuclear Energy ("GANE"). By responses dated August 7, 1990, and August 13, 1990, the Applicants and NRC Staff, respectively, have opposed the petition. Because we do not agree that the GANE petition may at this time be rejected on its face, we are hereby scheduling a prehearing conference to consider the petition (including any supplement filed) and setting a schedule for the filing of such a supplement.

The intervention provisions applicable to this proceeding are set forth in 10 C.F.R. § 2.714(a), as amended effective September 11, 1989 (54 Fed. Reg. 33,168 (Aug. 11, 1989)). Under those rules, to be admitted to a proceeding, a potential intervenor must demonstrate that it has standing to participate and must proffer at least one acceptable contention. Contentions need not appear in the intervention petition itself but, rather, are to be set forth in a supplement to the intervention petition filed not later than 15 days prior to the first prehearing conference. 10 C.F.R. § 2.714(b)(1). Further, a potential intervenor may amend its intervention petition *without leave of the Board* until 15 days prior to the first prehearing conference. 10 C.F.R. § 2.714(a)(3). As we shall see, it is this latter provision which saves the GANE petition from summary dismissal.

As the Applicant and Staff point out, the one-page petition before us fails to include an adequate demonstration of standing — i.e., a statement of the petitioner's interests in the proceeding and of how those interests may be affected by the proceeding. GANE attempts to incorporate by reference statements of standing filed in other proceedings in which it has participated, both NRC and otherwise. Standing in a non-NRC proceeding is not relevant to standing before us, at least in the absence of a showing (not here made) of the equivalence of applicable standards and an overlap of relevant issues. With respect to NRC, GANE participated in the operating license proceeding for this facility, which took place a number of years ago and was of different scope than the current proceeding. *See Georgia Power Co.* (Vogtle Electric Generating Plant, Units 1 and 2), LBP-84-35, 20 NRC 887, 916 (1984). GANE's interest in that proceeding may not be the same as its interest (if any) in this proceeding.

To establish standing to participate in a particular proceeding, a petitioner must show that the subject matter of the proceeding will cause an "injury in fact" and that the injury is arguably within the "zone of interests" protected by the Atomic Energy Act of 1954, as amended, or the National Environmental Policy Act, as amended. *See Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). Further, where (as here) a petitioner is a group or organization, it may establish standing either through its own organizational interests or through the interests of its

members. *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 647 (1979).

As a group, the proposed intervenor has failed to set forth how any of its interests, or those of its members, will be affected by the instant proceeding. In past reactor licensing or license-amendment proceedings, residence or employment of a petitioner or group member within 50 miles of a facility has been sufficient to demonstrate that a person's interest may be affected by the proceeding. See, e.g., *Tennessee Valley Authority* (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 n.4 (1977); *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439, 443-44 (1979), *aff'd*, ALAB-549, *supra*; *Virginia Electric and Power Co.* (North Anna Nuclear Power Station, Units 1 and 2), ALAB-522, 9 NRC 54, 56 (1979).

In that connection, if representing the interests of a member, a group must demonstrate by affidavit of that member that it is authorized to represent that member. Moreover, the group must also demonstrate that it has authorized the particular representative appearing before us — in this case, Ms. Glenn Carroll — to represent the group's interest. See *South Texas*, *supra*, ALAB-549, 9 NRC at 646. None of this type of information appears in the petition before us.

An intervention petition also must set forth the aspect or aspects of the subject matter of the proceeding as to which the petitioner wishes to intervene. In the paragraph numbered 3 of its petition, GANE appears to have satisfied this requirement, although we express no opinion at this time on the relevance to the proceeding of the various statements in the paragraph.

The Applicants have taken the position that the proposed intervenors may not even be requesting a hearing but only seeking to comment on the Staff's "no significant hazards condition" finding. We reject that approach. Although GANE did not formally request a hearing, the group did seek to "intervene" and, in our view, could not have practically done so without implicitly requesting a hearing in which to intervene. Further, any request filed on July 23, 1990, the date of GANE's petition, to address the Staff's finding would have been untimely, whereas a request for a hearing filed on that date is timely filed. For these reasons, we are treating GANE's petition as a request for a hearing and a petition for leave to intervene.

In addition to the standing requirements outlined above, to become a party to the proceeding GANE must file at least one acceptable contention. Under the revised criteria referenced above, each contention must include, *inter alia*, a specific statement of the issue of law or fact to be raised or controverted. In addition, each contention must include the following information:

- (1) A brief explanation of the bases of the contention;
- (2) A concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing,

together with references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts and expert opinion;

(3) Sufficient information (which may include that provided under paragraphs (1) and (2) above) to show that a genuine dispute exists with the applicant on a material issue of law or fact. This showing must include references to the specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report. The petitioner can amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's document.

10 C.F.R. § 2.714(b)(2).

As we have suggested, the GANE petition in its present form is grossly deficient in its statement of the group's standing. We reiterate, however, that GANE has an unlimited right to amend its petition until 15 days prior to the first prehearing conference. Accordingly, we are hereby scheduling a prehearing conference for Wednesday, September 19, 1990, and establishing Tuesday, September 4, 1990, as the final date on which GANE may submit (mail) an amendment to its petition to enhance its statement of standing. We are also establishing the same date, September 4, 1990, as the final date on which GANE may file a supplement to its intervention petition setting forth the contentions it wishes to assert in this proceeding. We will permit the Applicants and Staff to respond to any supplementary GANE filings, as long as any such responses are received by us (by FAX if necessary) no later than Friday, September 14, 1990. (If it appears that the statement of standing is clearly inadequate, based on the supplementary statement, we may dismiss the proceeding prior to the prehearing conference.)

One further matter warrants our brief comment at this time. By telephone, we requested the NRC Staff to forward to the Board copies of the Staff's Safety Evaluation Report, as well as the proposed license amendment submitted on May 25, 1990. The Staff has complied with this request. After examining these materials, we request the Applicants to clarify why they added a vague footnote to their technical specifications rather than deleting the phrase "high jacket water temperatures" from Technical Specification Surveillance Requirement 4.8.1.1.2h(6)(c). Further, does the footnote in question permit bypass in other than emergency conditions? The Applicants may respond to these questions at the prehearing conference or, if they wish, in any response they file to GANE's supplemented petition.

The September 19, 1990, prehearing conference is scheduled to be held at the Federal Trade Commission, Room 1010, 1718 Peachtree St., N.W., Atlanta,

Georgia, beginning at 9:30 a.m. Although we are authorized to entertain limited appearance statements during the course of this proceeding, in accordance with 10 C.F.R. § 2.715(a), we will not permit oral statements at this particular conference.

IT IS SO ORDERED.

**FOR THE ATOMIC SAFETY
AND LICENSING BOARD**

**Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE**

**Bethesda, Maryland
August 16, 1990**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(Re: TRUMP-S Project)
(Byproduct License
No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

August 24, 1990

The presiding officer in this Subpart L proceeding denied a request for a temporary stay of Licensee's planned experiments with neptunium and plutonium. He said that he understood why the documents available to Intervenors has caused them concern about the safety of the planned work. However, after reviewing the detailed technical response filed by Licensee, the presiding officer was satisfied that none of the grounds for a stay existed and he denied the stay.

RULES OF PRACTICE: SUBPART L; REQUEST FOR TEMPORARY STAY

Pursuant to 10 C.F.R. §2.1263, the presiding officer may issue a stay in response to Intervenors' motion for a stay, which they included with their request for a hearing. In this case, the presiding officer had deferred action on the stay motion included with the request. Hence, the terms of section 2.1263 refer to 10

C.F.R. § 2.788 for the standards governing the granting of a stay of the Staff's licensing action. Under that section, the criteria for determining whether or not to grant a stay are set forth in subsection (e). Additionally, subsection (g) permits a temporary stay in extraordinary cases, even without waiting for the filing of any answer. In this instance, the presiding officer was able to await an oral answer and a written answer from Licensee before acting on the motion for a temporary stay.

SPECIAL MATERIALS LICENSES AND BYPRODUCT MATERIALS LICENSES

Applications for special materials licenses and byproduct materials licenses must demonstrate that they are adequate to protect health and minimize danger to life or property pursuant to 10 C.F.R. §§ 30.33(a)(2) and 70.23(a)(3). They must also comply with 10 C.F.R. § 20.106, which limits the extent to which Licensee may release neptunium or plutonium into the air or water in excess of natural background radiation.

These regulations are interpreted in Regulatory Guide 10.3, which requires a detailed description of the equipment, facilities, and instrumentation, and — for chemical or physical processing operations — a description of controls for fire prevention.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: HEPA filters; DOP testing of HEPA filters; Glove box design; Plutonium, handling of; Neptunium, handling of.

MEMORANDUM AND ORDER

(Temporary Stay Request)

Memorandum

I. SUMMARY

[This portion of the Memorandum — "I. SUMMARY" — was sent to the parties on August 23, 1990, for the purpose of informing them of the decision on the stay motion. This early notice was promised to the University of Missouri, which had voluntarily suspended its work on neptunium, pending the Board's determination on the motion for a temporary stay. Note that the University of Missouri was initially called "Applicant" but I have corrected this to "Licensee," which is more descriptive.]

Intervenors have requested a temporary stay of work with neptunium and plutonium that the University of Missouri (Licensee) is planning to do in its TRUMP-S project. The initial showing of possible grounds for a stay relied on documents obtained from the Licensee without the assistance of the presiding officer. Those documents indicated that a University consultant, Mr. Steppen, considered that there was a "major design flaw" in the Alpha Laboratory that required the installation of an additional filter device. They also showed that the University of Missouri was sufficiently concerned about the recommendation to order the recommended filter and to consider deferring the start of its experimental program.

Although the documents filed by Intervenors caused me to have enough concern about the safety of the Alpha Laboratory to consider granting a temporary stay, I have now analyzed the answering documents submitted by Licensee. I am persuaded by the affidavit of the University of Missouri-Columbia Research Reactor's (MURR's) Interim Director, Dr. J. Steven Morris, that there is no serious risk either to the health of members of the public or to workers in the Alpha Laboratory. Consequently, after weighing each of the factors required for a stay or temporary stay, I have decided that the request for a temporary stay should be denied.

Although I have considered the possible need for a public hearing to test the testimony offered by Licensee, I have decided that there has not been enough of a showing by Intervenors for me to require such a hearing in this proceeding, which is being conducted under Subpart L of the Commission's procedural regulations.

II. RELEVANT DOCUMENTS

The relevant documents include Intervenors' Application for Temporary Stay to Preserve the Status Quo, August 20, 1990,¹ and Supplemental Memorandum, August 20, 1990; Licensee's Response to "Intervenors' Application for Temporary Stay to Preserve the Status Quo," August 23, 1990, and affidavits of William J. Adam, filed July 26, 1990, and August 22, 1990. Also relevant, but not relied on in this memorandum, are an Affidavit of Dr. J. Steven Morris, filed June 15, 1990; a Declaration of James C. Wurf and Daniel O. Hirsch, filed June 12, 1990.

¹ See the Certificate of Service, found in Exhibit 11.

III. LEGAL AUTHORITY

A. Authority to Issue a Temporary Stay

Pursuant to 10 C.F.R. § 2.1263, I have authority to issue a stay in response to Intervenor's motion for a stay, which they included with their request for a hearing. In LBP-90-18, 31 NRC 559, 575-77, 578 (1990), I deferred action on the stay request.

The terms of section 2.1263 refer me to 10 C.F.R. § 2.788 for the standards governing the granting of a stay of the Staff's licensing action. Under that section, the criteria for determining whether or not to grant a stay are set forth in subsection (e). Additionally, subsection (g) permits me to grant a temporary stay in extraordinary cases, even without waiting for the filing of any answer.

In this case, the voluntary action of the University in deferring its work with neptunium made it possible for me to wait for its answer before acting. Thus, there was no harm to Intervenor from my waiting for a response from Licensee and circumstances were therefore not so extraordinary as to permit action before a response was filed.

B. Applicable NRC Regulations

Sections 30.33(a)(2) and 70.23(a)(3) of 10 C.F.R. require that "[t]he Licensee's proposed equipment and facilities [be] adequate to protect health and minimize danger to life or property." Part 30 applies to byproduct materials licenses and Part 70 to special nuclear material licenses.

Section 20.106 of 10 C.F.R. limits the extent to which Licensee may release neptunium or plutonium into the air or water in excess of natural background radiation. Additionally, Licensee must keep releases of radiation As Low As Reasonably Achievable (ALARA). 10 C.F.R. § 20.1(c).

IV. ARGUMENTS

A. Intervenor's Arguments

The principal safety ground relied on in the request is that a University of Missouri consultant, Mr. Steppen, found "only one major flaw in the facility design" for TRUMP-S.² According to the Steppen Memo, at page 1:

² Memorandum of June 19, 1990, from John Ernst to Charlie McKibben, "Summary of Consultant Visit" (Steppen Memo), attached to Intervenor's Application for Temporary Stay to Preserve the Status Quo.

DOE regulations require two DOP³ tested HEPA filters between a contamination source and personnel or public. The alpha lab is designed to this standard except for the case of an accidental pressurization of the exhaust line. If that should occur the glove box exhaust could be forced into the occupied area of the alpha lab via the room exhaust. The glove box air would have passed through two sets of HEPA filters, only one of which can be DOP tested.

At a subsequent meeting of the University of Missouri's TRUMP-S Group, held July 19, 1990, the following minute was recorded:

We expect bids for the HEPA filter housings for the exhaust air systems on July 30. With four week delivery, one week installation and testing, the laboratory should be ready for neptunium experiments on September 4. This change was recommended [by] Mr. Steppen, Alpha consultant (see memo from Ernst to McKibben dated June 19, 1990)[.]

However, the TRUMP-S work with neptunium was scheduled to begin August 22, prior to installation of the HEPA filters. The University of Missouri, at my request, voluntarily deferred its work with neptunium in order to permit me to receive its written response to the request prior to acting on it. Hence, I was able to permit Licensee to respond to the stay request prior to acting on it.

Intervenors would have us believe that commencing work with neptunium or plutonium without the filter recommended by Mr. Steppen does not adequately assure public safety and is being done under contract pressure. They state, on page 4 of their motion, that Steven J. Morris, lab director, filed a June 14, 1990 affidavit stating that the alpha lab was provided with HEPA filters adequate for any emergency, redundant and DOP-tested. They further state, on pages 7-8 of their motion, that:

[T]here is imminent risk posed by operation without the required dual DOP-tested HEPAs. The University has rested virtually its entire assertion of safety on the claim that, in a worst-case accident, one of two DOP-tested HEPA filters would fail or be bypassed and the remaining filter would be able to reliably function, reducing exposures [of the public to radiation] by several orders of magnitude.

B. Licensee's Arguments

1. *No Imminent Risk*

Licensee argues, first, that there is no imminent risk posed by planned operations. It states that the consultant cited by intervenors has not identified any pertinent DOE regulations or requirements that Licensee is violating and

³The DOP test is a sophisticated technique for determining the efficiency of the filter in removing particles from the air flow.

that he may have been expressing his beliefs concerning DOE practices.⁴ It also states, supported by the Affidavit of Dr. J. Steven Morris, August 23, 1990, ¶¶ 6h and 7d, that the only possible consequence of the scenario set forth by the consultant would be a release of radioactive materials within the laboratory itself and not to any unrestricted areas that could affect the public.⁵

Licensee further shows that even a release within the laboratory would be very unlikely. Mr. Steppen's concern was that:

DOE regulations require two DOP tested HEPA filters between a contamination source and personnel or public. The alpha lab is designed to this standard except for the case of an accidental pressurization of the exhaust line. If that should occur the glove box exhaust could be forced into the occupied area of the alpha lab via the room exhaust. The glove box air would have passed through two sets of HEPA filters, only one of which can be DOP tested.

For the scenario of concern to occur, there must first be an accidental pressurization of the exhaust line, which can only occur if: (1) the emergency exhaust valve is open, and (2) the air pathway through HEPA filters 3 and 4 is completely or almost completely blocked or the damper downstream from filter 4 is closed. See Figure 1, Alpha Laboratory Air Flow Diagram and Morris Affidavit at ¶ 6h. In that instance, the air flow could proceed in a reverse direction through the room exhaust system and back into the room. *Id.*

Licensee has several ways of addressing this possibility. One response is that under this scenario the flow would have passed through HEPA filters 1 and 2. HEPA filter 2 has been DOP tested in place; thus there is no problem about that filter. HEPA filter 1, while not tested in place, was validly tested with respect to its filtering capabilities. Morris Affidavit ¶ 6c. Licensee believes that the testing prior to installation is valid because the installation is simple because:

The filter is installed by screwing the intact tested unit into the receptacle provided. This installation has the same simple mechanical coupling as used to connect devices that contain molecules such as water and natural gas which are smaller than the particles challenging these filter units.⁶

Licensee also does not accept Mr. Steppen's hypothesis that there could be an "accidental pressurization of the exhaust line." *Id.* ¶ 7d. It states that there is no mechanism to pressurize the air. That is, there is no fan or blower that could drive air from the argon glove box to the emergency exhaust line. This

⁴ Licensee's Response at 3 n.2.

⁵ Although Intervenors have not demonstrated that any of their members are workers in the laboratory and consequently have not shown a litigable interest in protecting the workers, I have analyzed the possible effect on workers because of the important public interest involved.

⁶ Morris Affidavit.

is unlike other glove-box facilities in which there are such fans or blowers. *Id.* (See ¶ 7d for additional details concerning argon circulation through a minimum resistance loop, not shown in Figure 1, under the conditions of concern to Mr. Steppen.)

Licensee also states that "since the pressure in . . . filters [3 and 4] is monitored, the possibility that an experiment would be taking place and result in a release to such filters when they are clogged is minimal." *Id.* ¶ 7. Furthermore, if the damper were closed, there would be some pressure increase in the Alpha Laboratory, causing an alarm that would permit corrective action to be taken. *Id.*

Licensee then concludes that applicable NRC requirements have been met and that there is reasonable assurance that the health and safety of both the public and MURR personnel would be protected even if the air flow through HEPA filters 3 and 4 were blocked. It also concludes that it would be inconceivable for there to be pressurization in the exhaust line. *Id.* ¶ 7d. It also states that the postulated multiple problems or failures are remote. *Id.*

2. *Compliance with Regulatory Guide 10.3*

Licensee states that its laboratory complies with Regulatory Guide 10.3. Such regulatory guides are issued by the Staff and are presumptive evidence of compliance with the more general regulations that they interpret. Although they do not prove compliance, persuasive evidence must be introduced to demonstrate the inadequacy of the guide.

In this instance, Regulatory Guide 10.3, cited by Licensee, states in pertinent part:

The equipment, facilities, and radiation detection instrumentation for each site of use should be described in detail. The proposed equipment and facilities for each activity must be adequate to protect health and minimize danger to life and property. In describing available equipment and facilities, the following types of information should be included, as appropriate:

* * * *

4. Physical plant, laboratory, or working area facilities. A description of all fume hoods, glove boxes, waste receptacles, special sinks, ventilation and containment systems, effluent filter systems, including the design specifications and capabilities of these systems, should be included. . . . Applications for chemical or physical processing operations⁷ should include a description of controls for fire prevention and the firefighting equipment available. Sketches showing laboratory or plant arrangements and the nature and use of areas adjacent to areas in which special nuclear materials will be processed should be submitted.

⁷Neither Applicant nor Staff have indicated whether they believe this clause applies to the Alpha Laboratory.

Licensee also attempts to place its compliance with this regulatory guide into context. It states, in Morris Affidavit ¶ 6a, that the guide

is intended for applications to possess and use up to 2000 grams of plutonium, which greatly exceeds the 5 grams of plutonium that Licensee will have in inventory for the TRUMP-S research, and especially the 0.1 grams or less that will be used in any one thermodynamic experiment.

C. Staff Arguments

Staff's argument concerning the possible need for HEPA filtration in connection with the TRUMP-S work is: (1) 10 C.F.R. does not specify that particular filters are needed, and (2) the Staff has found that it is permissible to license TRUMP-S work under 10 C.F.R. Part 20 with no further filters required to provide an adequate assurance of safety.

Despite my specific invitation, the Staff chose not to be responsive to my expressed needs and has therefore failed to provide any analysis of the reasons for its findings. Memorandum of Telephone Conference Call of August 21, 1990 (unpublished), at 2.

D. Conclusion

The evidence available to Intervenors caused them serious concern about the safety of permitting Licensee to proceed with its TRUMP-S work with neptunium. That evidence included a memorandum stating that a University consultant, Mr. Steppen, had found a "major design flaw" in the alpha laboratory. It also included a memorandum of a TRUMP-S design group that ordered the additional filter recommended by Mr. Steppen and appeared to make the addition of the filter to the laboratory a necessary condition before the experimentation would continue. The memorandum stated that the "laboratory should be ready for neptunium experiments on September 4" — after the filter was installed.

Now that I have received the answer of Licensee, I am no longer concerned. The Affidavit of J. Steven Morris describes in great detail Licensee's reasons for believing its laboratory to be safe without the filter. The affidavit is accompanied by a figure, which I have attached to this Memorandum and Order, that enables me to follow quite easily Mr. Morris's description of how air would flow under different conditions. Furthermore, the affidavit is well organized and logical, attending to specific details that support the conclusions. It is the kind of careful technical memorandum that not only makes its point but adds to my confidence in the professional competence and carefulness of Mr. Morris and of the research reactor and laboratory that he runs.

I find that the event described by Mr. Steppen is unlikely to occur. HEPA filters 3 and 4 are monitored for pressure; therefore, undetected clogging or operation with clogged filters is very unlikely. Were the damper downstream of HEPA 4 improperly closed, there would be some reverse circulation of air through the room exhaust and a slight overpressurization would occur in the laboratory, setting off an alarm that would permit corrective action with respect to the damper.

Were this unlikely reverse-circulation-of-air event to occur, there would be a natural circulation return through the room exhaust system. The return would not be driven by fans or blowers and therefore would not be at high pressure. Furthermore, the air would pass through two HEPA filters, providing an adequate assurance of safety. It will have passed through HEPA 1 as it left the glove box. (There is one HEPA 1 filter downstream of each of the argon glove boxes.) It also will pass through HEPA 2 shortly after it leaves the Alpha Laboratory in the exhaust line. Additionally, I find that each of these HEPA filters has been tested adequately — HEPA 2 having been tested in place and HEPA 1 having been installed subsequent to testing.

Whatever health risk does exist in this scenario exists within the laboratory itself — a location in which none of the interests of any of the intervenors or petitioners would be compromised since there are no intervenors or petitioners who have been shown to be workers in the laboratory. Hence, no one has standing to raise possible injury within the laboratory as an injury affecting them. It is part of traditional judicial standards of standing that intervenors may not act as private attorneys-general and raise issues that are of concern to them but do not affect them directly.

I am aware that Intervenor, as part of their motion, made various charges of misrepresentation and withholding of information by Licensee. Given what the Intervenor knew, it was proper for them to raise these concerns. I am always concerned with the accuracy and completeness of my record and would pursue these matters in an appropriate fashion were I to agree with the Intervenor. However, these matters are peripheral to the motion before me and I find that they are fully explained by Licensee, when they are understood in relationship to the full technical evidence that has been presented.

With respect to the applicable stay criteria, I find that Intervenor has not demonstrated that there is any problem concerning the adequacy of the safety of the Alpha Laboratory; consequently, they are very unlikely to succeed on the merits of this claim. Since there is no showing that there is a failure in the assurance of the adequacy of safety, there obviously is no irreparable injury from commencing the planned experiment. There obviously is some harm to the University of Missouri were it to be restrained from completing its TRUMP-S contract commitments at this time; hence, this factor is adverse to Intervenor as well. Nor is there any showing that the public interest would be adversely

affected. Consequently, there are no grounds for granting a stay or temporary stay, and the request will be denied.

In closing, I wish to state that I am saddened by the lack of communication that seems to be affecting my relationship to the Staff. I requested their assistance because I sincerely thought I needed their help. Yet their answer provided no reasoning that could be of any help to me. Their naked statement that they reviewed the Application and found it to be adequate is not helpful in evaluating specific grounds presented by Intervenors. In this instance, Licensee's proof was sufficient to establish the appropriateness of the position urged by the Staff. However, I could not know what proof Licensee would present when I made the Staff a party for a limited purpose. I regret their continuing unwillingness to provide helpful information with respect to a live issue that I had a duty to decide.⁸

Although it is not clear that I am permitted to hold a hearing in which I could ask questions of Mr. Morris and Mr. Steppen to test the adequacy of the conclusions I have reached, I nevertheless considered that possibility. The reason for considering that step is that the examination of witnesses is such an important part of our jurisprudence and because Intervenors were prohibited even from commenting on Licensee's proof by 10 C.F.R. § 2.788(d), which states that, "No further replies to answers [to motions for a stay] shall be entertained."

In this instance, the Temporary Stay motion relied on one of Licensee's consultants and the response consisted of an affidavit rebutting the grounds for the first consultant's opinions. Given the completeness of the responsive affidavit, the fact that neither of the witnesses involved in the papers was sponsored by Intervenors, and the preference of Subpart L for avoiding hearings, I decided not to hold a hearing with respect to the motion for a temporary stay.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 24th day of August 1990, ORDERED, that:

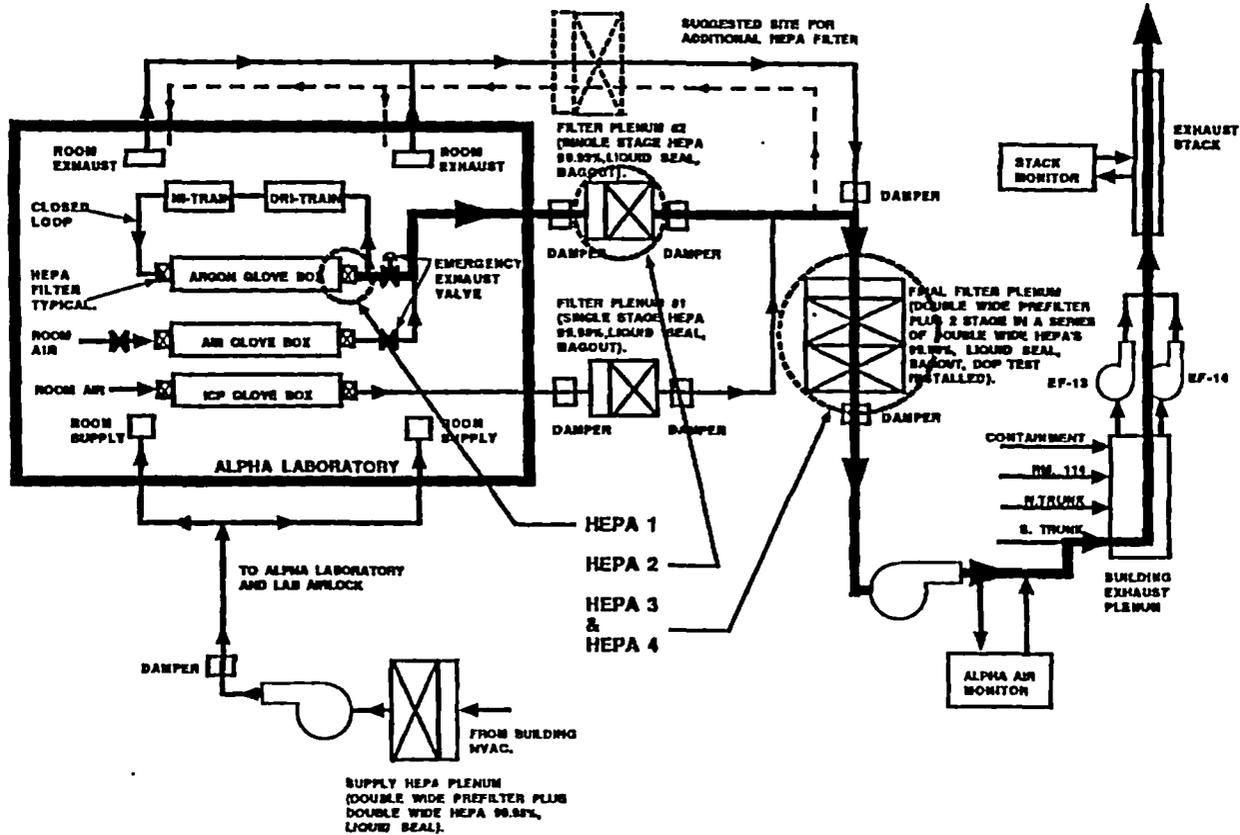
⁸ I acknowledge that the Staff had very short notice and I recognize that some of their unwillingness could have resulted from the time pressure under which my Order placed them. Under the circumstances, I also felt under time pressure and asked for the Staff's help at a time that I needed it.

Intervenors' Application for Temporary Stay to Preserve the Status Quo, August 20, 1990, is *denied*.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland



ATTACHMENT

Attachment 1 of Morris Affidavit No. 4 (revised with detail enhancements as of 8/22/90)

ALPHA LABORATORY AIR FLOW DIAGRAM

BASEMENT LEVEL - RESEARCH REACTOR
 UNIVERSITY OF MISSOURI - COLUMBIA
 2/19/98

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Morton B. Margulies, Chairman
Dr. A. Dixon Callihan
Dr. Jerry R. Kline

In the Matter of

Docket No. 30-12319-CivP
(ASLBP No. 90-618-03-CivP)
(EA 89-223)
(Material License
No. 35-17178-01)

TULSA GAMMA RAY, INC.

August 29, 1990

NOTICE OF HEARING AND OTHER MATTERS

Notice is hereby given that at the request of Licensee Tulsa Gamma Ray, Inc., of Tulsa, Oklahoma, a hearing will be conducted in the captioned proceeding in accordance with the provisions of Subparts B and G of Part 2 of Title 10 of the *Code of Federal Regulations* (10 C.F.R. Part 2, Subparts B and G). The time and place of hearing will be by further notice.

On June 6, 1990, the Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support issued an Order titled "Order Imposing Civil Monetary Penalty" (55 Fed. Reg. 24,949-52).

The Order stated that on December 29, 1989, a Notice of Violation and Proposed Imposition of Civil Penalty was issued for violations identified during an October 2-4, 1989 inspection for which a \$7,500 penalty was proposed. The Order further stated that the Licensee responded to the Notice of Violation on February 22, 1990, admitting nine of the ten alleged violations and requested reconsideration of the civil penalty for a variety of reasons.

The Order recited that based on NRC Staff's evaluation of the Licensee's response, it concluded that nine of the ten violations occurred as stated and that one alleged violation should be withdrawn. Because of the withdrawal of one of the ten violations alleged, the penalty of \$7,500 was also reduced by ten percent to \$6,750. No other grounds were accepted by Staff to further reduce the penalty.

The Order provided Tulsa Gamma Ray, Inc., the opportunity to request a hearing, the issue to be considered "shall be whether, on the basis of the violations admitted by the Licensee, consisting of the violations set forth in the Notice of Violation as modified by the withdrawal of Violation 3, [the] Order shall be sustained."

By letter dated July 3, 1990, Licensee requested a hearing and filed a request for reconsideration of the imposition of the civil penalty. In a letter dated July 31, 1990, the Director of the Office of Enforcement refused to withdraw its June 6, 1990 Order. As a result, this formal adjudicatory proceeding was initiated.

This Board requests that, before it conducts the hearing offered by Staff and requested by Licensee, the parties confer and consider steps that will expedite the proceeding and reduce its costs. The matters to be considered should include the establishment of a schedule for further actions in the proceeding, the identification of witnesses, the simplification of issues, and any other matters that may aid in the orderly disposition of the proceeding.

The parties should also consider settlement, a process encouraged by the Commission. Settlement can provide an expeditious and cost-effective way of resolving the dispute.

The parties shall, by letter, report back to the Board, no later than September 21, 1990, the results of their discussions. Future prehearing and hearing scheduling will depend on the achievements of the parties.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Morton B. Margulies, Chairman
ADMINISTRATIVE LAW JUDGE

Bethesda, Maryland
August 29, 1990

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Thomas E. Murley, Director

In the Matter of

Docket No. 50-443

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Statlon, Unit 1)

August 31, 1990

In an Emergency Motion filed before the Commission on behalf of New England Coalition on Nuclear Pollution, Seacoast Anti-Pollution League, and the Commonwealth of Massachusetts (Petitioners) in the U.S. Nuclear Regulatory Commission's (NRC's) licensing proceeding for the Seabrook Station, Unit 1, Petitioners alleged the existence of recent, previously undisclosed industry reports of extensive and serious regulatory noncompliance at Seabrook. Petitioners argued that these materials (certain reports prepared by the Institute for Nuclear Power Operations (INPO)) demonstrated that the NRC had no valid technical basis for finding that Seabrook Station Unit 1 of the Public Service Company of New Hampshire, et al. (Licensee) complied with the NRC's regulations and was safe to operate.

The Motion was referred to the Director of the Office of Nuclear Reactor Regulation (NRR) for preparation of a response pursuant to 10 C.F.R. § 2.206.

The Director of NRR has reviewed the INPO reports referred to by Petitioners and has found the allegations not to be substantiated. The INPO reports on which the allegations were founded do not indicate that the Seabrook facility is out of conformance with NRC requirements or that it is unsafe to operate. The Licensee's corrective actions were appropriate and responsive to the INPO findings. Consequently, the Director of NRR determined that no action pursuant to section 2.206 need be taken in this matter.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By letter dated March 14, 1990, Ms. Diane Curran, Esq., filed an Emergency Motion with the Commission on behalf of New England Coalition on Nuclear Pollution, Seacoast Anti-Pollution League, and the Commonwealth of Massachusetts, (Intervenors) in the U.S. Nuclear Regulatory Commission's (NRC's) licensing proceeding for the Seabrook Station, Unit 1. Intervenors' motion was based on alleged recent, previously undisclosed industry reports of extensive and serious regulatory noncompliance at Seabrook. Accompanying the motion was the affidavit of Robert Pollard and the testimony of Mr. Pollard and Ralph Nader presented before the Subcommittee on General Oversight and Investigations, Committee on Interior and Insular Affairs, U.S. House of Representatives, during a hearing on March 14, 1990. The motion argued that these materials demonstrated that the NRC had no valid technical basis for finding that Seabrook Station Unit 1 of the Public Service Company of New Hampshire, et al. (PSNH or Licensee) complied with the NRC's regulations and was safe to operate.

In an Order issued on March 15, 1990 (unpublished), the Commission denied the Emergency Motion which sought an extension of the stay of full-power operation issued by the Commission in its Memorandum and Order of March 1, 1990.¹ In CLI-90-3, the Commission authorized the Director of NRR to issue a full-power license consistent with the provisions of CLI-90-3 for a housekeeping stay. In its March 15, 1990 Order, the Commission concluded that no extension was needed to fulfill the purpose of the stay provided for in CLI-90-3. Moreover, the Commission noted that the motion failed to address the stay factors specified in 10 C.F.R. § 2.788.

Prior to issuance of a full-power license for Seabrook Unit 1, the NRC Staff reviewed the substance of the information on which the Emergency Motion is based. Specifically, both the Regional and Headquarters staffs reviewed the three Institute for Nuclear Power Operations (INPO) reports cited in the congressional testimony. Based on the Staff's review, I concluded that there was no information in the three INPO reports that would change the Staff's conclusion that there was reasonable assurance that the Seabrook facility could be operated safely. Accordingly, on March 15, 1990, I issued the full-power license for Seabrook.

On March 15, 1990, the Intervenors' Motion (Petition) was referred to my Office for the preparation of a response pursuant to 10 C.F.R. § 2.206. A letter

¹ CLI-90-3, 31 NRC 219 (1990).

acknowledging receipt of the Petition and its status as a Petition for consideration pursuant to section 2.206 was sent to Intervenor on April 9, 1990.

II. BACKGROUND

Prior to responding to the Petition, an explanation of INPO and how its evaluation reports relate to the NRC's regulatory process is necessary. INPO is an industry group, an organization funded by member utilities, which was created following the Three Mile Island accident in 1979. INPO performs a number of functions for its members, including conducting periodic inspections of operating nuclear plants, plants under construction, and corporate organizations. These periodic inspections are documented as INPO Appraisal/Evaluation reports, which are the reports referred to in the Petition.

The relationship between the NRC and INPO reflects the desire for a cooperative relationship in the exchange of experience, information, and data related to the safety of nuclear power plants. In an October 1988 "Memorandum of Agreement" (MOA) signed by the NRC and INPO, the provisions for coordination in regard to INPO appraisals and evaluation activities were discussed. Included are provisions that INPO expects its member utilities to make operating plant evaluation reports available to the NRC for review. Further, INPO will make final evaluation reports available to the NRC for review by appropriate NRC management personnel at the INPO offices in Atlanta. It should be noted, however, that these INPO documents and information are of a proprietary nature, are not publicly available, and NRC access is in the interest of improving nuclear plant safety.

INPO has no regulatory authority. INPO recommendations in each area are based on what it views as best practices, rather than on NRC standards or requirements. Accordingly, areas where improvements are recommended are not necessarily indicative of unsatisfactory performance or noncompliance with NRC requirements.

In the event that an INPO evaluation revealed that a licensee failed to comply with a legally binding requirement such as a rule, license condition, or Technical Specification, the NRC Staff would evaluate the situation and take the appropriate action pursuant to the NRC's "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 C.F.R. Part 2, Appendix C (Enforcement Policy). Further, under such NRC regulations as 10 C.F.R. §§ 50.55(e), 50.72, and 50.73, a licensee's failure to report significant violations or safety deficiencies revealed in such documents (such as INPO reports) is subject to enforcement action under that Enforcement Policy.

III. DISCUSSION

The bases for the Intervenor's (hereinafter Petitioners) request are its allegation that issues raised in certain INPO reports describe a wide array of "serious safety deficiencies" at the Seabrook plant, including: inadequate training of maintenance personnel and radioactive waste technicians, continuing failures by plant personnel to follow procedures, the permanent installation of equipment not shown on plant drawings or included in plant procedures, the lack of staffing for the solid waste radioactive waste handling group, the lack of an effective check valve preventative maintenance program despite numerous check valve failures, and failure to complete a design review of check valves.² The Petitioners also indicate that PSNH stated in the reports that it does not plan to correct a number of the deficiencies until well after the plant is licensed.

On these bases, the Petitioners allege that these reports raise such grave new issues of regulatory noncompliance as to completely undermine the NRC's previous conclusion that the Seabrook reactor is ready for safe operation at full power and ask that the license be denied or revoked.

On March 14, 1990, the Staff requested that the Licensee provide a response to the March 14, 1990 testimony presented by Ralph Nader and Robert D. Pollard to the Subcommittee on General Oversight and Investigations. On March 15, 1990, the Licensee provided its Response, including copies of the three INPO reports referenced in the congressional testimony. In addition, the Licensee provided a status update of its actions for each INPO finding or observation and the correlation of the INPO finding with the corresponding allegation presented in the congressional testimony. The Licensee concluded, from its review of the INPO findings from the three reports in question, that its existing programs and practices related to each item exceeded regulatory requirements.

In its Response, the Licensee emphasized that the allegations described as "serious safety deficiencies" mischaracterized the nature of the INPO findings. The Licensee maintained that the INPO findings and recommendations are based on best practices, rather than minimum acceptable standards or requirements, and are not indicative of unsatisfactory performance.

The Licensee also discussed INPO's policy that, if INPO observes a situation that is reportable in accordance with NRC requirements, INPO will encourage the utility to report the matter. If the utility does not report the matter, INPO will do so. The Licensee asserted that, in the course of the INPO visits at Seabrook Station, no reportable matters were identified. The Licensee also indicated its

²The specific INPO reports referred to by Petitioners are "Trip Report — Special Assistance Visit to Seabrook Station," dated February 8, 1988, "Evaluation of Seabrook Station," dated September 1989; and "Evaluation of Public Service Company of New Hampshire, New Hampshire Yankee Division's Corporate Support and Monitoring of Seabrook Station from October 2 through 6, 1989," dated December 26, 1989.

belief that there were no existing safety issues or concerns and no issues that would prevent the safe, conservative startup and operation of Seabrook Station upon issuance of a full-power operating license.

The Staff reviewed and evaluated each of the issues raised by the Petitioners as well as the Licensee's response to each issue. Each of the specific issues raised by the Petitioners is characterized below, followed by the Staff's evaluation. The issues are presented in the following order:

1. INPO Trip Report dated February 8, 1988 (3 issues)
2. INPO Evaluation dated September 1989 (8 issues)
3. INPO Evaluation dated December 26, 1989 (4 issues)

A. Issues Discussed in INPO Trip Report Dated February 8, 1988

Issue #1

Petitioners quoted an INPO finding that several New Hampshire Yankee (NHY) employees did not know their complete assigned duties and had never seen a position (job) description. A specific example cited was that no position description was available describing all of the duties and functions of the Radiological Assessment Manager.

This INPO observation related to the Seabrook Station emergency preparedness efforts and organization. In its Response, the Licensee indicated that, at the time of the audit, the organization had not yet been stabilized and personnel reassignment to handle priority issues was common. The Licensee indicated that it is probable that some of the personnel interviewed as part of the basis of this INPO observation are now in entirely new assignments or, possibly, are no longer with Seabrook. This issue has been addressed by the Licensee with the development and distribution of job descriptions for Emergency Planning staff positions and the reduction in staffing to a constant workforce. With regard to the Radiological Assessment Manager, the Licensee redefined this position to that of the Radiological Technical Specialist in plant procedures and has reassigned certain responsibilities to other Emergency Planning staff positions.

The Staff has reviewed and evaluated the Licensee's actions set out in its Response to the INPO findings. The Licensee's corrective actions, if properly implemented, should be sufficient to ensure that Emergency Planning staff position duties and responsibilities are adequately documented and that personnel are aware of their responsibilities. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In addition, subsequent to the issuance of the INPO Trip Report documenting the above findings, three separate emergency preparedness (EP) inspections were conducted at Seabrook Station by NRC EP specialists. These inspections are documented in NRC Region I Inspection Reports (IR) 50-443/88-03, 89-02,

and 90-01. Areas of inspection included the Seabrook EP organization and the Seabrook staff's knowledge and performance of duties. The specific INPO findings were encompassed within the scope of the NRC inspections. Seabrook personnel knowledge and performance of duties were noted in IR 50-443/90-01 as being in compliance with 10 C.F.R. § 50.47(b) and section IV of Appendix E to 10 C.F.R. Part 50. The creation of the Seabrook staff position of Radiation Technical Specialist was noted in IR 50-443/90-01. The inspection determined that the Licensee's emergency organization continued to meet the requirements of section 50.47(b) and section IV of Appendix E to 10 C.F.R. Part 50.

Based on the NRC inspections conducted in the areas of Seabrook emergency preparedness and the Staff's assessment of Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and that they do not present a significant health or safety issue.

Issue #2

Petitioners quoted an INPO finding discussing an inconsistency between the Emergency Plan and the Emergency Plan implementing procedures and/or how the Plan is actually implemented. Petitioners also cited INPO findings indicating that revisions to onsite procedures were being made through unauthorized, undocumented methods that shortcut the approved process.

In its Response, the Licensee stated that discrepancies between the Emergency Plan and its implementing procedures had been corrected through a series of revisions. These revisions have been in accordance with an established administrative procedure which requires a series of reviewer approvals, including an independent review by the Station Operations Review Committee (SORC) and final Station Manager approval. This administrative procedure has been in effect since August 19, 1988.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO finding. The Licensee's corrective actions included actions to correct the noted inconsistency and to establish controls to prevent similar problems from recurring. The Staff's assessment is that the Licensee's corrective actions adequately address the INPO findings.

In addition to the three NRC inspections of EP activities noted previously, two EP exercises were observed by NRC inspectors since the INPO Trip Report was issued. The results of these inspections are documented in IRs 50-443/88-09 and 89-10. The inspection of the EP exercise conducted in September 1989 resulted in an overall conclusion, as stated in IR 50-443/89-10, that observed Licensee activities in the areas of EP were consistent with the emergency response plan and implementing procedures and that no exercise weaknesses are identified.

The Licensee's Change Control Program is discussed in IR 50-443/89-02. This IR documents that procedure changes are approved only after the conduct of an internal review which results in the conclusion that the revision does not negatively impact the emergency plan. Additionally, several emergency plan and implementing procedure changes were reviewed by NRC inspectors, as documented in IR 50-443/90-01, and found to have been satisfactorily controlled.

Based on the NRC inspections conducted in the areas of Seabrook emergency preparedness and the Staff's assessment of Licensee's corrective actions in response to the INPO findings, the Staff has concluded that these issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #3

Petitioners quoted an INPO finding discussing deficiencies in the Emergency Preparedness training program including a failure of the then-current training program to comply with the applicable procedural requirements and a finding that the training instructors were not being selected or qualified in accordance with specified criteria.

The Licensee stated in its Response that the training procedures referenced in the INPO finding were developed for operator training and were not applicable for other training programs. The Licensee has since developed a series of Nuclear Training (NT) procedures and revised the Emergency Plan implementing procedure to be consistent with the NT procedures. The Licensee did not explicitly discuss the issue of training instructor selection or qualification as noted in the INPO finding. However, the Staff discussed this issue with the Licensee and was informed that the NT procedures specify training instructor selection and qualification criteria.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO finding. The Staff considers the Licensee's corrective actions involving the development of a series of NT procedures and revising the Emergency Plan implementing procedure to be appropriate responses to the INPO findings.

With regard to EP training, an NRC inspection determined that the Licensee's Fully Integrated Nuclear Information System tracks training requirements and requalification time periods, while maintaining the correct status of training records. The inspection, conducted in January 1990, and documented in IR 50-443/90-01, also noted that EP training at Seabrook was being conducted in compliance with section 50.47(b) and section IV.F of Appendix E to 10 C.F.R. Part 50.

Based on the NRC inspections conducted in the areas of Seabrook emergency preparedness and the Staff's assessment of Licensee's corrective actions in response to the INPO findings, the Staff has concluded that these issues raised

by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

B. Issues Discussed in INPO Evaluation Dated September 1989

Issue #1

Petitioners quoted an INPO finding that monitoring of plant activities, programs, and supervisors is often ineffective in identifying needed improvements. As an example, Petitioners cited the INPO finding that senior station managers were unaware that Instrumentation and Controls (I&C) technicians routinely used vendor manuals to troubleshoot and repair equipment, although the manuals are not approved by the Site Operations Review Committee and no program exists to keep the manuals updated.

In its Response to the INPO findings, the Licensee took several corrective actions. The Station Management Manual was revised to clearly state expected management oversight in the workplace which included a requirement for supervisors to submit a monthly summary of oversight activities performed to the Station Manager. The Licensee also upgraded guidance for supervisory walkdowns. In addition, the Licensee, with guidance from INPO, improved the existing plant administrative procedures governing the use of vendor manuals in the performance of maintenance activities.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. Providing clarification and guidance with regard to supervisory oversight responsibilities in the workplace should improve management oversight effectiveness. The Staff considers the strengthening of administrative controls governing the use of vendor manuals as a proper and effective corrective action. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The Staff, through its inspection activities, routinely observes and comments on management monitoring of plant activities and programs. Although the specific issue regarding technician use of unapproved vendor manuals has not been previously documented by the Staff, references to the effectiveness of Seabrook management in monitoring of plant activities are typically summarized in the Systematic Assessment of Licensee Performance (SALP) Reports. Specific references to management oversight of maintenance activities can be found in SALP Reports IR 50-443/86-99 and IR 50-443/87-99. In IR 50-443/87-99, the Staff indicated that, overall, the effective performance of maintenance activities had resulted in a high level of plant equipment operability. In addition, the Staff stated that the maintenance program had excellent controls in place which effectively tracked and managed the workload. The Staff's findings in the area of

management oversight and the performance of maintenance activities indicated acceptable Licensee performance.

Based on the NRC inspections conducted in the areas of management oversight and maintenance at Seabrook and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #2

Petitioners quoted an INPO finding that the Seabrook Station had experienced recurrent events due to inadequate identification and investigation of in-house operational events. Petitioners cited one of six INPO examples: recurrent events involving the inadvertent draining of the refueling water storage tank (RWST) and the condensate storage tank (CST). The Petitioners further noted the significance of the events in that the RWST and CST provide water to safety systems needed in the event of an accident.

The Licensee responded to this INPO finding through several programmatic enhancements to improve its investigation of in-house operational events. The Licensee indicated in its response that the Operating Experience Review Program would be revised to incorporate industry experience and improve distribution of Station Information Reports (SIRs). SIRs are used to document the investigation and evaluation of significant operating events. Other enhancements included the initiation of a program that would examine operational events of a lower threshold than those that would be examined by an SIR. The Licensee also implemented a Human Performance Evaluation System (HPES) program to review events from a human performance standpoint.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The programmatic enhancements and improvements initiated should increase the Licensee's ability to investigate and evaluate significant events and learn from industry experience. Initiation of a program that would capture events of a lower threshold for examination is a significant improvement which could provide operations personnel with valuable information on activities that are potential precursors to events. The Staff also considers the implementation of an HPES program an important action for the analysis of human performance. The Staff considers the Licensee's corrective actions appropriate and responsive to the INPO findings.

In addition, the Staff has closely evaluated and reviewed the Licensee's identification and investigation of certain in-house operational events. For example, the Staff reviewed the Licensee's corrective actions in response to the inadvertent draining of the RWST and CST in IRs 50-443/88-15 and 89-03. The Staff determined that the corrective actions taken were adequate and appropriate

considering the significance of the events. The Staff also routinely reviews the Licensee's application of industry experience to prevent similar occurrences at Seabrook. The Licensee's review of NRC Information Notices, which provide industry experience to nuclear utilities without requiring a specific licensee response, are discussed in IRs 50-443/87-24 and 88-11. The Staff concluded in IR 50-443/88-11 that the Licensee's engineering group was satisfactorily responding to operational issues that might impact plant operations at Seabrook.

Based on the NRC inspections and the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #3

Petitioners quoted an INPO finding that improved application of industry operating experience, specifically INPO significant operating event reports (SOERs) and significant event reports (SERs), could have prevented some events that occurred at the Station. Implementation of corrective actions to prevent occurrence of events described in SOERs was frequently found not to be effective or timely. In addition, INPO found that some SERs were not reviewed completely or timely.

In its Response to the INPO findings, the Licensee indicated that it had revised its Operating Experience Review Program with goals to review and implement recommendations from specifically designated SOERs within 90 days of receipt and other SOERs and SERs within 120 days. In addition, the Licensee indicated that all SOER recommendations and SER suggestions have been reviewed and corrective action plans and schedules have been determined for all open SOER recommendations and SER suggestions.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Licensee's action to review and schedule any resulting corrective actions with regard to the outstanding SOERs and SERs should bring its program up to date. The revision of the Operating Experience Review Program will then provide the mechanism necessary to keep the program current with industry experience. The Staff considers the Licensee's corrective actions to be an appropriate response to the INPO findings.

The Staff does not typically review a licensee's actions with regard to INPO SOERs and SERs. The Staff considers INPO SOERs and SERs to be useful industry tools providing information designed to help licensees enhance their plant operations. The Staff utilizes its own system of Bulletins and Generic Letters to alert licensees to safety-significant issues. As noted above, the Licensee's action in this area have been acceptable.

Based on the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #4

Petitioners quoted an INPO finding involving the lack of adequate design review and documentation for plant changes and failure to incorporate changes into plant drawings and procedures with the possibility that these failures could result in plant events and reportable conditions. The INPO example referred to indicated that there were sixty-four outstanding temporary modifications, with some installed more than 4 years ago. Of these, fifty-two required a design engineering decision to make the modification permanent or to cancel the modification. The Licensee had scheduled twenty-one of these items to be completed by 1990, ten items for 1991 or later, and twenty-one had no dates established.

In its Response to the INPO findings, the Licensee stated that it has committed to review the scope of the temporary modification program. Previously installed temporary modifications that have been made permanent are being reviewed to ensure that appropriate maintenance documents are accurate. Existing plant administrative configuration controls are being enhanced. The Licensee also initiated a program to minimize the use of future temporary modifications and is in the process of reducing the current backlog.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The review of previously installed temporary modifications is prudent to ensure that all controlled documents and modification checks were completed as necessary. Enhancements to the temporary modification program and administrative configuration controls, if properly implemented, should strengthen the temporary modification process as well as minimize the future use of temporary modifications. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In addition, the Staff routinely reviews the Licensee's temporary modification program through the NRC inspection program. IR 50-443/87-02 documents inspector discussions with the Licensee concerning minor discrepancies on certain piping and instrumentation drawings, which the Licensee corrected. A routine review of the Licensee's Monthly Temporary Modification Report which noted no discrepancies is documented in IR 50-443/89-13. The Staff's review of the Licensee's overall temporary modification program is documented in IR 50-443/90-05. In IR 50-443/90-05, the Staff noted two violations for which no citations were issued (due to the low safety significance of the items)

involving temporary modifications, but overall found the Licensee's temporary modification program satisfactory.

Based on the NRC inspections of the Licensee's temporary modification program and the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #5

Petitioners quoted an INPO finding involving inadequate preventative maintenance measures for check valves. The Licensee's check valve monitoring program was also found to be deficient in "quantitative acceptance criteria" and insufficient testing of check valves at Seabrook which may not identify degraded internal conditions. Check valve failures cited by INPO involved several safety systems. In addition, INPO noted that test and inspection requirements had not been specified for 64 of the 220 valves listed in the check valve monitoring program. Petitioners also discussed the importance of check valves in preventing overpressurization of low-pressure systems and the possibility of a resultant interfacing systems loss-of-coolant accident.

In its Response to the INPO findings, the Licensee indicated that the check valves used at Seabrook were selected, specified, designed, procured, installed, and tested to the applicable industry codes and standards. The Licensee also indicated that it had developed design changes or work requests to address each specific check valve issue cited in the INPO report. The Licensee is currently reviewing its current check valve design and monitoring program in order to enhance the existing check valve maintenance program. This effort is scheduled to be completed by October 1990. The review follows industry guidance and includes an assessment of the appropriate preventative maintenance measures and acceptance criteria. The Licensee is also performing a design review of check valves for applicability in accordance with accepted industry guidelines.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Staff views the Licensee's action to address each check valve issue identified in the INPO report with the appropriate design change or work request as responsive. The Licensee's efforts to upgrade its check valve design, monitoring, and maintenance programs in accordance with industry guidance should result in improved check valve reliability. The establishment of appropriate preventative maintenance measures and suitable acceptance criteria is a vital part of a comprehensive program to ensure check valve operability. The Staff considers the Licensee's corrective actions as appropriate and responsive to the INPO findings.

In addition, the Staff has routinely inspected the Licensee's actions with regard to check valve operability. The Staff has found the Licensee's programs involving check valve design and monitoring of check valve operability acceptable as documented in NUREG-0896,³ Supplements 5 and 7. The Staff also found the Licensee's in-service testing program for all safety-related pumps and valves (which includes check valves) acceptable as stated in NUREG-0896, Supplement 6.

Based on the Staff's review of the areas involving check valve operability at Seabrook and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #6

The INPO finding quoted by Petitioners involved the use of unapproved vendor technical manuals in the performance of various maintenance activities. The finding also indicated that some of the manuals lacked sufficient information to provide sufficient technical direction for conducting maintenance.

The Licensee's Response to the INPO finding indicated that the current program and procedures for handling vendor technical information, including vendor technical manuals, has been enhanced to include applicable INPO, and other industry guidance. The program has been strengthened to include additional evaluation of vendor technical information upon receipt to determine any necessary actions. All required actions are then tracked to completion. The Licensee has also provided additional training to personnel on procedures regarding vendor information.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Licensee's programmatic enhancements should strengthen its program for the control of vendor technical information. The Staff has recently issued Generic Letter (GL) 90-03 which describes its position on vendor interface with regard to safety-related-component vendors. In the GL, the Staff references the Vendor Equipment Technical Information Program (VETIP) described in INPO Report 84-010. The Staff has found the VETIP INPO report, which the Licensee has used to upgrade its program and procedures for handling vendor technical information, to be acceptable. Thus, the Licensee's corrective actions have been taken in accordance with the Staff's stated policy.

Based on the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by

³NUREG-0896, "Safety Evaluation Report Related to the Operation of Seabrook Station, Units 1 and 2," Supplement No. 5, July 1986, and Supplement No. 7, October 1987.

INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #7

Petitioners quoted the INPO finding involving the adequacy of the Licensee's equipment tagging and isolation procedure. Petitioners also indicated that INPO had cited three problems, some involving safety systems, where the procedures in effect were not adequate to prevent equipment damage or personnel injury.

As a result of the INPO finding, the Licensee indicated in its Response that it is revising the station tagging control procedure to include additional guidance and controls. Additional guidance includes upgrading procedures governing the proper sequence for component isolation and providing for tagging order audits on a frequency adequate to identify problems. The Licensee has indicated that, as part of these revisions, the applicable INPO guidelines and good practices are being used and the INPO findings addressed.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The strengthening of component isolation procedures can reduce the likelihood of component damage during maintenance activities. Increasing the program audit frequency should provide the Licensee with timely feedback on the effectiveness of the programmatic enhancements. These improvements, if properly implemented, should result in an improved equipment tagging and isolation program. The Staff considers the Licensee's corrective actions to be responsive and appropriate to the INPO findings.

In addition, the Staff routinely monitors the Licensee's program of equipment tagging and isolation. For example, in 1987 the Staff issued a violation to the Licensee for failure to properly implement the requirements of the equipment tagging program with respect to work performed on the service water system. In response to the Staff's concerns, the Licensee revised the tagging procedure and retrained the operators involved. The issue is discussed in IR 40-443/88-02. Since closure of this violation, Staff inspections of the Licensee's equipment tagging and isolation program, documented in IRs 50-443/89-08 and 89-13, have found no violations.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #8

Petitioners quoted an INPO finding involving the material condition of plant equipment and piping. The finding indicated that some plant equipment and piping was degraded due to corrosion and that many equipment deficiencies were not in the work control system. Examples included safety system components.

The Licensee indicated in its Response that it has taken several corrective actions in regard to this INPO finding concerning equipment deficiencies. These actions include upgrading the program for supervisory walkdowns, adding a deficiency tagging program to enhance routine equipment reporting, and the continuation of a 5-year plant painting program.

The Staff has reviewed and evaluated the Licensee's actions in Response to the INPO finding. The Licensee's corrective actions involving the initiation of a deficiency tagging program and the continuation of a 5-year painting program appear to be an appropriate response to the INPO findings. In addition, supervisory walkdowns are typically an effective management tool in focusing attention on a plant's material condition. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The plant's material condition is routinely observed, inspected, and documented through the NRC inspection program. Routine inspections of the plant's material condition are conducted by the NRC plant resident inspectors and are documented in IRs 50-443/88-04, 88-07, 88-10, and 90-05. These inspections found the plant material condition to be satisfactory overall, and no violations were noted. In addition to the routine inspections conducted by the plant resident inspectors, NRC regional management has also conducted reviews of the plant material condition. IR 50-443/89-20 documents the review conducted by NRC regional management. Again, the Staff found no violations and concluded that the plant material condition was acceptable.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and that they do not present a significant health or safety issue.

C. Issues Discussed in INPO Evaluation Dated December 26, 1989

Issue #1

Petitioners quoted an INPO finding involving the needed shifting of corporate emphasis from a construction to an operations orientation. In this regard, the INPO finding indicated that the solid radioactive waste handling group required staffing and that recent maintenance training had been cancelled due to insufficient resources. The INPO report also indicated that senior plant and

corporate management were unaware of the cancellation of training and the impact on the maintenance department's readiness for power operations.

The Licensee in its Response indicated that the responsibilities of the Production organization and those NHY organizations supporting Production are defined in the NHY manual system. Senior Production Management now chairs regular meetings with appropriate station supervision and corporate supervision. The Licensee emphasized that production priorities are clearly defined and the support necessary to resolve production problems are identified and allocated.

In response to this INPO finding, the Licensee has since staffed the Radioactive Waste Handling Group and the Operations Support Group. In addition, the Licensee stated that the INPO finding regarding maintenance training has been fully addressed. Adequate resources and attention to correct maintenance training have been applied.

The Staff has reviewed and evaluated the Licensee's actions in response to the INPO findings. The Staff recognizes that these types of findings are not atypical of a plant shifting from a construction to a production orientation. The Licensee's corrective actions, if properly implemented, should help direct the organization toward a production orientation. The Staff expects the Licensee to continue concentration on staffing and training as plant operation continues. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In addition, the Staff has closely monitored the Licensee's activities in its transition from a construction to an operations orientation. As indicated previously, the Staff typically uses the SALP process to comment on management performance. The last three SALP Reports, IRs 50-443/85-98, 86-99; and 87-99, document the Staff's assessment of the Licensee's shifting of emphasis from a construction to an operations orientation. The Staff has noted in these SALP Reports that the Licensee's performance reflected a continued commitment to quality as the transition from construction to operations progressed. IR 50-443/90-03 documents the Staff's inspection of the Licensee's radioactive processing and packaging program. No violations were identified and the Staff determined that the facility was ready for full-power operation.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #2

The INPO findings quoted by Petitioners involved the timeliness and adequacy of implementation of corrective actions to resolve problems identified

within the NHY organization. Examples included repetitive procedural adherence problems and check valve failures.

The Licensee indicated in its Response that it has developed a program to identify open issues and problems areas, consolidate the issues into an Integrated Readiness Document and assign a completion schedule. These issues are then reviewed by senior management and tracked until closure. Meetings between senior management and employees are held weekly to obtain feedback on issues and effectiveness of corrective actions implemented. In regard to procedural adherence problems, the Licensee completed procedure compliance training for all site personnel in December 1989. The Licensee also indicated that a design review of check valves as well as a review of preventive maintenance activities, using industry guidelines, is currently being conducted.

The Staff has reviewed and evaluated the Licensee's actions taken in response to the INPO findings. The issue involving check valves has been previously discussed herein. In regard to the repetitive nature of procedural adherence problems, compliance training for all site personnel, stressing the significance of following procedures, is generally effective at focusing personnel attention on the importance of procedural adherence. The Licensee's corrective actions, if properly implemented, should provide the basis for reduction of the instances of inadequate procedural adherence. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The Staff has closely monitored the Licensee's actions with regard to procedural adherence through the NRC inspection program. This issue is of particular concern to the Staff in view of the past failure of certain Licensee managers observing a natural circulation test at Seabrook on June 22, 1989, to ensure adherence to test procedure requirements. The June 22, 1989 event is documented in IR 50-443/89-92 and discusses the failure of the operating crew to comply with an explicit procedural requirement. The event resulted in the Staff issuance of Confirmatory Action Letter (CAL) 89-11 which required the Licensee to perform a number of corrective actions with regard to procedural adherence. These actions included issuance of the Licensee's policy defining procedural adherence requirements for all activities, issuance of a memorandum to all personnel reemphasizing the requirement that all procedures be followed, and enhancement of the Seabrook Management Manual to clearly state the only conditions under which departure from approved procedures is allowed. The completion and closure of the Licensee's corrective actions is documented in IR 50-443/89-83. The Staff concluded that this Licensee had adequately addressed the issue of procedural compliance.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #3

Petitioners quoted an INPO finding which indicated that corporate and station management were often not held accountable for timely completion of assigned tasks. Examples cited by INPO included past-due integrated commitment tracking items, failure to achieve 62 percent of the corporate goals for 1989, and overdue personnel annual appraisals.

The Licensee in its Response indicated that it has taken a number of corrective actions with regard to this INPO finding. A Core Values and Work Ethic Program was implemented to strengthen attention to detail, accountability, and corporate expectations regarding high-quality work with appropriate attention to commitments, cost control, and work effectiveness. The Integrated Commitment Tracking System (ICTS) was revised, implementing a new priority system, tighter controls, and closer tracking. Personnel are being held accountable for completion of INPO findings through the use of the ICTS. Accountability for completion performance appraisals has been tied to annual wage and salary actions. Accountability for established goals has been emphasized in writing to all managers. The goals program is being reviewed monthly to ensure that established goals are consistent with management priorities.

The Staff has reviewed and evaluated the Licensee's actions taken in response to the INPO findings. The ICTS should provide management with the tool it needs to accurately track outstanding commitments and to ensure accountability for the timely completion of assignments. Assigning accountability for specific goals clarifies management's priorities and should focus the organization on the issues considered important by management. Monthly review of site goals should keep middle management and the plant staff current with senior management priorities. The Licensee's corrective actions, if properly implemented, should provide the basis for improved accountability and more timely completion of assigned items. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

The Staff, in the course of its inspection program, has reviewed and evaluated a number of the Licensee's programs for goal accountability. The Staff discusses the Licensee's Core Values and Work Ethic Policy statement in IR 50-443/89-83 and found the statement satisfactory. SALP Report 50-443/87-99 documents the Staff's assessment that the Licensee's performance with respect to maintenance work requests relative to Station goals was also satisfactory. In addition, the Staff reviewed, as appropriate, a number of documents involving personnel actions taken by the Licensee as the result of the June 22, 1989 natural circulation test event as documented in IR 50-443/89-21. The Staff concluded that the Licensee's actions were appropriate.

Based on the NRC inspections conducted in this area and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings,

the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and do not present a significant health or safety issue.

Issue #4

Petitioners quoted an INPO finding that insufficient management attention had been given to the development and implementation of a radioactive waste handling program and that key segments of the program were not in place. INPO examples cited by Petitioners included: unclear responsibility between two Licensee departments for radioactive waste processing and shipment, incomplete reorganization and staffing of the proposed radioactive waste organization, the failure of the radioactive waste minimization committee to meet for over 2 years, and the failure to communicate plans and milestones for the temporary storage of radioactive waste prior to the availability of long-term storage.

In response to the INPO findings, the Licensee developed a comprehensive radioactive waste program with accompanying staffing requirements and implemented a training program for radioactive waste technicians. Transfer of the chairmanship of the established radwaste minimization committee was also finalized. A minimization program and final plans for temporary storage of solid low level waste have also been completed.

The Staff has reviewed and evaluated the Licensee's actions taken in response to the INPO findings. Completion and implementation of a comprehensive radioactive waste program should clarify departmental responsibilities and result in adequate staffing. Reestablishing the chairmanship of the radwaste minimization committee should result in a more active committee. The Licensee's corrective actions, if properly implemented, should result in an effective radioactive waste handling program. The Staff considers the Licensee's corrective actions to be appropriate and responsive to the INPO findings.

In its inspection program, the Staff has conducted a startup inspection to review and assess the Licensee's ability to control and quantify radioactive waste and to review management controls of the Licensee's radioactive waste programs. The inspection results are documented in IR 50-443/89-18 and IR 50-443/90-03. The Staff found the management controls in place for the radioactive waste program to be satisfactory and concluded that the Licensee's radwaste programs were ready for full-power operations.

Based on the NRC inspections conducted in the area of radwaste controls and the Staff's assessment of the Licensee's corrective actions in response to the INPO findings, the Staff has concluded that the issues raised by INPO have been satisfactorily addressed by the Licensee and that they do not present a significant health or safety issue.

IV. CONCLUSIONS

The NRC Staff has reviewed the allegations in the Intervenor's Petition including the congressional testimony of Messrs. Pollard and Nader, which maintained that the Seabrook Unit 1 facility was not in compliance with NRC requirements and was unsafe to operate and has found the allegations not to be substantiated. The INPO reports on which these allegations were founded do not indicate that the Seabrook facility is out of conformance with NRC requirements or that it is unsafe to operate. The Licensee's corrective actions were appropriate and responsive to the INPO findings.

The NRC Staff's assessment extended beyond the specific issues raised in the Petition and included an assessment of the overall impact of INPO findings with regard to the Seabrook facility. As noted herein, the NRC Staff has access to and has reviewed all INPO Reports that have assessed the performance of the Licensee. The reviews of all these reports, as well as those referred to above, did not reveal any substantial health and safety issues that would call into question the continued safe operation of Seabrook Unit 1.

The institution of proceedings in response to a request pursuant to section 2.206 is appropriate only when substantial health and safety issues have been raised. See *Consolidated Edison Co. of New York* (Indian Point, Units 1, 2, and 3), CLI-75-8, 2 NRC 173, 176 (1975), and *Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), DD-84-7, 19 NRC 899, 923 (1984). This standard has been applied to determine whether any action in response to the Petition is warranted. For the reasons discussed above, no basis exists for taking any action in response to the Petition as no substantial health or safety issues have been raised by the Petition. Accordingly, no action pursuant to section 2.206 is being taken in this matter.

A copy of this Decision will be filed with the Secretary of the Commission for the Commission's review in accordance with 10 C.F.R. § 2.206(c).

FOR THE NUCLEAR
REGULATORY COMMISSION

Thomas E. Murley, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 31st day of August 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kenneth M. Carr, Chairman
Kenneth C. Rogers
James R. Curtiss
Forrest J. Remick

In the Matter of

Docket No. 50-271-OLA
(Spent Fuel Pool Amendment)

**VERMONT YANKEE NUCLEAR POWER
CORPORATION**

**(Vermont Yankee Nuclear Power
Station)**

September 21, 1990

The Commission dismisses this proceeding on the unopposed motion of the Licensee. Nonetheless, the Commission feels that certain matters raised by the Intervenor, the Licensee, and the Appeal Board warrant a response and, therefore, uses this occasion to comment on those matters. The Commission also notes that by confining the Intervenor's case to the contention that they themselves drafted and filed, it acted in accord with almost 20 years of Commission jurisprudence.

NEPA: RULE OF REASON

The Commission's opinion in CLI-90-4, 31 NRC 333 (1990), made clear that low probability is the key to applying NEPA's rule of reason test to contentions that allege that a specific accident scenario presents a significant environmental impact that must be evaluated.

NEPA: REMOTE AND SPECULATIVE EVENTS

The Commission's opinion in CLI-90-4, 31 NRC 333 (1990), made clear that in the future, when applying the "rule of reason" test against which environmental contentions are to be judged under NEPA, a finding that an accident scenario is remote and speculative must be more specific and more soundly based on the actual probabilities and accident scenarios being analyzed than they were in this case.

MEMORANDUM AND ORDER

In CLI-90-4, 31 NRC 333 (1990), we responded to the Atomic Safety and Licensing Appeal Board's certification of its ruling in ALAB-919, 30 NRC 29 (1989), that an environmental contention proffered by the New England Coalition on Nuclear Pollution and the Commonwealth of Massachusetts ("Intervenors") was not admissible in this proceeding, and remanded the contention to the Appeal Board for further proceedings. Since then the Licensee has sought reconsideration,¹ the Appeal Board has sought clarification,² Intervenors have filed a notice of withdrawal from the proceeding,³ and Licensee has moved to dismiss the proceeding.⁴

The motion to dismiss is unopposed and is granted. However, certain comments in the Intervenors' Withdrawal Statement and certain essential aspects of the Licensee's Motion for Reconsideration and the Appeal Board's Clarification Request warrant a Commission response.

I.

The environmental contention at issue was accurately described by the Appeal Board in the Clarification Request and in ALAB-919 as follows:⁵

¹ Motion for Reconsideration, dated April 13, 1990.

² Request for Clarification from the Commission, April 17, 1990 (hereinafter "Clarification Request").

³ New England Coalition on Nuclear Pollution's and Massachusetts Attorney General's Statement of Withdrawal from Vermont Yankee Licensing Amendment Proceedings, dated May 2, 1990 (hereinafter "Withdrawal Statement").

⁴ Motion to Dismiss Proceeding, dated May 3, 1990.

⁵ Clarification Request at 4-5; ALAB-919, 30 NRC at 29, 43 (1989). In CLI-90-4 we summarized this contention as "involv[ing] a severe reactor accident that generates sufficient hydrogen to cause hydrogen ignition or detonation which, in turn, causes a loss of spent fuel cooling that leads to a spent fuel cladding fire." CLI-90-4, 31 NRC at 335 n.2. This is an accurate summary of the contention. The Appeal Board commented in its Clarification Request that our summary was a more expansive reading of the contention than the language warranted. Clarification Request at 5. We do not believe that the contention language omitted from our summary, which specified that

Continued

(1) a severe reactor accident occurs by some unidentified mechanism and involves substantial fuel damage, hydrogen generation, Mark I containment failure, and subsequent detonation in the reactor building where the Vermont Yankee spent fuel pool is located; (2) the reactor building and the spent fuel pool are assertedly not likely to withstand the pressure and temperature loads generated by such an accident, thereby threatening the pool cooling systems or pool structure itself . . . ; and (3) pool heatup occurs, resulting in a self-sustaining zircaloy cladding fire with increased long-term health effects for the public from the increased fuel pool inventory

The Licensee sought reconsideration of our opinion on the ground that the Appeal Board dismissed the contention not because of the low probability of the accident scenario set forth in the contention, as we had found, but because the contention lacked a sufficient basis as required by our rules. In its Clarification Request the Appeal Board professed uncertainty as to the precise contention that was to be examined on remand, but in the course of doing so eliminated any doubt that low probability played the key role in rejecting the contention as it saw it. We believe that our opinion does not need reconsideration, that it is clear that the contention on remand was to be the one described above, and that as so described it did not include a seismic event as the initiating event leading to spent fuel pool cooling failure. ALAB-919 was not so clear in this regard.

After carefully reviewing the record, it is clear that the uncertainty that our opinion apparently engendered on the part of the parties had as its root cause the train of logic of the Appeal Board's decision itself. ALAB-919 held that the contention posited an environmental impact (from an accident scenario) which was remote and speculative and therefore ran contrary to the "rule of reason" against which environmental contentions are to be judged under NEPA. The Appeal Board found the environmental impact to be remote and speculative because the accident scenario was of very low probability.⁶ In CLI-90-4 we made clear that low probability is the key to applying NEPA's rule-of-reason test to contentions that allege that a specified accident scenario presents a significant environmental impact that must be evaluated. This conceptual approach is consistent with the approach in ALAB-919. The difficulty is that the Appeal

hydrogen detonation would cause loss of spent fuel pool cooling by either failing the cooling system or the pool structure, had any limiting effect. Failure of the cooling system or structure would be the logical cooling failure mechanisms in any event.

⁶ALAB-919, 30 NRC at 45-46 ("But more important, the BNL Report [offered as a basis for the contention] concludes that '[s]cidents leading to complete pool draining that might be initiated by loss of cooling water circulation capability . . . were found to have a very low likelihood'"); ALAB-919, 30 NRC at 47 ("But more important, those documents [offered to support the contention] themselves reflect the view that the accident scenarios analyzed therein are individually events of very low probability. Environmental Contention 1 strings these individual events together into a chain of causation that is *necessarily* of even lower likelihood. We thus conclude . . . that . . . Environmental Contention 1 is remote and speculative"); Clarification Request at 1 ("We found that the documents on which NECNP and the Commonwealth relied to support the contention 'conclude that the various elements of the accident scenario on which the contention is based are individually events of very low probability[.] . . . [and] that, taken together as set forth in [the contention], these events become even more remote.'")

Board somehow found that the accident scenario set out in the contention was of low probability notwithstanding that the technical documents put forward as the basis for the contention did not address the actual probability of that accident scenario.⁷

This difficulty with the record basis for the Appeal Board's finding of low probability may have been what led the Licensee to believe that low probability was not the basis for the Appeal Board's decision. It led us to be concerned that the probability that the Appeal Board found to be so low as to be remote and speculative pertained not to the whole scenario in the contention but to pieces of the scenario in the contention or related scenarios set out in the technical documents, some with probabilities as high as on the order of 10^{-4} per reactor year. In ALAB-919, the Appeal Board bridged the gap between the technical documents and the scenario in the contention by assuming, conservatively, that the probability of that scenario could be no *greater* than certain scenarios actually analyzed in the technical documents.⁸ If the scenarios in the technical documents were remote and speculative, then, *a fortiori*, the scenario in the contention must be remote and speculative as well. Our opinion makes clear that future decisions that accident scenarios are remote and speculative must be more specific and more soundly based on the actual probabilities and accident scenarios being analyzed.

II.

As to Intervenor's complaint that our only goal in CLI-90-4 was to restrict their participation in the proceeding, we can simply say that by confining Intervenor's case to the contention that they themselves drafted and filed we were acting in accord with almost 20 years of Commission jurisprudence.

The motion to dismiss the proceeding is granted, and the proceeding is terminated.

The additional views of Chairman Carr are attached.

⁷ ALAB-919, 30 NRC at 45. ("Although the BNL Report addresses several different accident scenarios . . . none involves the serious reactor accident and resultant hydrogen detonation that serve as the triggering event for the Environmental Contention 1 accident scenario"); ALAB-919, 30 NRC at 46 ("But neither document [NUREG-1150 and NUREG/CR-4624] even mentions . . . , let alone analyzes, what effects such a reactor accident might have on the facility's spent fuel pool structure or pool cooling system, which is the subject of the particular license amendment application before us here.")

⁸ See, e.g., ALAB-919, 30 NRC at 47.

It is so ORDERED.

For the Commission⁹

SAMUEL J. CHILK
Secretary of the Commission

Dated at Rockville, Maryland,
this 21st day of September 1990.

ADDITIONAL VIEWS OF CHAIRMAN CARR

I concur in the order to dismiss the proceeding, but do not join in the opinion. I would have dismissed the Licensee's Request for Reconsideration and the Appeal Board's Request for Clarification as moot since the Intervenors have withdrawn from the proceeding.

⁹ Chairman Carr was not present for the affirmation of this order; if he had been present he would have approved the order to dismiss the proceeding.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Wilber

In the Matter of

Dockets No. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

September 18, 1990

The Appeal Board finds that the Licensing Board erred in LBP-89-32, 30 NRC 375 (1989), by dismissing an intervenor contention concerning teacher abandonment of the role assigned to them in the utility-sponsored emergency response plan. The Appeal Board remands the issue to the Licensing Board for an exploration of the following: (1) whether there is reasonable assurance that a sufficient number of teachers and day-care personnel will fulfill their assigned role, and (2) if not, are there satisfactory alternative arrangements for the fulfillment of that role by others.

**RULES OF PRACTICE: IMMEDIATE EFFECTIVENESS REVIEW
(EFFECT ON APPEAL BOARD DECISIONS)**

Unless the Commission otherwise so directs, the Appeal Board may not attach "any weight" to statements contained in immediate effectiveness determinations. See 10 C.F.R. § 2.764(g).

EMERGENCY PLAN(S): UTILITY PLAN AS SUBSTITUTE

**EMERGENCY PLANNING: ABSENCE OF STATE AND LOCAL
GOVERNMENT PARTICIPATION**

The essence of the realism rule, as set forth in 10 C.F.R. § 50.47(c)(1)(iii), is that, in the evaluation of the adequacy of a utility-sponsored emergency response plan, the NRC will recognize the "reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public." By reason of this recognition, the section declares that "it may be presumed [in the evaluation process] that in the event of an actual radiological emergency state and local officials would generally follow the utility plan."

EMERGENCY PLAN(S): UTILITY PLAN AS SUBSTITUTE

**EMERGENCY PLANNING: ABSENCE OF STATE AND LOCAL
GOVERNMENT PARTICIPATION**

On the basis of its history, it cannot be concluded that the realism rule was intended to cover school personnel such as the classroom teachers expected to serve as bus escorts under a utility-sponsored emergency response plan.

RULES OF PRACTICE: EVIDENCE

The Appeal Board may not properly rely on documents that have not been admitted into evidence in the record at hand.

EMERGENCY PLAN(S): UTILITY PLAN AS SUBSTITUTE

**EMERGENCY PLANNING: ABSENCE OF STATE AND LOCAL
GOVERNMENT PARTICIPATION**

In terms the realism rule applies only to official action once an actual emergency has occurred and thus makes no assumptions respecting pre-emergency conduct.

APPEARANCES

John Traficonte, Boston, Massachusetts (with whom Allan R. Fierce, Leslie B. Greer, Mathew T. Brock, and Pamela Talbot, Boston, Massachusetts, were on the brief), for the intervenor James M. Shannon, Attorney General of Massachusetts.

Thomas G. Dignan, Jr., Boston, Massachusetts (with whom George H. Lewald, Kathryn A. Selleck, Jeffrey P. Trout, Jay Bradford Smith, Geoffrey C. Cook, William Parker, and Barbara Moulton, Boston, Massachusetts, were on the brief), for the applicants Public Service Company of New Hampshire, *et al.*

Mitzi A. Young (with whom Edwin J. Reis, Richard G. Bachmann, Elaine I. Chan, Sherwin E. Turk, and Lisa B. Clark were on the brief) for the Nuclear Regulatory Commission staff.

DECISION

In this decision, we single out for separate determination one of the issues presented on the pending appeals from the Licensing Board's November 9, 1989 partial initial decision in this operating license proceeding involving the Seabrook nuclear power station.¹ That issue concerns the role assigned to school teachers in the Seabrook Plan for Massachusetts Communities (SPMC) — the utility-sponsored emergency response plan for the Massachusetts portion of the station's plume exposure pathway emergency planning zone (EPZ).² Because it has become apparent both that the evidentiary record on that issue requires correction and supplementation, and that legal error was committed below, we are now remanding the matter to the Licensing Board for further consideration, without awaiting the outcome of our exploration of the remainder of the questions raised by the appeals at hand. Although we are not now suspending *pendente lite* the full-power operating license that has been issued for Seabrook, at the same time, we do not foreclose the grant of such relief by the Licensing Board.

¹ See LBP-89-32, 30 NRC 375 (1989).

² Unless otherwise indicated, all citations in this decision to the SPMC are to Revision O, Amendment 6, effective date August 1, 1988. This document is Applicants' Exhibit No. 42. In Massachusetts (unlike New Hampshire, where both the Seabrook facility and the remaining portion of the EPZ are located), state and local governments are not participating in the emergency response planning effort. Thus, it became necessary for the applicants to formulate an emergency response plan of their own.

I.

A. In the event of a Seabrook radiological emergency while Massachusetts EPZ schools are in session, the SPMC calls for teachers in those schools to accompany their students on buses to a host facility (first located in Wilmington, Massachusetts, and subsequently relocated at Holy Cross College in Worcester, Massachusetts — a distance of sixty miles or more from the communities in which the schools are situated).³ In his Contention No. 47, the intervenor Attorney General of Massachusetts (MassAG) asserted that, because of role conflict (i.e., concern for the welfare of members of their own families), the teachers would not be prepared to escort the students to a reception center or host facility. (At the time this contention was proffered, the applicants contemplated the use of the Wilmington facility for school children; Holy Cross College was substituted at a later date.)⁴

In a July 1988 memorandum and order, the Licensing Board rejected that claim at the threshold. The Board's principal justification was that a similar role abandonment issue had been among the human behavior questions fully explored in the phase of the proceeding concerned with the emergency response plan for the New Hampshire portion of the EPZ.⁵ That plan contemplates that, in the event of an evacuation necessitated by a radiological emergency at Seabrook, teachers in New Hampshire EPZ schools likewise would accompany their students on school buses to the students' prescribed destinations (reception centers).⁶

Five months later, the Licensing Board ruled on the teacher role abandonment issue in the course of its decision on the general acceptability of the New Hampshire emergency response plan. Discounting the testimony of thirteen New Hampshire teachers that, should a school evacuation be required, they (and a substantial number of other New Hampshire teachers as well) would promptly leave their students without performing any of their assigned duties, the Licensing Board reached the conclusion that "[s]chool teachers and school officials, as a group, will not abandon their pupils in the event of a radiological emergency at Seabrook."⁷

³ See Applicants' Rebuttal Testimony No. 6 (Protective Actions for Particular Populations), fol. Tr. 21,049, at 25, 75. The Holy Cross facility will also accommodate children in day-care centers and nursery programs, whose teachers or other staff members likewise will be expected to accompany them. Unless otherwise indicated, all references in this opinion to school teachers or school children (students) encompass as well the staff and children involved in those centers and programs.

⁴ See *id.* at 65; Tr. 21,345. See also SPMC, App. M at M-13.

⁵ Memorandum and Order — Part I (July 22, 1988) at 72-73 (unpublished). The New Hampshire plan was formulated by the State. See *supra* note 2.

⁶ LBP-88-32, 28 NRC 667, 730 (1988).

⁷ *Id.* at 749.

This conclusion was reviewed by us in ALAB-932.⁸ We there held that, “at least insofar as teachers are performing duties corresponding to those they generally undertake in connection with their normal duties and responsibilities,” the Licensing Board correctly determined that “teacher role abandonment does not pose a substantial barrier to an adequate emergency response” under the New Hampshire plan.⁹ On this score, we drew a distinction between the teachers’ performance of such functions as “accounting for and supervising the children and assuring their safe boarding of evacuation buses” — responsibilities that we believed “correspond sufficiently to their usual duties” — and the discharge of bus escort functions.¹⁰ The latter role, we noted, “may necessitate the teachers’ traveling for indefinite periods of time considerable distances from their school and very likely their homes and families.”¹¹ In addition,

if a teacher embarks on a bus for the potentially lengthy trip to a reception center, the teacher’s opportunity to engage in actions designed to alleviate “role strain” (e.g., calling home to check upon family members) could be severely hampered, if not foreclosed, thereby adding to the possibility that role abandonment might occur.”¹²

We went on, however, to decide in ALAB-932 that it was not necessary to pursue that concern in assessing the adequacy of the New Hampshire emergency response plan. This was because there was record evidence that the provisions in that plan for teacher escorts on evacuation buses were not required for the safety of the school children involved. That conclusion on the part of New Hampshire state planning officials, we observed, apparently rested upon their “not unreasonable judgment that bus drivers will be able to transport the students safely to reception centers, where the students will be cared for and supervised by the personnel already assigned to staff the centers until such time as they are reunited with their parents or guardians.”¹³ Given this consideration, we saw no purpose in pursuing further whether teachers could be expected to fulfill the bus escort roles assigned to them under the New Hampshire plan.¹⁴

B. It is against this background that we have examined the MassAG’s challenge to the Licensing Board’s refusal to allow him to litigate, through the vehicle of his Contention No. 47, the teacher role abandonment matter in the

⁸ 31 NRC 371 (1990). The Commission declined review of ALAB-932. See Memorandum from S. Chilk (July 12, 1990).

⁹ 31 NRC at 404.

¹⁰ *Id.* at 406.

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Id.* at 407.

¹⁴ *Ibid.* We suggested that, “so as not to mislead those involved in or relying upon emergency response efforts by school personnel, State planners may wish to revise the plan to reflect their judgment about the precatory nature of teacher participation as escorts on student buses.” *Id.* at 407 n.161.

context of the SPMC (with the consequence that there was no evidence adduced that was directed specifically to the issue of role abandonment on the part of Massachusetts teachers). At the very inception of our inquiry, it appeared to us (as it did to the MassAG) that there were factual differences pertaining to the operation of the two emergency response plans that might well have a bearing upon the likelihood that Massachusetts (as distinguished from New Hampshire) teachers would fulfill their assigned bus escort roles, as well as upon the necessity that such roles be fulfilled by those teachers. We elaborated on the point in a June 22 unpublished memorandum and order:

[T]he minimum sixty-mile distance between the Massachusetts schools within the EPZ and Holy Cross College in Worcester (the host facility for those schools) is approximately twice the maximum distance between the New Hampshire schools and the reception centers to which their students are to be evacuated. In this circumstance, the concern expressed in ALAB-932 respecting whether *New Hampshire* teachers would be prepared to travel "for indefinite periods of time considerable distances from their school and very likely their homes and families" would seem, if anything, to have a greater foundation when the likely course of conduct of *Massachusetts* teachers is at issue.¹⁵

In these circumstances, we thought it might "be particularly significant in the evaluation of the Massachusetts emergency response plan whether, as was testified and found to be the case in New Hampshire, it is not necessary for the teachers to accompany their students to the prescribed evacuation destination."¹⁶ On that score as well, we saw possibly crucial distinctions between the two plans in operation. As explained in the June 22 order:

The New Hampshire portion of the Seabrook EPZ does contain a significantly larger number of students in schools and children in day-care centers (including nurseries) than the more than 10,000 youngsters now to be found in schools and day-care/nursery facilities in the Massachusetts EPZ. But, as earlier noted, the New Hampshire plan calls for evacuation of these individuals to a total of four reception centers. For this reason, it may well be that no single New Hampshire location will receive more than the number of students and day-care children that will be dispatched to Holy Cross College — the single Massachusetts facility that is to receive that segment of the population.

More important, however, the record discloses that the New Hampshire Department of Health and Human Services will allocate in excess of 400 individuals to staff the state's reception centers. With such a large contingent of state employees, proper supervision of the students at the centers should be readily achievable. Moreover, there is the real possibility that, should the need arise, the aid of adult evacuees could be enlisted. For, in contrast to Holy Cross College, which will receive *only* students and still younger children, the New Hampshire

¹⁵ Appeal Board Memorandum and Order (June 22, 1990) at 6 (emphasis in original; footnotes omitted).

¹⁶ *Id.* at 7.

reception centers will serve all evacuees from that state's portion of the EPZ, including but not restricted to students and those in day-care and nursery facilities.¹⁷

All of this, combined with our then impression that the American Red Cross (ARC) had assumed the responsibility for staffing the School Host Facility at Holy Cross College, prompted us to pose certain questions to the parties. Specifically, they were asked to inform us in supplemental memoranda as to the state of the existing record concerning the capability of the ARC, in the absence of accompanying teachers, to care for and supervise the children sent to the School Host Facility.¹⁸ If the record established that it is necessary for Massachusetts teachers to serve as bus escorts, the parties were then to address the concerns expressed in ALAB-932 with respect to the likelihood that teachers will accept such a role.¹⁹

The June 22 order called for the applicants and the NRC staff to respond first to these questions. In their responses, both the applicants and the staff took issue with our understanding that the ARC is to operate the School Host Facility. Indeed, we were told by the staff that the SPMC, "as litigated, does not anticipate that the ARC will be present at Holy Cross College nor does it rely on the ARC to provide any staff to assist organizations at the host school facility."²⁰ Rather, according to the applicants and the staff, the ARC is to be involved only in the operation of the congregate care centers (located at quite different sites) to which some children ultimately might be transferred from the School Host Facility.²¹

We found this information rather surprising. For one thing, the Licensing Board had expressly found that Holy Cross College would be one of two facilities "generally administered by ARC officials and volunteers," although "trained personnel" accompanying the children to the College would be expected to provide "any necessary specialized care."²² Second, the staff's rejoinder in its appellate brief to the MassAG's assertion that the Licensing Board had failed to address the issue of staffing for the Holy Cross facility was that, as the Board's detailed findings reflected, such staffing is "a function left to the American Red Cross (ARC)."²³ The brief added that an ARC commitment to respond to an emergency had been held by the Commission in the *Shoreham* proceeding to be sufficient evidence that such a response would be not merely forthcoming, but

¹⁷ *Id.* at 8-9 (emphasis in original; footnotes omitted).

¹⁸ *Id.* at 9-10.

¹⁹ *Id.* at 10. ALAB-932 was issued after the filing of the briefs on the appeals and, thus, was not taken into account in those briefs.

²⁰ NRC Staff Response to Appeal Board's June 22, 1990 Memorandum and Order (July 13, 1990) at 1 n.1.

²¹ *See id.*; Licensees' Response to Appeal Board Memorandum and Order of June 22, 1990 (July 11, 1990) at 2.

²² *See* LBP-89-32, 30 NRC at 552.

²³ NRC Staff Brief in Response to Intervenor Appeals from LBP-89-32 and LBP-89-17 (Mar. 21, 1990) at 109.

adequate and effective as well.²⁴ Third of all, at oral argument, the applicants' counsel observed that, if the school children are not accompanied by teachers on the bus trip from the schools to Holy Cross College, there will be "a little more work for the Red Cross at the other end."²⁵

But even more compelling than these expressions by the Licensing Board and the appellees was the content of the evidentiary record itself — specifically, the SPMC and a November 30, 1988 Letter of Agreement (LOA) between Holy Cross College and the lead applicant, Public Service Company of New Hampshire. As they appear in the record presented to us, both of those documents — introduced by the applicants — clearly call for direct ARC involvement in the operation of the School Host Facility. In section 3.6.3 of Revision O, Amendment 5, the SPMC deals with organizations providing evacuation support.²⁶ Subsection B of the section focuses upon the ARC. It states in pertinent part:

In the event that an incident at Seabrook Station results in the need to relocate a segment of the general public from the Plume Exposure EPZ, the American Red Cross (ARC), when activated, will provide staff to operate Congregate Care Centers and host facilities for special populations (e.g., school and nursing home host facility). [Emphasis supplied.]

And, for its part, the LOA not merely provides that the use and occupancy of Holy Cross College in the event of a declared emergency at Seabrook will be "under the direction of College officials in conjunction with the American Red Cross," but also stipulates that the contemplated uses of the College premises will include:

use of those portions of the Premises for processing approximately (11,000) eleven thousand school children, day care children and staff and *under the auspices of the American Red Cross*, temporary shelter of school children, day care children and staff for approximately an (8) eight hour period and for maintaining records and clerical support.²⁷

In short, a wide gulf existed between, on the one hand, what we were told by the applicants and the staff in their responses to the June 22 order and, on the other, the sum total of the documentary evidence, Licensing Board findings, and prior explicit or implicit representations of those parties. As a consequence, we were constrained to issue another unpublished order on July 17 that, after

²⁴ *Id.* at 109-10 (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-5, 25 NRC 884, 888 (1987)). As will be later seen, the staff now tells us that its brief was in error respecting ARC involvement at Holy Cross.

²⁵ App. Tr. 99 (Apr. 18, 1990).

²⁶ See SPMC (Plan) at 3.6-12 to -13. Although the version of the SPMC that is identified is Revision O, Amendment 6, the List of Effective Pages (LOEP) at the inception of the plan reflects that section 3.6.3 was not altered between Amendments 5 and 6. See *id.* at LOEP-4.

²⁷ Applicants' Exhibit 41, at 604 (Holy Cross College LOA) (emphasis supplied).

pointing to the apparent inconsistencies, requested the applicants and the staff to inform us whether the record established that the SPMC and the LOA had been amended in respects relevant to the matter of ARC involvement in the operation of the School Host Facility. If the record did not so establish, those parties were to explain how the documents might nonetheless be reconciled with the parties' current position that no such involvement is contemplated.

In their responses to this order, the applicants and the staff acknowledge that it does not appear in the record that either the SPMC or the LOA has been amended to remove all references to ARC involvement at the School Host Facility. We are told, however, that testimony adduced by the applicants reflected that, at the time of the hearing, the SPMC was in the process of alteration to remove such references and that the continued mention of the ARC in the LOA is to be dismissed as the product of inadvertent draftsman error. To support their assertion that the MassAG was not misled by the terms of the SPMC and LOA in evidence, the applicants allude, *inter alia*, to the fact that MassAG counsel asked one of the applicants' witnesses whether she (counsel) was correct in believing that the ARC was not being called upon "to provide any staffing or resources at the host school facility in Worcester."²⁸ Although, by reason of an objection on the part of applicants' counsel, the question seemingly was never answered, in their response to our June 22 and July 17 orders, the intervenors (including the MassAG) explicitly now agree that "the SPMC does not look to the Red Cross to respond to the School Host Facility at Holy Cross College."²⁹

II.

As the foregoing recitation discloses, the record in this proceeding on an important ingredient of the teacher role abandonment issue is in a state of disarray. As found in the record, all of the pertinent documentary evidence introduced by the applicants — namely the SPMC and the LOA — unmistakably has the ARC fulfilling an important staffing function at Holy Cross College. And even though the applicants and the staff now maintain that the testimony adduced

²⁸ Tr. 21,328.

²⁹ Response of the Intervenors to the Appeal Board Memoranda and Orders of June 22, 1990 and July 17, 1990 (Aug. 7, 1990) at 4.

In an August 2, 1990 letter to the members of this Board, the staff advised us that its appellate brief was in error in stating that the ARC would provide staffing at the School Host Facility. See *supra* note 23 and accompanying text. Although the letter also observed that the Licensing Board had made the same error, just eight days earlier (in its response to our July 17 order) the staff had implied that the Licensing Board findings on ARC staffing were directed to the Congregate Care Centers for special-needs evacuees located in Wilmington and Westboro, Massachusetts. See NRC Staff Response to Appeal Board Memorandum and Order of July 17, 1990 (July 25, 1990) at 7 n.7. This implication was unwarranted. It is clear the ARC staffing findings in question had reference to the Holy Cross College and Wilmington facilities. See ¶¶ 9.14 and 9.15 of LBP-89-32, 30 NRC at 552-53. The applicants so recognized in their response to the July 17 order. See Licensees' Response to Appeal Board Memorandum and Order of July 17, 1990 (July 19, 1990) at 9 n.5.

by the applicants clearly establishes an intent that the ARC's involvement will be confined to congregate care centers such as those at Wilmington and Westboro, Massachusetts,³⁰ that message obviously was not received by the Licensing Board. Nor, seemingly, was it readily understood by staff counsel, whose appellate brief contains the explicit (albeit now repudiated) representation that there was no substance to the MassAG's claims respecting staffing at the Holy Cross College facility because, as the Licensing Board had found, that was "a function left to the American Red Cross."³¹ Perhaps this is because that precise message was not, in fact, delivered. For example, at one point the prepared direct testimony in question mentioned the "School Host Facility" and, in the next breath, alluded to "those host facilities operated by the American Red Cross."³² It may well be that the latter phrase was not intended to refer to host facilities such as Holy Cross College but, rather, had in mind congregate care facilities such as Wilmington that were also regarded as serving the function of a "host facility" for special-needs evacuees.³³ At the very least, however, the reference is less than a model of clarity.

We have dealt with this matter at length, not because there remains reason to believe that the ARC will be involved in staffing the School Host Facility. Manifestly, we must respect the current agreement of all of the parties that, notwithstanding the most probative existing evidence of record and the Licensing Board's findings, such is simply not the case. But this consideration only heightens our concern regarding the treatment that the applicants and the staff have accorded the question of School Host Facility staffing.

We appreciate, of course, that those parties profess to see no substance whatever in the position of the MassAG that significant numbers of school children might not be accompanied to Holy Cross College by their teachers. But even were their view on the issue of teacher response indisputably meritorious (and, as will be seen, it is not), the question of the staffing of the School Host Facility scarcely would be stripped of any significance. No matter how many teachers might elect to serve as bus escorts, it is beyond cavil that the arrival in a relatively short time period of more than 10,000 children (ranging in maturity from toddlers in day-care or nursery situations to high school seniors) would give rise to a high potential for chaos in the absence of the presence of individuals

³⁰ Those two Centers will be employed to care for certain evacuated special-needs individuals (such as nursing home patients).

³¹ See *supra* pp. 141-42. There is also the matter of applicants' counsel's statement at oral argument. See *supra* p. 142.

³² See Applicants' Rebuttal Testimony No. 6, at 25.

³³ This is suggested by other portions of the same prepared testimony. See, e.g., *id.* at 75. It is, of course, unfortunate that applicants' counsel successfully objected to a question by MassAG's counsel that was designed to lay to rest the matter of ARC staffing at Holy Cross College. See *supra* p. 143.

trained and ready to assume overall direction of the activities at the facility.³⁴ Thus, in all events, it is of considerable moment whether such individuals will be supplied and, if so, by whom.

In sum, in this matter both the Licensing Board and this Board were not well-served by the applicants and the staff.³⁵ Inasmuch as it is now, at last, clear that the ARC is to provide no assistance at the School Host Facility at Holy Cross College, we move on to the issues that remain open in connection with the Licensing Board's rejection of MassAG Contention No. 47 on the matter of teacher response.

III.

A. Basis R of MassAG Contention No. 47 asserts that:

There is no reasonable assurance that sufficient teachers, or other school staff, will volunteer on an *ad hoc* basis to accompany and supervise the students on the evacuation buses, at the Reception Center, and at the Host Special Facility. ORO Bus Drivers, Route Guides, and other ORO staffers are inadequate substitutes.³⁶

As earlier noted, in a July 1988 ruling the Licensing Board declined to allow the MassAG to litigate this claim for the reason that the teacher role abandonment matter had been fully explored in the New Hampshire phase of the proceeding. Although by that time the evidentiary record in that phase had closed, the Board had not as yet decided whether New Hampshire teachers could be counted on to accompany their students to designated evacuation destinations in that state. But the Board obviously thought that there was no basis for distinguishing between New Hampshire and Massachusetts teachers insofar as concerns their likely response in the event of a Seabrook emergency, with the consequence that

³⁴ Although there is no evidence on the point, it seems reasonable to suppose that relatively few of the teachers within the Massachusetts EPZ have ever set foot on the Holy Cross College campus and even fewer would have had prior experience of value in coping with the situation that would confront their charges after a 60-mile or more bus trip to a strange location in a crisis atmosphere.

³⁵ It is most disturbing to us that the applicants and the staff — the sponsors and supporter of the SPMC, respectively — were prepared to allow the record on School Host Facility staffing to close in a state of such confusion. And we find even more distressing the failure of either of those litigants to take timely steps to correct the misapprehension of the Licensing Board — not surprising in light of the condition of the record — that the ARC would be involved in staffing the School Host Facility. Insofar as the staff is concerned, apparently it shared the Licensing Board's misapprehension at the time it filed its appellate brief last March. At some point before the filing of its July 13 response to our June 22 order, however, the staff presumably discovered its error. For reasons that have gone unexplained, even then it did not see any occasion to call our attention to the error (and to the Licensing Board's similar misimpression). Rather, once again, it was not until early August — well after the ARC staffing matter had come to the fore — that the staff offered its acknowledgment that both it and the Licensing Board had held a mistaken view on that matter.

³⁶ Attorney General James M. Shannon's Contentions Submitted in Response to the [SPMC] (Apr. 13, 1988) at 123. ORO refers to the applicants' Offsite Response Organization, which has overall responsibility for the execution of the SPMC.

whatever evidence had been adduced regarding the former would necessarily apply with equal force, and produce the same result, with respect to the latter. The Board did not, however, explain the foundation for such a conclusion.

More significant, we have been referred to nothing in the record to suggest that the Board put the intervenors on notice *before* the commencement of the hearings on the *New Hampshire* emergency response plan — or, for that matter, at any point *during* those hearings — that any evidence relating to the likely reaction of *Massachusetts* teachers to the fulfillment of duties imposed by the SPMC would have to be offered in the *New Hampshire* hearings. As a consequence, as the MassAG suggests, it is not unreasonable to assume that, had he endeavored during the hearings on the *New Hampshire* plan to introduce the testimony of *Massachusetts* teachers as to role abandonment under the SPMC, there would have been an immediate and sustained objection on the part of the applicants and staff on grounds of relevancy. For it is our firm impression that the Licensing Board was *determined* to keep the two phases of the proceeding separate to the maximum extent possible, i.e., not to allow generally an intermingling of the challenges to the terms or implementation of the two quite distinct emergency response plans.³⁷ Thus, there was no reason why the MassAG should have assumed that any evidence related peculiarly to *Massachusetts* teachers would have to be presented in the *New Hampshire* phase.

Nor is there merit to the applicants' argument in support of the threshold rejection of Contention No. 47. In this connection, the applicants observe that, at the time Contention No. 47 was filed and acted upon, Holy Cross College had not as yet been selected as the School Host Facility.³⁸ They also stress that none of the assigned bases for Contention No. 47 attached any significance to the fact (if such was then the case) that the *Massachusetts* teachers would have to ride the buses for greater distances than would be required of *New Hampshire* teachers. While that may be true, it is also quite beside the point on the question whether the Licensing Board's disposition of the contention can stand. To be sure, once Holy Cross College became the chosen School Host Facility, the differences between the demands being made on the teachers in the two states became particularly noteworthy. But it scarcely follows that solely the travel distance factor might provide a line of demarcation between expected teacher response in *New Hampshire* and *Massachusetts*.

More specifically, the ultimate issue on teacher response is not whether teachers might experience a role conflict (i.e., might be called upon to choose between fulfilling their assignment under an emergency response plan and addressing, instead, real or perceived personal or family needs). Clearly, in many if not most instances, such a conflict will exist and what must be decided

³⁷ Compare LBP-88-32, 28 NRC at 669 with LBP-89-32, 30 NRC at 380.

³⁸ That selection apparently was made in the October–November 1988 time period. See Tr. 21,345.

is the likelihood that it will be resolved in one manner rather than in the other.³⁹ On that score, notwithstanding the Licensing Board's seeming view to the contrary, we do not so readily dismiss the MassAG's assertion that the New Hampshire emergency response plan stands on an entirely different footing from the SPMC. The New Hampshire plan is not merely state-sponsored but represents the judgment of senior New Hampshire officials that an adequate response to an emergency at Seabrook will be achieved under that plan. In contrast, far from enjoying state sponsorship or even endorsement, the utility-sponsored (and administered) SPMC was issued in the teeth of the insistence of high-level Massachusetts officials that a satisfactory response to a Seabrook emergency is simply not achievable. Even if that position is insubstantial, it can scarcely be gainsaid that it might have some influence on the choice of Massachusetts teachers between accompanying their students to a School Host Facility (whether at Holy Cross College or elsewhere) and looking out for the interests of their own children (or other family members) instead.

This is not to say, of course, that, following a full ventilation of the matter, the Licensing Board perforce would be required to reach a different conclusion respecting Massachusetts teachers than it reached in its December 1988 decision on New Hampshire teacher response. All that we need or do conclude at this juncture is that the MassAG was improperly denied the opportunity to present a case in support of his proposition, embodied in Basis R for Contention No. 47, that there is no reasonable assurance that a sufficient number of Massachusetts teachers will accompany their students to the School Host Facility (now located at Holy Cross College).⁴⁰ Among other things, as the MassAG suggests, but for that unwarranted denial he might have both introduced the affirmative testimony of Massachusetts teachers on their likely response to a Seabrook emergency and cross-examined, *in the context of the demands imposed upon teachers by the SPMC*, the applicants' principal witness (Dr. Dennis S. Mileti) on the application to the Massachusetts situation of his thesis that, as a generic matter, teachers

³⁹ See generally ALAB-932, 31 NRC at 398-408.

⁴⁰ It follows from this conclusion that there is no merit to the insistence of the applicants that, following the substitution of the College as the School Host Facility, the MassAG was obliged to file a new, and late-filed, contention if he wished to litigate Massachusetts teacher role abandonment. As the discussion in the text undergirding the conclusion indicates, Basis R of Contention No. 47 provided a sufficient foundation for the pursuit of the role abandonment issue both before and after the College came into the picture. It might be added that, given the ground assigned by the Licensing Board for refusing to allow the MassAG to litigate the issue when presented in a timely-filed contention, it appears most unlikely that an untimely contention would have had any different fate. For such a contention must survive a balancing of a number of factors, only one of which pertains to whether it could have been filed at any earlier time. See 10 C.F.R. § 2.714(a)(1); *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041 (1983).

will meet any obligations imposed upon them.⁴¹ Once again, neither of these opportunities was made available to the MassAG during the hearings on the New Hampshire phase, and that failure amounts to reversible error.⁴²

B. The foregoing conclusions are not affected by the insistence of both the applicants and the staff that school teachers are subject to the “realism/best efforts” presumption (i.e., “realism rule”) embodied in 10 C.F.R. § 50.47(c)(1)(iii). In ALAB-932, we noted our doubt that such is the case.⁴³ Nothing that we are now told has removed that doubt as applied to Massachusetts teachers (including day-care center personnel).

1. The essence of the realism rule, as set forth in section 50.47(c)(1)(iii), is that, in the evaluation of the adequacy of a utility-sponsored emergency response plan, the NRC will recognize the “reality that in an actual emergency, state and local government officials will exercise their best efforts to protect the health and safety of the public.” By reason of this recognition, the section declares that “it may be presumed [in the evaluation process] that in the event of an actual radiological emergency state and local officials would generally follow the utility plan.”

The applicants seemingly would have it that the teachers are to be deemed “government officials” for this purpose, with the consequence that it is to be presumed that they will meet whatever obligations might be imposed upon them by the SPMC. Leaving aside (as the MassAG stresses) that many of the school teachers (and likely virtually all of the day-care center personnel) are not in the public employ, there is no cause to believe that the Commission thought the term “officials” to embrace non-supervisory government employees such as classroom teachers. To the contrary, we are satisfied from all available indicia that the Commission had in mind solely those persons in leadership positions (such as governors, mayors, civil defense directors, and state police superintendents)

⁴¹ The substance of Dr. Mileti’s testimony is set forth in ALAB-932, 31 NRC at 392-96, 399-400, and need not be rehearsed in detail here. Suffice it to say that, although we there determined that his testimony supported the view that New Hampshire teachers would perform those duties assigned to them by the New Hampshire plan that clearly correspond to their usual duties, we also thought a serious question remained respecting whether the same could be said regarding the role of bus escort. See *supra* p. 139. In the case of Massachusetts teachers, such a question perforce is at least equally present.

⁴² In its “immediate effectiveness” decision concerned with LBP-89-32, the Commission expressed the view that school children can be evacuated to Holy Cross College without teachers on the buses. See CLI-90-3, 31 NRC 219, 254 (1990). The Rules of Practice specifically provide, however, that, unless the Commission otherwise so directs (and it did not do so here), we may not attach “any weight” to statements contained in immediate effectiveness determinations. See 10 C.F.R. § 2.764(g). In addition, the Commission rested its belief upon its earlier conclusion that there was no need for the participation of New Hampshire teachers as bus escorts. 31 NRC at 235. But that conclusion was in turn founded upon the testimony of the *New Hampshire Director of Emergency Management*. *Ibid*. Apart from the fact that the Director was not addressing school evacuation in Massachusetts, as we have observed the situation in the two states is not identical. Moreover, we cannot say to what extent, if any, the Commission’s conclusion respecting school children evacuation under the SPMC was influenced by the Licensing Board’s finding that the School Host Facility would be staffed by the ARC.

⁴³ See 31 NRC at 404 n.145.

whose regular duties include the initiation of measures to protect the public health and safety in the event of an emergency that puts the populace at risk.⁴⁴

The realism rule had its genesis in a Commission decision in the *Shoreham* proceeding.⁴⁵ In that decision, the Commission came to grips with the assertion of both the Governor of New York and the County Executive of the county in which the Shoreham facility was located that, in the event of an accident, they would not cooperate in the emergency response effort. Declining to credit that pledge, the Commission stated its belief that:

[I]f Shoreham were to go into operation and there were to be a serious accident requiring consideration of protective actions for the public, the State and County officials would be obligated to assist, both as a matter of law and as a matter of discharging their public trust. See N.Y. Exec. Law art. 2-B, §25.1. See also H.R. Rep. No. 212, 99th Cong., 1st Sess. (1985), quoted in part in note 7, *supra*. Thus, in evaluating the [utility] plan we believe that we can reasonably assume some "best effort" State and County response in the event of an accident. We also believe that their "best effort" would utilize the [utility] plan as the best source for emergency planning information and options. After all, when faced with a serious accident, the State and County must recognize that the [utility] plan is clearly superior to no plan at all.⁴⁶

The Statement of Consideration accompanying the 1987 codification of *Shoreham* in section 50.47(c)(1)(iii) referred to the holding in that decision as being that, "in an actual emergency, state and local governmental *authorities* will act to protect their citizenry."⁴⁷ Thus, the Commission added, "the presiding Licensing Board may presume that state and local governmental *authorities* will look to the utility for guidance and generally follow its plan in an actual emergency."⁴⁸

In rejecting the challenge of several *Seabrook* intervenors to the realism rule the following year, the United States Court of Appeals for the First Circuit also evinced an understanding that the rule is directed to the response of those holding the reins of government. As the court observed:

That state and local governments have refused to participate in emergency planning, or have indicated a belief that such planning is inherently impossible in a particular plant location, does not indicate how these governments would respond in an actual emergency. It is hardly

⁴⁴ Quite apart from the realism rule as promulgated in section 50.47(c)(1)(iii), there may well be reason to assume that, because of the nature of their regular duties, most individuals in certain occupations will respond in emergency situations. We have in mind, for example, police officers, professional firefighters, and civil defense workers, all of whom routinely confront emergencies in the discharge of their assigned functions. Clearly, the professional undertaking of teachers is not generally regarded as encompassing the same responsibilities and obligations.

⁴⁵ See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22 (1986).

⁴⁶ *Id.* at 31. The Commission went on to note that it was unwilling to assume further "that this kind of best-effort government response would necessarily be adequate." *Ibid.*

⁴⁷ 52 Fed. Reg. 42,078, 42,082 (1987) (emphasis supplied).

⁴⁸ *Ibid.* (emphasis supplied).

unreasonable for the NRC to predict that state and local governments, notwithstanding their misgivings about the adequacy of a utility plan or their opposition to a particular plant location, would, in the event of an actual emergency at a plant they were lawfully obligated to coexist with, follow the only existing emergency plan. This prediction is supported by common sense, and also by the uncontested fact — part of the administrative record of this rule — that state and local governments prefer a planned emergency response to an ad hoc response. See 52 Fed. Reg. 42,082 (1987).⁴⁹

Accordingly, on the basis of its history, we are unable to conclude that the realism rule was intended to cover school personnel such as those expected to serve as bus escorts under the SPMC.

2. Both the applicants and the staff maintain, however, that all municipal employees in Massachusetts, including school teachers, have a legal obligation, said to be imposed by the Massachusetts Civil Defense Act,⁵⁰ to comply with any directives that they might receive from either the Governor or the Director of Civil Defense in the event of a Seabrook emergency. In support of this proposition, we are referred to an April 24, 1989 memorandum from Charles V. Barry, the Secretary of the Executive Office of Public Safety, to Robert J. Boulay, the Director of the Massachusetts Civil Defense Agency and Office of Emergency Preparedness, and an accompanying December 30, 1988 opinion letter prepared by the Town Counsel of Plymouth, Massachusetts. But, as the applicants (albeit not the staff) acknowledge, neither the memorandum nor the letter was admitted into evidence in the record at hand.⁵¹ In that circumstance, it is problematic whether we may properly rely upon either of them here.⁵²

The position of the applicants and the staff is not improved even if that consideration is put to one side, and we also ignore for present purposes the fact that the school teachers and day-care center personnel employed in private (including parochial) institutions manifestly and concededly do not come within the invoked provisions of the Massachusetts Civil Defense Act. For, as the MassAG correctly insists, there is no evidence in the present record to indicate that the public school employees are both aware of the interpretation given that statute and prepared to act in accordance with it. We also conclude that the MassAG is entitled to an opportunity to demonstrate that, even as interpreted by the Plymouth Town Counsel, the Civil Defense Act provides inadequate

⁴⁹ *Massachusetts v. United States*, 856 F.2d 378, 383 (1st Cir. 1988).

⁵⁰ St. 1950, c. 639, § 20.

⁵¹ See Licensees' Response to Appeal Board Memorandum and Order of June 22, 1990 at 9 n.18. Both the Barry memorandum and the Plymouth opinion letter endorsed therein, however, were attached to the Licensees' July 11 Response and also were provided by the applicants to the Commission in connection with its decision on whether to give immediate effectiveness to the Licensing Board's authorization of a full-power license for Seabrook in LBP-89-32.

⁵² In this regard, because the documents in question have not found their way into evidence in connection with the litigation of Contention No. 47, neither the correctness of the opinion expressed by the Plymouth Town Counsel nor Mr. Barry's authority to provide a binding endorsement of that opinion has been established.

assurance that sufficient numbers of public school teachers can be counted on to accompany their charges to Holy Cross College. In this regard, we do not understand the Commission, in its realism rule or otherwise, to have fashioned a conclusive presumption that, in any and all circumstances, teachers will comply with any and all directives received from government officials. Moreover, here such a presumption might be difficult to sustain as reasonable. Among other things, the Plymouth Town Counsel's opinion letter itself notes that the Civil Defense Act contains no specific enforcement mechanism, but simply authorizes the Governor to promulgate implementing regulations and executive orders in anticipation of an emergency, the violation of which could be punished by imprisonment and/or fine.⁵³ If the Governor of Massachusetts has undertaken such a step with respect to a possible Seabrook emergency, that development has not been called to our attention.⁵⁴

C. We now turn to the further claim of the applicants and the staff that, in any event, there is no need for the presence of teachers (including day-care center personnel) on the buses or at the School Host Facility at Holy Cross College. This claim is not wholly rooted in evidence in the existing record. Rather, it rests in considerable measure upon affidavits supplied in response to our June 22 order, as well as upon other extra-record material, that assertedly establish that a sufficient number of persons (many of whom are associated with ORO, the applicants' emergency response organization) will be available to compensate for any lack of accompanying teachers.⁵⁵

If, in actuality, there will be no need for teachers on the buses and at the School Host Facility, then the question of teacher role abandonment becomes academic.⁵⁶ But on the present state of the record, no finding to that effect is possible — and, indeed, none was made by the Licensing Board. Standing as an insuperable barrier to the acceptance *at this juncture* of the position of the applicants and the staff on the matter of the need for accompanying teachers are the following four considerations. First, the MassAG specifically challenged in Basis R of Contention No. 47 the adequacy of bus drivers, route guides, and other ORO personnel as substitutes for teachers who failed to accompany children to the Holy Cross facility. Second, because of the improvident rejection

⁵³ See letter from Barbara J. Saint Andre to William Griffin (Dec. 30, 1988) at 2. As earlier noted, the letter accompanied the applicants' response to our June 22 order.

⁵⁴ As we have seen, in terms the realism rule applies only to official action once an actual emergency has occurred and thus makes no assumptions respecting pre-emergency conduct.

⁵⁵ See affidavits of Anthony M. Callendrello (July 10, 1990) and Richard W. Donovan (July 3, 1990), appended to, respectively, the applicants' July 11 and the staff's July 13 responses to our June 22 order. Mr. Donovan, the Federal Emergency Management Agency (FEMA) Regional Assistance Committee Chairman for Seabrook, refers to a FEMA review of two support plans for the Holy Cross College School Host Facility that, according to the staff, identify the classes of persons, other than the school bus drivers and accompanying route guides, who will be at the College. The staff acknowledges (July 13 Response at 6) that these support plans are not in evidence.

⁵⁶ See ALAB-932, 31 NRC at 406-08.

of Basis R at the threshold, the MassAG was denied an opportunity to pursue that challenge. Third, the Licensing Board's decision on the SPMC reflects the Board's erroneous understanding, not surprising given the confused state of the applicants' evidence, that the American Red Cross would staff the School Host Facility at Holy Cross College. And fourth, as just noted, the applicants and the staff offer extra-record matter in justification of their present claim that teachers are not needed at the School Host Facility.

IV.

For the foregoing reasons, we must reverse the Licensing Board's threshold rejection of Basis R of MassAG's Contention No. 47 and remand this proceeding to the Licensing Board for an exploration of the two subissues of the teacher role abandonment issue that Basis R presents:

1. Is there reasonable assurance that, in the event of a radiological emergency at Seabrook necessitating an evacuation of children in schools and day-care centers within the Massachusetts EPZ, a sufficient number of teachers and day-care center personnel will escort the children to the School Host Facility at Holy Cross College and remain with those children until relieved of that assignment?

2. If such reasonable assurance does not exist, have the applicants made satisfactory alternative arrangements for the care and supervision of the children both on the bus trip to Worcester and during their stay at the School Host Facility?

The question remains whether the full-power operating license may be allowed to continue in effect pending the outcome of the remand. Given the as-yet uncontroverted (but extra-record) affidavit of Mr. Callendrello, the applicants' Emergency Planning Licensing Manager,⁵⁷ to the effect that ample ORO personnel will be available to substitute for teachers and day-care center personnel, at this point we are unable to conclude that there are significant deficiencies in the SPMC relative to teacher role abandonment for which adequate compensating measures do not exist. This being so, we do not have sufficient warrant to take the drastic step of license suspension.⁵⁸ On the other hand, should the MassAG challenge the representations in the Callendrello affidavit (on grounds of either insufficiency or inaccuracy) in a motion before the Licensing Board seeking such a suspension, the Board is to act upon the motion, following receipt of responses, with all possible expedition.

⁵⁷ See *supra* note 55.

⁵⁸ See 10 C.F.R. § 50.47(c)(1).

The teacher role abandonment issue is *remanded* to the Licensing Board for further proceedings consistent with this opinion.⁵⁹
It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

⁵⁹ In the brief in support of his appeal, the MassAG also complains of the threshold rejection of certain additional assigned bases for Contention No. 47, concerned with the possible behavior in the event of an emergency of persons other than school teachers (e.g., bus drivers). Brief of the [MassAG] in Support of his Appeal of LBP-89-32 (Jan. 24, 1990) at 34-35. The entire discussion of Contention No. 47 in the brief is little more than a page in length and refers specifically only to the teachers. In the circumstances, we find that solely the rejection of Basis R, concerned with teacher response, was adequately briefed and, thus, warrants our consideration. *See, e.g., Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-872, 26 NRC 127, 131 (1987).*

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

Christine N. Kohl, Chairman
Dr. W. Reed Johnson
Howard A. Wilber

In the Matter of

Docket No. 50-271-OLA
(Spent Fuel Pool Amendment)

VERMONT YANKEE NUCLEAR POWER
CORPORATION
(Vermont Yankee Nuclear Power
Station)

September 21, 1990

The Appeal Board directs that its previously unpublished request for clarification from the Commission be reported in the *NRC Issuances*. In ALAB-919, 30 NRC 29 (1989), the Appeal Board reversed a Licensing Board decision that admitted an environmental contention, and certified its ruling to the Commission. The Commission responded by remanding the matter for the Appeal Board's further consideration, prompting the Board to seek clarification from the Commission as to the precise issue it is to consider and the procedures it should follow.

RULES OF PRACTICE: COMPLETENESS OF PUBLISHED DECISIONS

For the sake of completeness, previously unpublished issuances may later be published in the NRC issuances. See, e.g., *Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-829, 23 NRC 55 (1986).

NEPA: REMOTE AND SPECULATIVE EVENTS; RULE OF REASON

The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §4321, and the “rule of reason” by which NEPA is to be interpreted do not require agencies to consider remote and speculative events. ALAB-919, 30 NRC 29, 51 (1989).

RULES OF PRACTICE: CERTIFICATION OF ISSUES TO COMMISSION

An Appeal Board may certify its own decision to the Commission where it finds a definitive ruling would be in the public interest. *Id.* at 35, 39.

RULES OF PRACTICE: CONTENTIONS (ADMISSIBILITY)

“[W]here a contention is based on a factual underpinning in a document that has been essentially repudiated by the source of that document, the contention may be dismissed unless the intervenor offers another independent source.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989).

RULES OF PRACTICE: CONTENTIONS (AMENDMENT)

The Commission’s Rules of Practice ordinarily allow the supplementation of contentions and their bases only upon a balancing of the five factors in 10 C.F.R. § 2.714(a)(1). *See* 10 C.F.R. § 2.714(b).

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

While reaching the “merits” of a contention at the admission stage formerly was prohibited, *Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 547-49 (1980), the Commission overruled this precedent by amending the Rules of Practice to require that contentions be more specific and supported with sufficient documentation to show that a genuine issue of material law or fact exists, 54 Fed. Reg. 33,168, 33,170, 33,180, 33,181 (1989) (codified at 10 C.F.R. § 2.714(b)(2), (d)(2) (1990)).

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

The rules adopted in September 1989 (i.e., 10 C.F.R. § 2.714(b)(2), (d)(2)) that require contentions to be more specific and supported with sufficient documentation are prospective only.

NOTICE

For the sake of completeness in our published decisions, the attached "Request for Clarification from the Commission" (dated April 17, 1990, and previously unpublished) will now be reported in the NRC Issuances. *See, e.g., Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-829, 23 NRC 55 (1986).*

FOR THE APPEAL BOARD

**Barbara A. Tompkins
Secretary to the
Appeal Board**

ATTACHMENT TO ALAB-938

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

**Christine N. Kohl, Chairman
Dr. W. Reed Johnson
Howard A. Wilber**

In the Matter of

**Docket No. 50-271-OLA
(Spent Fuel Pool Amendment)**

**VERMONT YANKEE NUCLEAR POWER
CORPORATION
(Vermont Yankee Nuclear Power
Station)**

**REQUEST FOR CLARIFICATION FROM
THE COMMISSION**

In ALAB-919, 30 NRC 29 (1989), we reversed a Licensing Board decision that admitted an environmental contention proffered by intervenor New England Coalition on Nuclear Pollution (NECNP) and the Commonwealth of Massachusetts in this operating license amendment proceeding involving the expansion of the capacity of the Vermont Yankee spent fuel pool. The contention at issue was based on a sequential, multi-event accident scenario. We found that the documents on which NECNP and the Commonwealth relied to support the contention "conclude that the various elements of the accident scenario on which the contention is based are individually events of very low probability[,] . . . [and] that, taken together as set forth in [the contention], these events become even more remote." *Id.* at 51. We thus concluded that the National

Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §4321, and the "rule of reason" against which environmental contentions are to be judged did not *require* the consideration of the NECNP-Commonwealth contention. *Ibid.*¹ Because ALAB-919 represented the third occasion on which we ruled on similar environmental contentions (*see* ALAB-869, 26 NRC 13, *reconsideration denied*, ALAB-876, 26 NRC 277 (1987)²), and because we believed that "a definitive ruling on [its] admissibility" was "in the public interest," we certified our ruling to the Commission. *Id.* at 35, 39.

The Commission has now responded to that certification. It has remanded for our further consideration "the actual contention formally filed by the Intervenor." CLI-90-4, 31 NRC 333, 335 (1990). On remand we have been directed to develop "more information on the plausibility or probability of the reactor accident/hydrogen combustion/spent fuel pool cooling failure/cladding fire at issue here." *Ibid.* The Commission also stated:

If the Appeal Board finds that an accident probability on the order of 10^{-4} per reactor year is appropriate for the entire accident sequence postulated in this contention, the case should be returned to the Commission for further review. Otherwise, the Appeal Board should modify or confirm its judgment as to the remote and speculative nature of the accident on the basis of the accident probability derived on remand.

Id. at 336.

The contention here at issue has been pending in various forms for over three years and has previously been considered three times by the Licensing Board and, as already noted, three times by us. *See* ALAB-919, 30 NRC at 35-38. We therefore hope to undertake and complete our task upon remand in a manner as efficient, fair, and meaningful as possible, as well as in full compliance with the Commission's instructions. Our study of the Commission's order, our prior decisions, and the record in this case, however, necessitate this request for clarification from the Commission.³

1. We do not understand what the specific contention is that we should consider on remand. The Commission's order states that the "contention involves a severe reactor accident that generates sufficient hydrogen to cause hydrogen ignition or detonation which, in turn, causes a loss of spent fuel cooling that leads to a spent fuel cladding fire." CLI-90-4, 31 NRC at 335 n.2. The

¹ We also determined that certain court decisions did not require admission and litigation of the contention. ALAB-919, 30 NRC at 47-51.

² The Commission declined review of ALAB-869 and ALAB-876 on March 17, 1988.

³ Late yesterday we received a copy of the applicant's Motion for Reconsideration (April 13, 1990) of CLI-90-4. Our Request for Clarification was prepared well before that time but could not be finalized until today. Needless to say, the applicant's filing played no role whatsoever in the matters addressed in our Request. We have decided to issue the instant Request, rather than to await disposition of the applicant's motion, so that the Commission may take our concerns into account at the same time.

order also explicitly limits the remand to “the actual contention *formally filed* by the intervenors.” *Id.* at 335 (emphasis added). It states further: “The *broadened* contention that was *raised at oral argument on appeal* and that was *considered by the Appeal Board in ALAB-919* is, in essence, an *improperly late-filed contention*; it should *not* be considered in this remand.” *Id.* at 335 n.2 (emphases added).

The precise contention that we considered in ALAB-919 was *not* “raised at oral argument on appeal,” but rather was “formally filed” with and first considered by the *Licensing Board* in the ruling it referred to us in LBP-89-6, 29 NRC 127 (1989). The contention is set out in the appendix to ALAB-919, 30 NRC at 52-53. We summarized the accident scenario hypothesized by the intervenors’ contention as follows:

(1) a severe reactor accident occurs by some unidentified mechanism and involves substantial fuel damage, hydrogen generation, Mark I containment failure, and subsequent detonation in the reactor building where the Vermont Yankee spent fuel pool is located; (2) the reactor building and the spent fuel pool are assertedly not likely to withstand the pressure and temperature loads generated by such an accident, thereby threatening the pool cooling systems or pool structure itself . . . ; and (3) pool heatup occurs, resulting in a self-sustaining zircaloy cladding fire with increased long-term health effects for the public from the increased fuel pool inventory

Id. at 43; *compare id.* at 52-53. This scenario is very close to the Commission’s first sentence in footnote 2 of CLI-90-4; it differs, however, in that it is *narrower in scope* by precisely delineating *how* hydrogen detonation might cause a loss of spent fuel pool cooling — i.e., by threatening the pool cooling systems or the pool structure itself — *both of which were explicit parts of the intervenors’ contention.*

As indicated in ALAB-919, *id.* at 37, 52, the source of the contention was the intervenors’ December 30, 1988, motion for reconsideration of the Licensing Board’s decision in LBP-88-26, 28 NRC 440 (1988), in which that Board rejected an August 1988 version of the contention on the ground that our decisions in ALAB-869 and ALAB-876 were the law of the case. The intervenors’ motion for reconsideration was prompted by the court’s decision one month earlier in *Sierra Club v. NRC*, 862 F.2d 222 (9th Cir. 1989), *as amended*. On reconsideration, the Licensing Board admitted the contention as set forth in the December 1988 motion. LBP-89-6, 29 NRC 127, 133 (1989). As we noted in ALAB-919, 30 NRC at 42, the December 1988 version of the contention was not substantively different from that presented to the Licensing Board in August 1988. It simply restored some explanatory detail that had appeared in the contention when it was originally and timely proffered to the Licensing Board in March 1987. *Compare* Joint Motion of [NECNP] and the Commonwealth of Massachusetts for Leave to File Late-Filed Contentions (August 15, 1988) at

1-3 with Joint Motion of [NECNP] and the Commonwealth of Massachusetts for Reconsideration (December 30, 1988) at 2-5 & nn.2-6.

The August 1988 contention, however, was "late-filed," and *we so held* in ALAB-919, reversing the Licensing Board. 30 NRC at 40. Despite the Licensing Board's belief that the contention was not late-filed, it nonetheless weighed in the intervenors' favor the five factors of 10 C.F.R. § 2.714(a)(1). Although we disagreed with its treatment of one factor, we agreed with the Licensing Board's ultimate determination that, on balance, the contention satisfied the five-factor test. ALAB-919, 30 NRC at 40-41.

The *only matter* raised by the intervenors for the first time on appeal was NECNP's mention in its *brief* of a *seismically-initiated* spent fuel pool accident. Because we did not regard this matter as having been properly or timely presented to the Licensing Board, we addressed it only in a footnote, out of an abundance of caution and in an attempt to be thorough. Seismic issues were apparently the source of the court's concern in *Sierra Club*, which decision served as the intervenors' primary ground for seeking admission of their contention once again in their December 1988 motion to the Licensing Board.

In that footnote, we pointed out that NECNP had misread or misunderstood the Livermore Report (NUREG/CR-5176) on which it relied for its claims in connection with a seismically-initiated spent fuel pool accident. We concluded that "the Livermore Report *neither supports the contention actually submitted to the Licensing Board* nor says what NECNP claims it says." ALAB-919, 30 NRC at 45 n.19 (emphasis added). This is the only portion of ALAB-919 that deals with anything raised for the first time on appeal, and it in no way was intended to suggest that the contention actually under our consideration was anything other than that thrice-tendered by the intervenors to the Licensing Board.

Given this background, we are thus confused by the statements in CLI-90-4 about the "actual contention formally filed" and the "broadened contention that was raised at oral argument on appeal and that was considered by the Appeal Board in ALAB-919 [and] is, in essence, an improperly late-filed contention." 31 NRC at 335 & n.2. In sum, the contention that we (and the Licensing Board) ruled upon in ALAB-919 was "formally filed" by the intervenors in August 1988 and nonsubstantively enhanced in December 1988. It closely parallels the broad outline of, but is in fact narrower in scope than, the contention described by the Commission in the *first* sentence of footnote 2 in CLI-90-4. We found that the contention was "late-filed," but that it satisfied the five-factor test for

such late contentions.⁴ We also did not allow the contention (which we, in fact, rejected) to be broadened on appeal to include seismically-initiated events. In these circumstances, we respectfully request (a) clarification of what the exact contention is that we are to consider on remand, and (b) identification of the intervenor filing that is its source.

2. The Commission's order states:

We note . . . that Intervenors suggest before the Appeal Board that their contention should be broadened to include other *reactor* [sic?] accident sequences as a cause for a major loss of spent fuel cooling water. We recognize that the documents cited by Intervenors indicate that the upper limit on the probability of such events is on the order of 2.6×10^{-4} per reactor year and that the Appeal Board in effect found probabilities of this magnitude to be so low as to be remote and speculative for NEPA purposes.

Id. at 335 (emphasis added). ALAB-919 did not mention any probability figures whatsoever. The only reference to " 2.6×10^{-4} " that we have been able to locate in the intervenors' cited documents is in the BNL Report (NUREG/CR-4982), mentioned in the intervenors' August 1988 late contention filing with the Licensing Board. The BNL Report (at 38) gives a *range* of " 2.6×10^{-4} " to "negligible" as the estimated probability of a "Complete Loss of Water Inventory" due to a "Seismic Structural Failure of [Spent Fuel] Pool." This probability estimate thus has no relationship to the *reactor* accident that intervenors' contention specifies as the initiating event of their accident scenario.

As noted above at p. 160, the first time the intervenors ever mentioned a seismically-initiated spent fuel pool accident was in their brief on appeal the third time we considered the contention, but we did not consider this matter to be properly within the scope of "the contention actually submitted to the Licensing Board." ALAB-919, 30 NRC at 45 n.19. We also observed that, in any event, another, more recent document cited by the intervenors — the Livermore Report — had concluded that "seismic *risk* contribution from spent fuel pool structural failures is *negligibly small*.'" *Ibid.* (emphases added in ALAB-919). We cited

⁴We assume that the Commission's reference in the *second* sentence of footnote 2 in CLI-90-4 to a late-filed contention does *not* mean that the Commission disagrees with our and the Licensing Board's balancing of the five factors in the intervenors' favor vis-a-vis their August/December 1988 contention. The Commission clearly views a cladding fire to be encompassed within the contention we are to consider on remand. CLI-90-4, 31 NRC at 335 & n.2. Contrary to the suggestion in CLI-90-4, *id.* at 335 ("The accident at issue here is essentially the same as the one addressed previously . . . in ALAB-869 . . . and ALAB-876"), a cladding fire was *not* part of the contention originally filed in March 1987. See ALAB-869, 26 NRC at 28, 36-38; ALAB-876, 26 NRC at 284 & n.6. Rather, it first appeared as part of the formally-filed, albeit late, contention in August 1988. Thus, if the Commission were to believe that the five late-contention factors have not been satisfied as to the August 1988 contention, a cladding fire could not properly be part of the contention under consideration on remand.

We also assume that the Commission does not regard the intervenors' December 1988 motion for reconsideration as untimely. In our view, taking into account the holidays, that motion, based on the November 30, 1988, *Sierra Club* decision, was filed with the Licensing Board within a reasonable time after that decision. And, as noted above, the restatement of the contention in the motion for reconsideration effected no substantive changes from the August 1988 version.

to the Livermore Report at 8-2 but did not quote the actual probability figure stated therein. The report, however, found: "The mean annual frequency of seismic failure for the spent fuel pool structure was estimated to be 6.7E-06 [6.7×10^{-6}] for *Vermont Yankee* . . ." Livermore Report at 8-2 (emphasis added). See also *id.* at 6-6.

We are therefore unclear as to the relevance of the 2.6×10^{-4} figure cited in the Commission's order. That figure, as best we can determine, appears to relate only to a seismically-initiated event, which, in our view, was never properly or timely included in the intervenors' contention. Moreover, even if it had been, the 2.6×10^{-4} figure has already been effectively discredited in the Livermore Report — which report was raised and relied on by the intervenors themselves — by a lower probability estimate calculated specifically for the Vermont Yankee facility. Cf. *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989) ("where a contention is based on a factual underpinning in a document that has been essentially repudiated by the source of that document, the contention may be dismissed unless the intervenor offers another independent source").

In short, we did not regard the contention before us (and the Licensing Board) as based on any accident scenario, or single element of a multi-event accident scenario, with a probability in the 10^{-4} range. Indeed, the documents on which the intervenors relied contain probability estimates for only two of the elements of the contention's multi-event scenario. First is the contention's reference to "pool heatup due to loss of cooling water circulation capability," resulting in a cladding fire. ALAB-919, 30 NRC at 52. The BNL Report assigned an estimated probability of 1.4×10^{-6} to such an event. BNL Report at 15-16, 38. As discussed in ALAB-919, 30 NRC at 45-46, the BNL Report itself did not consider this a dominant contributor to risk and assumed that such a loss of cooling water circulation capability would be triggered by station blackout, pump failure, pipe rupture, or other similar event — not the serious reactor accident with hydrogen generation and detonation hypothesized by the intervenors' contention.

The contention also expressed concern about the structural integrity of the spent fuel pool, in light of the risk estimates for reactors having Mark I containments like that at Vermont Yankee. Again, our decision in ALAB-919 did not indicate in numbers what that risk estimate is. But according to the February 1987 draft of NUREG-1150, upon which the intervenors relied and which we cited in ALAB-919, *id.* at 46-47, the range of risk (i.e., 5th to 95th percentile) of a core damage accident that might lead to hydrogen generation and detonation is approximately 4×10^{-7} to 4×10^{-5} . NUREG-1150 at ES-4, ES-5. See also *id.* at 3-41. NUREG-1150 and the other documents cited by the intervenors do not contain any risk estimates for structural failure of a spent fuel pool as a consequence of a reactor core damage accident; rather,

they address structural failure of the *reactor building* walls. Citing to the intervenors' reference documents, however, ALAB-919 noted the significant structural differences between Mark I reactor building walls and the Vermont Yankee spent fuel pool. 30 NRC at 46 n.22. In light of these structural differences, logic suggests that the risk estimate for structural failure of a spent fuel pool due to hydrogen detonation would be lower than the estimate for structural failure of the reactor building.

The intervenors' contention is premised on a complex scenario involving a reactor accident with hydrogen generation, containment failure, and hydrogen detonation in the reactor building outside containment, followed by a loss of pool cooling capability (by disruption of the cooling system or failure of the pool structure itself). We therefore concluded in ALAB-919 that the *combination* of these events is "*necessarily of even lower likelihood*" than any one of these individual events. *Id.* at 47 (emphasis in original). None of the documents cited or relied upon by the intervenors contained probability estimates for the multi-event accident scenario in the contention. Thus, we did not and could not assign any quantitative value to the probability of such a sequence occurring. We were able to conclude, however, that the multi-event accident scenario was necessarily so remote as to be beyond NEPA's mandate. *Id.* at 51.

We therefore respectfully seek clarification of whether the several references in CLI-90-4 to accidents with a 10^{-4} probability mean that the contention should be read on remand to encompass an accident scenario in that range, despite the actual wording of the intervenors' formally filed contention and the Commission's direction not to consider a "broadened" contention (*see supra* pp. 158-60).

3. In ALAB-919, we determined that the contention in question was not admissible and thus rejected it, certifying that ruling to the Commission. 30 NRC at 52. Although CLI-90-4 does not indicate whether the contention is in fact now admitted for litigation, in the absence of an unequivocal affirmative statement to that effect, we assume that the Commission has not yet admitted the contention. We infer, however, two points from the Commission's order in this regard. First, if the contention is to be admitted, it would be as a matter of agency discretion, rather than NEPA mandate. Second, the direction to "*obtain . . . by inviting something akin to summary disposition motions or otherwise*" "more information on the plausibility or probability of the reactor accident/hydrogen combustion/spent fuel pool cooling failure/cladding fire at issue" (CLI-90-4, 31 NRC at 336, 335 (emphases added)) amounts to a limited grant of permission to the intervenors to supply additional bases for their contention.⁵ If the preceding

⁵The Commission's Rules of Practice ordinarily allow the supplementation of contentions and their bases only upon a balancing of the five factors in 10 C.F.R. § 2.714(a)(1). *See* 10 C.F.R. § 2.714(b). Reaching the "merits" of a contention at the admission stage has also been prohibited. *Houston Lighting and Power Co.* (Allens Creek)
(Continued)

assumption and inferences drawn from CLI-90-4 are correct, are the applicant and the NRC staff likewise entitled to respond in kind (i.e., with analyses, affidavits, documents, etc.)? In the absence of existing, credible probabilistic risk estimates for the multi-event accident scenario hypothesized in the intervenors' contention, are the parties expected to create such information and, if so, within what timeframe? If the contention has not yet been admitted for litigation, do the intervenors thus have the burden of going forward in this regard?

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 547-49 (1980). The Commission, however, recently overruled *Allens Creek* by amending its Rules of Practice. Under the new rules, contentions must be more specific and supported with sufficient documentation to show that a genuine issue of material law or fact exists. 54 Fed. Reg. 33,168, 33,170, 33,180, 33,181 (1989) (to be codified at 10 C.F.R. § 2.714(b)(2), (d)(2)). The new rules, adopted in September 1989, however, are prospective only and do not apply to this proceeding. *Id.* at 33,179.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

September 28, 1990

The Appeal Board responds to questions referred by the Licensing Board in LBP-90-12, 31 NRC 427 (1990), concerning the adequacy of sheltering provisions in the New Hampshire Radiological Emergency Response Plan (NHRERP).

RULES OF PRACTICE: DISMISSAL OF PARTIES

When a party properly has been dismissed from a portion of the proceeding by the Licensing Board, the Appeal Board will not consider that party's subsequent submission that relates directly to the portion of the proceeding from which it was dismissed.

EMERGENCY PLANNING: SHELTERING

EMERGENCY PLAN(S): PROTECTIVE MEASURES (SHELTERING); CONTENT (IMPLEMENTING PROCEDURES)

As long as an emergency response plan contains sheltering as a potential emergency response option, the plan must contain directions as to how to carry out such an option, even if that option is an unlikely one.

TECHNICAL ISSUES DISCUSSED

Emergency Plans.

APPEARANCES

John Traficonte, Boston, Massachusetts, and **Diane Curran**, Washington, D.C., for the intervenors **Attorney General of Massachusetts and New England Coalition on Nuclear Pollution**.

Geoffrey M. Huntington, Concord, New Hampshire, for intervenor **State of New Hampshire**.

Thomas G. Dignan, Jr., **George H. Lewald**, **Kathryn A. Selleck**, and **Jeffrey P. Trout**, Boston, Massachusetts, for the applicants **Public Service Company of New Hampshire, et al.**

Mitzi A. Young for the **Nuclear Regulatory Commission staff**.

H. Joseph Flynn and **Linda Huber McPheters** for the **Federal Emergency Management Agency**.

MEMORANDUM AND ORDER REGARDING REFERRED QUESTIONS

In LBP-90-12,¹ the Licensing Board addressed several matters arising out of its consideration of four issues concerning the New Hampshire Radiological Emergency Response Plan (NHRERP) that we remanded for further proceedings

¹31 NRC 427 (1990).

in ALAB-924.² Among the issues discussed was the adequacy of the NHRERP's provisions for sheltering the substantial populace that during the summer regularly utilizes the Atlantic Ocean beaches in New Hampshire near the Seabrook Station. As part of its determination relative to the beach sheltering issue, the Licensing Board referred two questions to us for our consideration, as well as requested guidance on several other matters. In this memorandum, we provide our views regarding the questions referred by the Licensing Board.³

I. BACKGROUND

Because of the proximity of the Seabrook Station to the popular seaside beaches in New Hampshire, the question of what action will be taken, in the event of a radiological emergency, to provide protection for those who utilize the beaches during the summer has been one of the more ardently contested issues in this proceeding. As we noted in ALAB-924, early beach closure and evacuation of the beach population are the State of New Hampshire's preferred protective action options for the beach population.⁴ We also observed, however, that State (and utility) emergency planning officials have not totally ruled out the use of sheltering as a protective measure for the beach population.⁵ The questions now pending before us concern how and to what extent this option would be carried out.

As is described in the NHRERP, "[s]heltering involves remaining inside, closing all doors and windows, turning off all ventilation systems utilizing air drawn from outside, extinguishing all unnecessary combustion, and sealing, to the extent possible, all other access to the outdoor air."⁶ To utilize sheltering as a protective action option, planning officials have created a concept dubbed "shelter-in-place."⁷ As described in the plan, to implement this protective action option:

²30 NRC 331 (1989), *petitions for review pending*.

³ Shortly after its decision in LBP-90-12, the Licensing Board issued an additional determination in which it declared that the remanded sheltering issue had been "resolved" and recommended to us that the referred questions be vacated. LBP-90-20, 31 NRC 581, 585 (1990). In an order dated July 2, 1990, we invited the parties to provide comments on the Licensing Board's recommendation. The staff and the Federal Emergency Management Agency (FEMA) filed comments in support of the recommendation, while intervenors Massachusetts Attorney General (MassAG) and the New England Coalition on Nuclear Pollution (NECNP) opposed the suggestion. Because the issues remanded by ALAB-924 remain pending with the Board, in the interests of administrative efficiency and avoiding undue delay and expense for the parties relative to the remanded issues, we have decided to act on the already accepted referrals.

⁴ALAB-924, 30 NRC at 363.

⁵*Id.* at 363-64.

⁶NHRERP, Vol. 1, at 2.6-4. Unless otherwise indicated, all citations in this decision to the NHRERP are to Revision 2 issued in August 1986. The NHRERP was admitted into evidence in this proceeding as Applicants' Exhibit 5.

⁷NHRERP, Vol. 1, at 2.6-6.

Those at home are to shelter at home; those at work or school are to be sheltered in the workplace or school building. Transients located indoors or in private homes will be asked to shelter at the locations they are visiting if this is feasible. Transients without access to an indoor location will be advised to evacuate as quickly as possible in their own vehicles (i.e., the vehicles in which they arrived).⁸

In addition, referring to the population that frequents the New Hampshire ocean beaches during the summer months, a panel of State and utility emergency planning officials testified before the Licensing Board that utilizing “[s]heltering as a protective action option for this segment of the population would be considered in only a very limited number of circumstances characterized by one or more of the following conditions”: (1) when “it would be the most effective option in achieving maximum dose reduction”; (2) when there are physical impediments to evacuation; and (3) when evacuation is recommended for the beach population and there are individuals without transportation who are awaiting transportation assistance.⁹ As we describe in somewhat more detail *infra*, the Licensing Board questions referred to us in LBP-90-12 concern the use of this sheltering option under condition (1).

As we noted in ALAB-924, State and utility planning officials indicated that they could conceive of only one situation under condition (1) in which sheltering would be utilized for the beach population — a short duration, nonparticulate (gaseous) release arriving at the beach within a relatively short time period when, because of a substantial beach population, the evacuation time would be significantly longer than the exposure duration.¹⁰ In agreement with the Licensing Board, we found that there was an appropriate technical basis for the NHRERP planning judgment that use of a sheltering option for the beach population could be so limited.¹¹

In addition, however, several intervenors raised the issue of the appropriate implementing measures for the sheltering option. The direct testimony of State and applicant planning officials concerning sheltering indicated that,

[f]or implementation of this protective action option under any of the three conditions, New Hampshire decisionmakers will rely on the mechanisms now in place, or to be put in place, in the NHRERP for recommending shelter to the public whether on the beach or any place else. These mechanisms include rapid assessment of accident conditions; activation of the public alert system, which include the beach public address system; and EBS [(emergency broadcast system)] announcements. It is expected that people will comply with EBS announcements

⁸ *Ibid.*

⁹ Applicants' Direct Testimony No. 6 (Sheltering), fol. Tr. 10,022, at 19-20.

¹⁰ ALAB-924, 30 NRC at 364.

¹¹ *Id.* at 364-66.

to take shelter and that owners/operators of public access facilities will make their facilities available for this very limited purpose.¹²

Further, as part of its analysis concerning the sheltering option, applicants conducted a survey of private and public beach properties to establish sheltering capacity in relation to the entire beach population.¹³ State planners recognized the existence of this applicant-sponsored survey, also known as the "Stone and Webster survey," which purportedly shows there is substantial suitable shelter space in the beach area.¹⁴ In their direct testimony, state planning officials indicated that while they would employ the survey to assist them in identifying public buildings to be utilized by the two percent of the beach population who are without transportation and, in the event of an evacuation, are to be provided shelter under condition (3) as they await evacuation transportation, at that time they did not intend to incorporate the study into the NHRERP or rely upon it as a planning basis.¹⁵

The Licensing Board accepted this determination not to utilize the sheltering study or to engage in other activities intended to implement the sheltering option, essentially on the ground that there was a low probability that the sheltering option would ever be implemented.¹⁶ We disagreed. Pointing to the fact that, for sheltering under condition (3), State planners had committed themselves to identify specific shelter locations and to provide appropriate EBS messages, we remanded the matter for such implementing actions for conditions (1) and (2) as well — i.e., to "include designating in the NHRERP which shelters on the survey list are suitable and available for use in carrying out the protective action contemplated in sheltering conditions (1) and (2)."¹⁷

As a result of our remand of this and other matters, on January 11, 1990, the Licensing Board requested that the parties provide it with comments on how to proceed to resolve the remanded issues.¹⁸ In their comments, referring to a revision to the NHRERP provided to the Licensing Board by New Hampshire counsel in a letter dated October 13, 1988, applicants declared that "[t]he effect of the change is to eliminate sheltering as an option under the first of the two circumstances contemplated by the Appeal Board. Since sheltering is no longer a planned protective action option under those circumstances, no

¹² Applicants' Direct Testimony No. 6, at 20.

¹³ See *id.* Attach. 3.

¹⁴ *Id.* at 21.

¹⁵ *Id.* at 22.

¹⁶ See LBP-88-32, 28 NRC 667, 769 (1988).

¹⁷ ALAB-924, 30 NRC at 372.

¹⁸ Licensing Board Memorandum and Order of January 11, 1990, at 1 (unpublished).

implementing detail is required in that case."¹⁹ In response to this declaration, on February 6 intervenors Massachusetts Attorney General (MassAG), the New England Coalition on Nuclear Pollution (NECNP), and the Seacoast Anti-Pollution League (SAPL) filed with us a joint motion to reopen the record on the need for sheltering under condition (1). According to intervenors, applicants' declaration was a "new" interpretation of the condition (1) sheltering option that raised questions about the efficacy of the NHRERP's utilization of this protective action.²⁰ The State of New Hampshire also responded to the applicants' comments, asserting that, contrary to applicants' representation, the October 1988 amendments had not removed the shelter-in-place option as a possible protective action response under condition (1).²¹ At the same time, in a response to the intervenors' motion to reopen the record, the Federal Emergency Management Agency (FEMA) also asserted that applicants' representation concerning condition (1) was incorrect, adding the caveat that "there is no provision or instruction in the NHRERP for the transient beach population to attempt to find a nearby building and enter it."²² Reacting to these filings, intervenors MassAG, NECNP, and SAPL filed a second motion to reopen the record.²³ In an unpublished order dated March 1, 1990, we concluded that, because the ALAB-924 remand on the sheltering issue was before the Licensing Board, it likewise was the appropriate forum to deal with the motions to reopen the record, and we thus referred both motions to the Board.

It is against this backdrop that the Licensing Board issued its determination in LBP-90-12, which included the referral of the two questions concerning the sheltering option for condition (1) that are now before us. The Board declared that, "[w]hen emergency planning officials testified about 'sheltering' as the

¹⁹ Applicants' Response to Licensing Board Order of January 11, 1990 (Feb. 1, 1990) at 10. At the time we issued ALAB-924, we were unaware of this October 1988 letter, which was also cited for the first time by the Licensing Board in LBP-89-33, 30 NRC 656, 672 & n.18 (1989), *appeals pending*, the Board decision discussing why our remand in ALAB-924 did not preclude full-power authorization for the Seabrook Station. This letter, which was addressed to the Licensing Board, indicated that it was being provided to the "Service List." Nonetheless, a copy of the letter (which was not served directly on this Board) apparently was never provided for the official docket of this proceeding. We thus did not receive a copy and, it not being referenced by the parties or a part of the record relative to intervenors' appeals from LBP-88-32, we were unaware of the document prior to the issuance of LBP-89-33. In response to our inquiry about the letter subsequent to LBP-89-33, the Office of the Secretary included it and the accompanying attachments in the docket of this proceeding.

²⁰ Emergency Motion of Intervenors: (1) to Clarify the Status of the Appeal of LBP-89-33 and (2) to Reopen the Record on the NHRERP as to the Need for Sheltering in Certain Circumstances (Feb. 6, 1990) at 2-3.

²¹ State of New Hampshire's Comments Regarding Applicants' Response to Licensing Board Order of January 11, 1990 (Feb. 16, 1990) at 2.

²² Response of [FEMA] to Emergency Motion of the Intervenors to Reopen the Record as to the Need for Sheltering in Certain Circumstances (Feb. 16, 1990) at 5. The FEMA response to the motion to reopen was accompanied by a petition for leave to file, which we referred to the Licensing Board along with the motion to reopen. Appeal Board Order of March 1, 1990, at 2 n.4 (unpublished). Although the Licensing Board apparently never acted formally upon the petition, it did consider the FEMA response in making its determination in LBP-90-12. 31 NRC at 442 & n.42.

²³ Emergency Motion of the Intervenors to Reopen the Record, for Summary Disposition as to the Need for Sheltering in Certain Circumstances and for License Revocation (Feb. 28, 1990).

protective action under discussion, they were not always asked to explain the nuances of that option.”²⁴ It went on to observe that, as a consequence, “those examining the record, but not initiated to the plan, might not have understood that the recognized implementation of the sheltering option is to ‘shelter-in-place,’ i.e., almost all summer beach day trippers evacuate.”²⁵ Further, the Board referred to the Commission’s observation in its March 1, 1990 decision on immediate effectiveness for full-power authorization for Seabrook that, with respect to the sheltering issue, “[i]f changes to the plan are intended, or if the parties believe that the Licensing Board, Appeal Board, or Commission misconstrued the intent of the plan, then appropriate motions should be filed.”²⁶ The Licensing Board therefore “believe[d] that it should freely discuss what it perceives to be misconstructions by the Appeal Board on the intent of the plan.”²⁷

In undertaking this task, although providing no specific references to the plan or to the testimony of applicant or State witnesses, the Licensing Board declared:

When New Hampshire emergency officials speak of “sheltering” as a protective action for the beach population (or elsewhere for that matter), they do *not* mean that everyone goes to shelter. Quite the contrary, they mean “shelter-in-place” which, in turn, means that the persons receiving the instruction to shelter remain where they are if they are already at a sheltered place — house, school, workplace, wherever. The distinction between persons already at shelter and persons with access to shelter is blurred. The essential point is that there would be no time or confusion barrier between the persons to be sheltered and their sheltering.

The case that has driven this litigation, of course, concerns a large number of transient “day trippers” on the beach in summer without *immediate* access to shelter. Those people are *not* directed to seek shelter when the order to shelter-in-place is implemented. They are directed to *evacuate* in the cars they came in.²⁸

With this explanation, the Licensing Board concluded that because “New Hampshire’s ‘shelter-in-place’ concept under condition (1) provides for the immediate evacuation of the general transient beach population with transportation . . . the directive in ALAB-924 to identify suitable shelter for that group under condition (1) would be without purpose. Implementing detail would be inconsistent with the intent of the NHRERP.”²⁹

Finding that this interpretation is not in accord with ALAB-924, the Licensing Board referred its ruling to us. In addition, reiterating its conclusion first

²⁴ LBP-90-12, 31 NRC at 440.

²⁵ *Ibid.*

²⁶ CLI-90-3, 31 NRC 219, 245 n.39 (1990), *petitions for review pending sub nom. Massachusetts v. NRC*, Nos. 90-1132, 90-1218 (D.C. Cir. argued Sept. 18, 1990).

²⁷ LBP-90-12, 31 NRC at 441 n.38.

²⁸ *Id.* at 439 (emphasis in original).

²⁹ *Id.* at 449.

expressed in LBP-89-33 (the Board's explanation concerning the effect of the ALAB-924 remand upon the full-power license authorization granted in LBP-89-32) that there is no logical nexus between the principal purpose of going to public shelters under condition (3) and the purpose of actual sheltering under conditions (1) and (2),³⁰ the Board declared it would "implement ALAB-924 to require only that the 98% transient population with transportation must have identified and adequate shelter available to them if actual sheltering remains an option for that group in the NHRERP."³¹ Declaring that this ruling did not comport with ALAB-924, the Board referred it to us as well.³²

Because of their central importance to the sheltering issue remand, in an unpublished order dated May 18, 1990, we accepted the referred questions and permitted the parties to provide their views on the questions.³³ Memoranda were filed by intervenors MassAG, NECNP, and the State of New Hampshire, by applicants, and by the NRC staff. FEMA also made a submission.³⁴

In their response, intervenors maintain that the Licensing Board's interpretation of the NHRERP provisions regarding sheltering is of "recent vintage," as is demonstrated by its failure to put forth such a description in discussing the sheltering option in either LBP-88-32 or LBP-89-33. They also assert that a sheltering option for the ninety-eight percent of the transient beach population with transportation is necessary to ensure that appropriate protection will be provided to that populace in the event of the "puff release" that otherwise would trigger the NHRERP sheltering option under condition (1). The staff and the applicants essentially agree with the Licensing Board's analysis. The State also agrees with the Licensing Board, asserting that the "shelter-in-place" option for condition (1) "simply envisions that people already in buildings or who may access buildings without delay or direction from emergency management officials will utilize those buildings as shelter, and others will be expected to evacuate."³⁵ FEMA takes the same position, describing the "shelter-in-place" concept as "(1) people already in buildings [or who may elect to enter buildings immediately

³⁰ See LBP-89-33, 30 NRC at 672.

³¹ LBP-90-12, 31 NRC at 448 n.51.

³² *Ibid.*

³³ Appeal Board Order of May 18, 1990, at 2 (unpublished).

³⁴ The FEMA memorandum was accompanied by a motion for leave to file. This motion was supported by the staff in a June filing and was not opposed by any party. We grant FEMA's motion for leave to file and consider its memorandum.

Intervenor SAPL also submitted a memorandum concerning the referred questions. The same day SAPL's memorandum was filed, we issued ALAB-934, 32 NRC 1 (1990), in which we affirmed the Licensing Board's dismissal of SAPL from further participation with respect to the issues remanded by ALAB-924. SAPL's submission concerning the referred questions (which makes essentially the same arguments as are put forth by intervenors MassAG and NECNP) relates directly to a matter remanded by ALAB-924. We thus have not considered SAPL's filing.

³⁵ Comments of the State of New Hampshire Regarding NHRERP Sheltering and LBP-90-12 (May 28, 1990) at 2.

without direction from emergency management officials] would utilize those buildings as shelter, and (2) everyone else is expected to evacuate.”³⁶

II. ANALYSIS

The Licensing Board and the parties are correct that our determination in ALAB-924 concerning the need for implementing measures was based on the premise that, in response to emergency conditions falling within the ambit of condition (1), the State contemplated directing the beach population, whether with or without their own transportation, to seek shelter in buildings near the beach area. Upwards of 50,000 people could be involved in such a protective action on a peak summer weekend at the New Hampshire beaches.³⁷ In the circumstances, it seems apparent, as the Commission observed, that, “so long as sheltering remains a potential, albeit unlikely, emergency response option for the beach population, the NHRERP should contain directions as to how this choice is practicably to be carried out.”³⁸

In ALAB-924, we pointed out that “planning efforts are intended to make emergency response officials aware of the benefits and constraints associated with their actions, thereby providing them with the information necessary to make informed protective action decisions.”³⁹ Certainly, crafting practical directions for carrying out a protective action option that could well involve guiding nearly 50,000 people toward beachfront shelter requires that planners have adequate information about the benefits and constraints of that action.

Indeed, our directive in ALAB-924 that State planners designate which beach area shelters are “suitable and available” for use was intended to address, among other things, concerns recognized by the State’s own planners regarding the benefits and constraints of a sheltering option for the beach area population. After acknowledging that State planning officials intended to review the Stone and Webster shelter study in order to reach a conclusion about which beach area buildings would and would not be “available,” John D. Bonds, the Assistant Director for Planning of the Division of Public Health Services of the State Department of Health and Human Services, in responding to a question about how “beach area transients” would know which buildings to shelter in, indicated there might have to be a determination about the acceptability of buildings (e.g., whether particular buildings would be suitable in terms of the protection they

³⁶ Memorandum of [FEMA] Regarding LBP-90-12 (May 30, 1990) at 2 (bracketed material in original).

³⁷ See ALAB-924, 30 NRC at 368.

³⁸ CLI-90-3, 31 NRC at 248.

³⁹ ALAB-924, 30 NRC at 370 (footnote omitted).

would afford).⁴⁰ Also, Mr. Bonds observed that, in the event some buildings in the survey were found not to be suitable, this would raise the “logical” issue of how to designate which buildings are “acceptable” as shelter and which are not.⁴¹ Our directive, which addressed similar concerns, thus was in accord with steps that New Hampshire planners themselves acknowledged might be taken for practical implementation of a sheltering option.⁴²

Nevertheless, our conclusion about sheltering the entire beach population under condition (1) and the need for sheltering implementation for such a protective action was not an attempt on our part to impose upon State officials the requirement that they in fact adopt sheltering as a protective action for the entire beach population. Rather, it reflected our understanding of the measures State officials themselves contemplated utilizing, based upon our review of (1) the provisions of the NHRERP; (2) the adjudicatory record as it reflected the views of applicant, State, and FEMA officials concerning sheltering for the beach population under the NHRERP; and (3) the arguments of the parties during their written and oral presentations regarding intervenor appeals of LBP-88-32.

As we have earlier noted, in LBP-90-12 the Licensing Board suggests that one properly “initiated” with the plan — as opposed to being familiar with the adjudicatory record here — would arrive at the conclusion that sheltering for the entire beach population was not contemplated under the NHRERP for condition (1). Putting aside the fact that, in the context of an adjudicatory challenge to the plan, the hearing record, and particularly the testimony of planning officials, becomes the focal point for “initiation” into the plan’s meaning and purpose, the plan here provides, at best, an enigmatic picture of the planners’ intent as far as sheltering for the general beach population under condition (1) is concerned. Specifically, while it contains the passage quoted above giving a general description of the “shelter-in-place” concept,⁴³ it nonetheless fails to provide any detailed explanation about what is meant by “access to suitable shelters,” an element that is critical in the context of the beach population.

⁴⁰ See Tr. 10,757. Questioning this Board’s direction that the shelters utilized for condition (1) must be designated as is done under the NHRERP for those to be utilized for the transient-dependent population for condition (3), the Licensing Board asserted that there is no “logical nexus” supporting such a requirement because the purposes are different. See LBP-90-12, 31 NRC at 448 n.51. According to the Licensing Board, individual shelters must be designated under condition (3) so that people can identify them as shelters while waiting to be evacuated. The Board overlooks the fact that the designation of a building as a shelter serves another important purpose that may be applicable to condition (1) sheltering as well. It reflects a judgment about the building’s suitability for use as a shelter, a consideration that could be germane regardless of whether the building is being used as a bus stop. Compare Tr. 10,206-07 with Tr. 10,756-57.

⁴¹ See Tr. 10,757.

⁴² Although the Licensing Board declared, on the basis of the Stone and Webster survey, that there was adequate shelter for the general beach population, see LBP-88-32, 28 NRC at 771, this determination did not account for the fact that State planners, who will be responsible for determining whether and when to utilize a shelter as a protective action, had not made a determination about what criteria would be acceptable for shelter and whether the shelter identified in the survey met those criteria.

⁴³ See *supra* note 8 and accompanying text.

The plan does state that one of the main reasons sheltering is a valuable protective action option is that "it can be implemented quickly, usually in a matter of minutes."⁴⁴ Even with this emphasis on implementation time, however, nothing on the face of the plan forecloses utilizing the sheltering option for the general beach population. Indeed, the beaches in question generally are located a short distance from commercial and other buildings in beachfront communities that potentially could serve as shelters.⁴⁵ Moreover, adding to the plan's ambiguity concerning how the sheltering option for the beach population is to be utilized is the fact that it offers only the explanation that an EBS message "will include, but is not limited to: . . . (2) Special instructions for transients, campers, etc., including the location of public shelter, *if applicable*."⁴⁶ Again, this provides no concrete indication that sheltering of the general beach population has, in fact, been ruled out of the plan.

Given the state of the plan, the adjudicatory record thus takes on particular importance in resolving the issue, as raised by the referred questions, of what is intended to constitute "sheltering" for a response under condition (1). As we have noted, the Licensing Board found the problem with the record to be that "when emergency planning officials testified about 'sheltering' as the protective action under discussion, they were not always asked to explain the nuances of that option."⁴⁷ Contrary to the Licensing Board's suggestion, however, we find that in their testimony before the Board, the planning officials provided explanations concerning the plan that manifestly support the conclusion that, *at least at the time they testified*, State planners had under serious consideration the potential utilization of sheltering for the *entire* beach population for condition (1).

In response to various intervenor questions about whether sheltering would be recommended for the entire beach population and whether there would be emergency broadcast system messages directing the entire beach population to shelter, senior planning officials for the State and the applicants made it clear that a recommendation to shelter the entire beach population under condition (1), and an EBS message to that effect, were part of that protective action option. For example, during questioning about the withdrawal of draft EBS messages, in response to an inquiry about whether, under conditions (1) and (2), officials acting pursuant to the plan would consider recommending that the entire beach population be sheltered, Anthony M. Callendrello, then Emergency Planning

⁴⁴ *E.g.*, NHRERP (Town of Seabrook), Vol. 16, at II-30; *id.* (Town of Hampton), Vol. 18, at II-26.

⁴⁵ *See* Corrected Testimony of Robert L. Goble, Otwin Renn, Robert T. Eckert, and Victor N. Evdakinoff on Behalf of the [MassAG] on Sheltering Contentions, fol. Tr. 10,963, at 73 (most shelters in beach area are in walking distance of less than 15 minutes).

⁴⁶ *E.g.*, NHRERP (Town of Seabrook), Vol. 16, at II-30 to 31 (emphasis supplied); *id.* (Town of Hampton), Vol. 18, at II-26 to -27 (*same*).

⁴⁷ LBP-90-12, 31 NRC at 440.

Manager for New Hampshire Yankee, confirmed “[t]hat is correct.”⁴⁸ Similarly, when questioned about whether there were circumstances in which he would recommend sheltering for the entire beach population under conditions (1) and (2), Richard H. Strome, Director of the New Hampshire Office of Emergency Management, stated that, while not the “preferred option,” the use of sheltering was “conceivable.”⁴⁹ Other illustrations of this type abound,⁵⁰ with one of the most telling being additional testimony by Mr. Bonds, in which he describes the derivation of the “shelter-in-place” concept used in the plan and its relation to the beach population.

After noting that the designation of major public buildings for sheltering was considered an alternative to the shelter-in-place concept in which “you seek shelter indoors rather than go through the process of identifying major structures,” Mr. Bonds went on to explain in response to questioning by counsel for the MassAG:

I think we're all familiar with the radiation symbol that you find affixed to various post offices and what not that survives from a period of 20, 30 some years ago, the fallout shelter concept. Public shelters: school; major locations; stock and so on. That's the public shelter concept in my mind.

We did not adopt that shelter concept because in order to use it you've got to pick people up, out of their homes as well as off the beaches, out of their work place, out of schools, every place else and move them to another location. If you're going to move them, keep them moving.

Shelter-in-place was adopted as a much simpler process that says, you stay where you are. Now, in dealing with the beach population we chose not to identify them as a separate subset. Everybody else shelter-in-place; you folks, big public structures again, big public shelters. Again, if you're going to have to move them, keep them moving.

Q So what I gather from what you're saying is that, it would take some time to shelter the beach population or it would require some movement on their part and some time to get them into shelters?

A (Bonds) If you were using the big public shelter process. The state has chosen not to use the big public shelter process because it's a very complicated process. You've got to move them, you've got to stop them, you've got to get them indoors. It's a very complicated process. If all you have to do is get them moving and keep them moving outside of the zone for the majority of the time, the maximum dose savings is going to be realized through evacuation. For that range of incident[s], to the extent that they exist at all in which sheltering might be the recommendation, then the dose savings for the population is going to be realized by moving them not to major public shelter some place else, you don't want to take that time, that exposure time, you just want to simply get them indoors, go inside. Not go inside three blocks down the road or a half mile down the road at the junior high school, go inside. You want to reduce the exposure period.

⁴⁸ Tr. 10,069.

⁴⁹ Tr. 10,061-62.

⁵⁰ See Tr. 10,064-67, 10,101, 10,179, 10,183, 10,192-93, 10,715-16.

Q Well, where are the people on the beach suppose to go inside?

A (Bonds) If we're talking about the transportation-dependent transients they will go to where we discussed before. *If the recommendation should be to shelter for the entire beach population and everybody else, the recommendation will be to go indoors.*

Q And where are you assuming that would be for the beach population?

A (Bonds) About the same place they would go indoors if a cloudburst happened, if it started to rain, across the street where all the buildings, the shops, the material that's there.

Q Well, sometimes when there's a cloudburst people just get into their cars and leave the area, don't they?

A (Bonds) That's true and we can't — we're not going to stop people from doing that, and we just can't possibly stop people from leaving, if they want to leave rather than shelter.

Q There is a difference between a cloudburst and getting people inside, shelters — for the purpose of sheltering them from radiation, wouldn't you agree?

A (Bonds) I think you misunderstand me. If we recommend that the person go indoors they're not going to stand there and say, how, where, what, why. *The message is going to be pretty obvious that they are in some danger and they need to go inside.*

If they're capable of making the decision, if I stand here I'm going to get wet, I want to go inside, I as a planner, I'm assuming they're also able to say, I'm in some danger, if they say go inside I'm going to be protected. They will have the ability to come to that understanding and move inside.⁵¹

Mr. Bonds' testimony thus makes clear that, at the time of his testimony, the planners contemplated that under condition (1), as opposed to condition (3), sheltering could be a protective option for the entire beach population (or at least a very substantial portion of that population) and that emergency messages would direct the beach population to go inside to obtain protection. Further, and contrary to the Licensing Board's apparent view, we think the record also makes manifest that at the time they testified it was the understanding of FEMA officials that the State had not ruled out sheltering for the entire beach population, which in turn could warrant development of implementing details.⁵²

Finally, this same point — that the State was contemplating sheltering for the entire beach population under condition (1) — was presented to us during oral argument in July 1989. With counsel for the NRC staff and FEMA present, in response to a question concerning what the NHRERP plan reflected regarding sheltering for the beach population, counsel for applicants explained that "what their plan reflects is exactly what I said and that is, should you use this — well, in any of the situation[s], either one and three, you use this method. The methodology will be to announce a shelter-in-place and the theory is people

⁵¹ Tr. 10,550-53 (emphasis supplied).

⁵² Tr. 13,184, 14,219-20, 14,252-53.

who are not inside will go to the nearest place they can and shelter.”⁵³ This statement, which was essentially corroborated by counsel for the staff,⁵⁴ clearly reflects the view that condition (1) sheltering would encompass the entire beach population, not just those already in beachfront buildings. Nothing in the briefs of the staff or applicants suggests anything to the contrary.⁵⁵

Thus, our conclusion in ALAB-924 that the State contemplated that the condition (1) protective action option for sheltering the beach population could include all (or essentially all) of that population was one that was reasonable and supported by the record. Be that as it may, the recent post-remand filings by the State make it apparent that this is not now the State’s plan. Instead, interpreting the “shelter-in-place” option’s proviso that “access to an indoor location” means actually being indoors, the State now avers that what is contemplated for the general beach population is that under condition (1), those beachgoers who have their own transportation will be directed to employ sheltering as a protective action option only if they are already in a building. Everyone else in the beach area with transportation will be advised to go to their vehicles and to evacuate (although they may of their own volition and without direction from emergency management officials elect to enter a building in the immediate vicinity).⁵⁶

As we have previously indicated, it was not the intent of our remand in ALAB-924 to direct planning officials to adopt sheltering of the general beach population as a protective action and we do not do so now. Further, in response to the Licensing Board’s question concerning the need for implementing detail relative to the available shelter in the New Hampshire beach area, we agree that the need for such detail has for all practical purposes been vitiated, given the State’s post-remand assertions concerning the intended scope of the sheltering option under condition (1). It seems apparent that a protective action whereby

⁵³ App. Tr. 92-93.

⁵⁴ See App. Tr. 143-44.

⁵⁵ The same can be said for the applicants’ petition for Commission review of ALAB-924. See Applicants’ Petition for Review of ALAB-924 (Nov. 10, 1989) at 8-9.

By the same token, although the Licensing Board now declares that, under the State’s “shelter-in-place” option, it is apparent that implementing detail is inconsistent with the NHRERP because under condition (1) the general beach population is to evacuate, LBP-90-12, 31 NRC at 449, this straightforward and unequivocal explanation does not itself appear entirely consistent with the Board’s December 1988 partial initial decision on this subject. Instead, in dismissing the need for implementing detail for the general beach population (the so-called 98%), the Board relied upon the low probability that sheltering would be utilized and uncertainties about the benefits of using shelter at all. See LBP-88-32, 28 NRC at 769-70. Moreover, the Board provided an extended discussion concerning the amount of sheltering needed for the entire beach population, not simply the two percent (approximately 500) who will need shelter because they are without transportation. See *id.* at 770-72. So too, in its November 1989 explanation concerning the effectiveness of its licensing authorization determination, the Board’s explanation provides no hint of the rationale it now provides in LBP-90-12. See LBP-89-33, 30 NRC at 670-72.

⁵⁶ FEMA states that this was its understanding of the State’s plan at the time it approved the NHRERP in December 1988. FEMA Memorandum at 2. Assuming this is correct, which is not apparent from FEMA’s evaluation of the plan’s provisions regarding the beach population, see App. Exh. 43D, at 78-83 (FEMA Review and Evaluation of the State of New Hampshire Radiological Emergency Response Plan for Seabrook Station (Dec. 1988)), FEMA’s approval was not part of the record before the Licensing Board at the time the Board’s decision was made.

the beachgoers remain inside or, if not inside, return to their cars and begin to evacuate can be carried out without the type of implementing details that we had previously envisioned would be necessary if the entire beach population was to be directed to shelter in buildings near the beach area.

This does not, however, end the matter with respect to our remand of the sheltering issue. The Licensing Board acknowledges that events subsequent to our decision in ALAB-924 have served to reveal “confusion” between the State and applicants concerning some “finer details” of the State’s planning for the general beach population and requests that we afford it greater discretion to resolve “any remaining uncertainties.”⁵⁷ This observation has substantial merit. In light of the State’s post-remand filings clarifying the existing adjudicatory record concerning the scope and details of the sheltering option for the transient beach population under condition (1), in the context of the intervenors’ challenges to the adequacy of the sheltering option for the general beach population, we find it incumbent upon the Licensing Board to ensure that, as a consequence of evidence previously submitted by applicants in the course of the hearing, several related matters are clarified. First, because the evidence presented by applicants indicates that automobiles are assigned no cloudshine sheltering value by planners,⁵⁸ the Board should ensure that the record contains an adequately supported explanation for distinguishing between those nontransportation-dependent beachgoers already within a building, who will be directed to shelter, and all other beachgoers, who will be directed to go to their cars and evacuate, in terms of condition (1)’s purpose of utilizing sheltering for “achieving maximum dose reduction.”⁵⁹ In addition, given the testimony by New Hampshire emergency planning officials suggesting the need to distinguish between suitable and unsuitable shelter,⁶⁰ the Licensing Board should ensure that the record is clear as to whether such measures are necessary relative to the “shelter-in-place” option as now described by the State. Finally, given applicants’ evidence acknowledging the central importance of quality emergency notification messages,⁶¹ the Licensing Board should ensure that any EBS/beach public address message proposed for use relative to condition (1) makes clear the steps that all members of the beach population are to take in the event that a “shelter-in-place,” as now described by the State, is recommended. Whether any of these matters requires

⁵⁷ LBP-90-12, 31 NRC at 454.

⁵⁸ See Tr. 10,112; App. Exh. 34, at 34 (Table 10).

⁵⁹ Applicants’ Direct Testimony No. 6, at 19; see LBP-88-32, 28 NRC at 759 (choice of protective action will be based upon maximizing dose savings to beach population as a whole).

⁶⁰ See *supra* notes 40-41 and accompanying text.

⁶¹ See Tr. 10,048-49. See also ALAB-932, 31 NRC 371, 395-96 (1990).

additional submissions from the parties is a matter we leave to the initial judgment of the Licensing Board.⁶²

It is so ORDERED.

FOR THE APPEAL BOARD

Eleanor E. Hagins
Secretary to the
Appeal Board

⁶² Because the peak beach season has ended and does not begin again until June 1991, nothing in this memorandum now affords a ground for rescinding the authorization for the Seabrook operating license. See 10 C.F.R. § 50.47(c)(1).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Peter B. Bloch, Chair
Dr. George C. Anderson
Elizabeth B. Johnson

In the Matter of

Docket Nos. 50-250-OLA-5
50-251-OLA-5
(ASLBP No. 90-602-01-OLA-5)
(Technical Specifications
Replacement)
(Facility Operating License
Nos. DPR-31, DPR-41)

FLORIDA POWER & LIGHT
COMPANY
(Turkey Point Nuclear Generating
Plant, Units 3 and 4)

September 25, 1990

The Licensing Board decided that it has the authority to declare a *sua sponte* issue even after the intervenor has been dismissed as a party. However, it decided to refer its concerns to the Advisory Committee on Reactor Safeguards and to dismiss this case because the grounds for a *sua sponte* issue do not exist.

RULES OF PRACTICE: *SUA SPONTE* ISSUE

If a Licensing Board, in the course of its duties, discovers an important safety or environmental issue, it must declare a *sua sponte* issue, pursuant to 10 C.F.R. § 2.760a, whether or not there are parties interested in that issue or remaining in

the case. The *sua sponte* authority is an added protection for the public interest that the Board exercises on its own authority.

TECHNICAL ISSUES DISCUSSED

Standard Technical Specifications;
Change in Mode Reduction Requirement, Technical Specifications;
Boration, Loss of Ability to Reduce Modes;
Loss of Coolant Loop;
Allowed Outage Time;
Errors in No Significant Hazards Report, Significance of.

MEMORANDUM AND ORDER (Consideration of Possible *Sua Sponte* Issues)

Memorandum

The purpose of this opinion is to consider whether or not to declare a *sua sponte* issue based on information that came to our attention while this case was pending and before we dismissed the Intervenor from the case. We have decided that, despite the position of the remaining parties, we have the authority to declare a *sua sponte* issue at this stage of the proceeding, even though there are no parties left in the case.

However, after considering the facts submitted to us by the Staff and the Applicant, we have decided that there are no issues of sufficient importance to declare a *sua sponte* issue. In the course of our opinion, we discuss some matters that concern us, and we request that the Advisory Committee on Reactor Safeguards make an independent assessment of the significance of those matters. The proceeding is dismissed.

I. PROCEDURAL BACKGROUND

We have granted Applicant's motion to dismiss from this proceeding the Nuclear Energy Accountability Project (NEAP), the only remaining intervenor. LBP-90-24, 32 NRC 12, 13 (1990). In addition, we requested information from the Staff of the Nuclear Regulatory Commission for the purpose of determining whether or not to exercise our *sua sponte* authority. We stated, *id.* at 17-18:

Pursuant to 10 C.F.R. § 2.760a,

Matters not put into controversy by the parties will be examined and decided by the presiding officer only where he or she determines that a serious safety, environmental, or common defense and security matter exists.

This authority to raise matters on our own or "*sua sponte*" gives rise to the responsibility to determine whether or not to use the authority.

In dismissing NEAP after having reached a determination that some of its contentions were litigable, we have a responsibility to consider whether or not to retain jurisdiction of one or more of its contentions as a *sua sponte* matter. In reaching this determination, we must consider the seriousness of each contention. However:

The mere acceptance of a contention does not justify a board to assume that a serious safety, environmental, or common defense or security matter exists or otherwise relieve it of the obligation under 10 C.F.R. 2.760a to affirmatively determine that such a matter exists.¹

Furthermore, if the matter has already been spotlighted for serious consideration by the Staff, apart from the hearing process, then the seriousness of the issue is mitigated and a Board need not declare it to be a *sua sponte* issue.²

II. FILINGS

The filings relevant to this decision are "NRC Staff's Response to Licensing Board's Order of July 17, 1990," August 31, 1990; and "Applicant's Response to Memorandum and Order (Motion to Dismiss)," September 14, 1990.

III. ARGUMENTS OF THE PARTIES

A. The Licensing Board Lacks Jurisdiction

1. Staff Argument

The Staff has argued that the Licensing Board lacks jurisdiction for two reasons. First, because NEAP has appealed our ruling that dismissed it from the case and that once a notice of appeal has been filed, the Licensing Board

¹ *Texas Utilities Generating Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-81-36, 14 NRC 1111, 1114 (1981).

² *Cincinnati Gas and Electric Co.* (William H. Zimmer Nuclear Power Station, Unit 1), CLI-82-20, 16 NRC 109, 110 (1982). As Commissioner Asselstine points out in his dissent in this case, at 116, even the Staff agreed that the particular issue met the criteria for admission as a *sua sponte* issue because it was "a most serious issue." Although the Commission itself appears not to offer a rationale for how it could take the action it did, in face of the regulation — and Chairman Palladino, made it clear at 112 that he did not intend to revoke the *sua sponte* authority — we believe that our explanation in the text of this decision provides an appropriate rationale sympathetic to the intent of the Commission.

However, in this case we are uninformed of the Staff's evaluation of the importance of the issues before us or of the extent of its followup of these issues, so the proper application of the *Zimmer* rule is not apparent.

loses jurisdiction over the issue being appealed. For this proposition, it cites *Georgia Power Co.* (Vogle Electric Generating Plant, Units 1 and 2), ALAB-859, 25 NRC 23, 27 (1987).

Second, the Staff argues that should our dismissal of NEAP be sustained the issues in the case would then become uncontested and would rest exclusively with the Staff. Their form of citation (“see”) for this proposition implicitly recognizes that the cases are not directly in point; it is:

See, Public Service of New Hampshire, et al. (Seabrook Station, Units 1 and 2), ALAB-854, 24 NRC 783, 790-91 (1986); *Consolidated Edison Co. of N.Y., Inc.* (Indian Point, Units 1, 2 and 3) ALAB-319, 3 NRC 188, 190 (1976).

2. Applicant's Argument

Applicant introduces the additional argument that the Board lacks jurisdiction *at this stage of the case* — prior to the issuance of a Notice of Hearing that states the issues to be adjudicated and the parties that are admitted. It relies on two cases: *Public Service Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), LBP-86-37, 24 NRC 719 (1986),³ and *Rockwell International Corp.* (Rocketdyne Division), ALAB-925, 30 NRC 709 (1989), *aff'd*, CLI-90-5, 31 NRC 337 (1990).

In *Marble Hill*, the Board found that it lacked authority to take further action under the provisions of 10 C.F.R. § 2.107. Applicant relies on the scholarly analysis of that Board, 30 NRC at 723-24, which concluded that hearings historically have had two parts:

The first was to rule on requests for hearing and petitions to intervene. The second was to exercise the Commission's authority to issue any notice of hearing in the event a hearing is granted upon a petition or to issue any other appropriate order.

* * *

[F]ull analysis leads to the conclusion that the regulations, statutes and the Federal Register notice all anticipate a bifurcated process in operating license proceedings where first the threshold intervention issue is settled, then the notice of hearing is issued.

Applicant would have us conclude that the *sua sponte* authority attaches to the second part of this bifurcated process and that since we have not issued a notice of hearing we do not have *sua sponte* authority pursuant to 10 C.F.R. § 2.760a — whether or not a serious safety issue may be found to exist.

³ Although decisions of licensing boards are not “precedent,” it is always helpful to consider the views of fellow judges and to attempt to achieve uniformity and predictability of results in areas where neither the Appeal Board nor the Commission has spoken.

Applicant cites *Rockwell* for the proposition that a presiding officer, whether in Subpart L proceedings or in other Commission proceedings, may not ask questions of the parties before ruling on a petition for a hearing.

3. Conclusion

We conclude that the question of whether or not we can retain jurisdiction to raise a *sua sponte* issue, in the absence of a party, is a question of first impression. None of the cited precedents deals directly with the appropriate use of the *sua sponte* authority in this situation.

Despite the fact that the Commission obviously does not favor *sua sponte* issues, we consider that it is implicit in the *sua sponte* authority itself that a Board can examine certain serious issues on its own authority and that its authority does not depend on any party raising or being willing to pursue those issues, nor does it depend on the stage of the proceeding. This authority is unusual in judicial-type proceedings. It apparently arises from the belief that no officer of the NRC who sees a serious safety issue may work with closed eyes and pretend that it is on someone else's beat.

The authority is, however, closely supervised by the Commission, which must receive immediate notice of its use. Consequently, there is no chance that a Board will go out on a limb by itself and raise issues that the Commission does not also consider serious.

The most applicable case appears to be *Comanche Peak*, Units 1 and 2), CLI-81-36, *supra*. In that case, the Board adopted the contentions of a dismissed intervenor without making specific findings that supported its declaration of a *sua sponte* issue. The Commission, at 14 NRC 1114, directed the Board to make affirmative findings under 10 C.F.R. § 2.760a before declaring a *sua sponte* issue. However, there was no requirement that any other party have an interest in pursuing the issue. It was enough that the Board itself would pursue the issue.

The rationale for permitting a Board to declare *sua sponte* issues appears to be that a Board's expertise is an additional protection for the public interest, beyond the protection provided by the adversary process. It is our belief that if a Board learns, during its contact with a case, that there are serious issues, then it is authorized to use its expertise — which includes the technical expertise of two of its members and the legal expertise of the third — to pursue those issues. This is, of course, a highly unusual authority. It can exist because we are a judicial tribunal within the executive branch, not subject to Article III limitations concerning the need for a case or controversy. We understand that this unusual authority should be used sparingly and with great caution. However, the authority does not depend on parties having any formal role in the pursuit of

sua sponte issues, so that their absence from the case does not provide a reason to limit the Board's authority to use its expertise to pursue these issues.

We find that the cases cited by Staff are not persuasive. *Vogtle, supra*, was cited for the proposition that a Licensing Board loses jurisdiction over an issue that has been appealed. In this instance, NEAP has appealed its dismissal. It has not appealed our inquiry into declaring a *sua sponte* issue, nor is its appeal in any way directed at our decision to inquire. Thus, the appeal does not affect our jurisdiction to pursue *sua sponte* issues in the absence of a party.

Staff also cites *Seabrook, supra*, which deals with an intervenor's argument that a Licensing Board *must* make findings on an issue that the intervenor argued was important to safety. The Commission found that a Licensing Board needs to act only on contested issues and on issues that it has declared *sua sponte*. A Licensing Board is not required to act on any other issues. Similarly, *Indian Point, ALAB-319, supra*, 3 NRC at 190, stands for the proposition that: "[A] license board is neither required nor expected to pass upon all the items which the staff must consider and resolve before it approves the license."

Here we fully understand that the Staff's responsibility far exceeds our own, which is limited to the grounds set forth in the formal grant of *sua sponte* authority, which is "to be exercised sparingly." *Id.*

Applicant's argument, based on *Marble Hill*, has suggestive but not controlling force. That case involved interpretation of 10 C.F.R. § 2.107, which provides authority to a Board to determine issues related to withdrawal of an application but which predicates its authority on the issuance of a "notice of hearing" — which the licensing Board interpreted to be notice that sets the matter for hearing and not the notice that invites public participation in the adjudicatory matter. The parallel to section 2.760a, if any, is that the predicate to authority must be present. With respect to section 2.760a, the *sua sponte* authority is predicated on a finding that a serious matter exists. It is not predicated on the issuance of a notice of hearing; and, given the purpose of the *sua sponte* authority, we do not infer this additional predicate to its use.

We have similar reasons for rejecting the applicability of the *Rockwell* case. The use of the *sua sponte* authority is carefully hemmed in by Commission overview and its purpose suggests that it be used whenever the presiding officer becomes aware of a serious matter before it.

We conclude that we have the *sua sponte* authority and we proceed, therefore, to a careful examination of whether or not the grounds for its use exist.

IV. CONSIDERATION OF INDIVIDUAL CONTENTIONS

A. Contention 11

1. *Reasons We Admitted the Contention*

In admitting Contention 11, we said:

The proposed contention states:

The RTS relaxes the CTS because MODE Applicability is explicitly defined for each Surveillance Requirement and forced MODE reductions required by Action statements will, for the most part, stop with the first Mode beyond the LCO requirement.

In oral argument at the prehearing conference, Petitioner stated:

The Applicant in their safety evaluation admits in some cases that there will be a relaxation compared to the current requirements. They even cite an example that the revised tech specs for the emergency core coolant system, the ECCS, the mode applicability for modes 1, 2, and 3 and the action statement mode stops at mode 4, while the current tech specs requires mode reduction to mode 5. So the current tech specs require them to implement a mode reduction to Mode 5, and then the revised tech specs are not as restrictive. They only require mode change to Mode 4. (Tr. 103.)

Petitioner then has criticized Applicant for failing to document or to present supporting references for its statement that "in Mode 4 the probability and consequences from a design basis rupture is reduced." (Tr. 104.)

Applicant's answer to this question of lack of analysis is that the change is consistent with the standard technical specifications for Westinghouse plants.⁴ (Tr. 105.) Applicant concedes that there is some risk from being in Mode 4 rather than in Mode 5. (Statement of Counsel, Tr. 106.) Applicant also concedes that it did not provide a systematic review of possible accident sequences that might occur in Mode 4. (Statement of Counsel, Tr. 108.) Nor has the Board or the public been provided with supporting analyses from the Staff's acceptance of the standard technical specifications. (Staff Counsel, Tr. 113.)

Under the circumstances, we conclude that Petitioner has created a genuine issue of fact concerning Applicant's omission from its analysis of consideration of the risks related to the change in mode reduction requirements. Hence, this contention shall be admitted with respect to this genuine issue of fact.

2. *Staff and Applicant Conclusions*

Staff assures us that this is not an important safety issue. It states that modes need be reduced only until all required equipment for a particular mode is available. When all required equipment is available, that particular mode has been designed for safety. Further mode reductions are considered to add little to

⁴Although we are not aware of any analyses accompanying the standardized technical specifications — and therefore have a void on our record — we suspect that there may be very little difference in risk occurring because of a 150° difference in temperature between hot and cold shutdown, occurring in a system designed for extremely high pressures and temperatures.

reactor safety. "Safety Evaluation by the Office of Nuclear Reactor Regulation Related to Amendment No. 137 to Facility Operating License No. DPR-31 and Amendment No. 132 to Facility Operating License No. DPR-41 Florida Power and Light Company Turkey Point Unit Nos. 3 and 4 Docket Nos. 50-250 and 50-251," August 28, 1990 (Safety Evaluation) at 28.

Applicant relies on the Staff's reasoning.

3. Conclusion Concerning Contention 11

Based on the filings before us, we have no reason to believe that there is a serious safety issue here. However, we remain uneasy that the Staff and Applicant appear not to have done any troubleshooting concerning possible scenarios that could result in an accident, despite the analyses of mode stability.⁵ We are particularly uneasy that there is no indication of any effort to ascertain whether the original plant designers, who wrote technical specifications that required a further mode reduction, had any knowledge that led them to introduce a requirement that now seems to be completely purposeless.

There is no answer in our record concerning the possibility that the original designers knew something that has been lost. There also is no indication of systematic troubleshooting. We are, however, without resources to reach a conclusion as to the importance of these omissions.

B. Contention 14

1. Reasons We Admitted the Contention

After refusing to admit most of Contention 14, we explained our admission of a portion of Contention 14 as follows:

[We] . . . would have ended our inquiry [into the admissibility of Contention 14] but for language in the No Significant Hazards Evaluation at App. A 3/4 1-17 that we do not fully understand. The language that we do not understand states:

After borating to cold shutdown SDM, the only boration system function is make-up for loss in volume due to shrink. In the event that this capability is lost in this time interval, *the plant's ability to reduce modes as required is lost*, but the safety aspect of maintaining the SDM is preserved. So, extending the time period to restore operability to the pumps or flow path does not result in an increase in the probability of or impact on the consequences of an accident previously evaluated. [Emphasis added.]

⁵Such troubleshooting, which resembles PRA (probability risk assessment) or fault-tree analysis but without quantification, can spot unanticipated interactions among plant systems or unexpected sources of accidents that result from idiosyncracies in a particular plant.

Our concern is that it seems to be possible, during the additional time in hot standby, to lose the ability to reduce modes; the possible safety implications of this loss of ability require explanation. Accordingly, we find the Applicant's explanation inadequate and admit this contention for this one purpose.

2. Staff and Applicant Conclusions

Staff concludes that it is not possible for Applicant to lose the ability to reduce modes. Staff states that even if both of the flow paths required by RTS 2.1.2.2 were lost, two additional methods would be available: (1) the Chemical and Volume Control System, and (2) safety injection pumps taking suction from the refueling water storage tank. Safety Evaluation at 29-30.

Applicant, in its Response at 10, states that:

Maintenance of the reactor in Mode 3 (hot standby) and fully borated to 1% delta-k/k at 200°F constitutes reactor operation under safe and stable conditions.

It cites the Safety Evaluation, at 28, for the proposition that the plant has been designed to be in this mode and that it may therefore be expected to fully accommodate accidents and transients that might occur while it is in that mode.

3. Conclusion

We have no basis for concluding that this particular technical specification gives rise to an important safety question. However, we are distinctly uneasy that neither of the parties has explained the reason that Applicant's No Significant Hazards Evaluation stated that the plant could lose the capacity to reduce modes. Was there an error in the choice of words? Was there an error in failing to consider other ways to reduce mode? What was the source of the error? Was something important being considered without fully describing the problem that the analyst had in mind?

C. Contention 30

1. Reasons We Admitted the Contention

In admitting Contention 30, we said:

Proposed Contention 30 states:

Specifically, the amendments would change the CTS at specification 3/4.4.1.1. The RTS relaxes the allowed outage time for a Reactor Coolant Loop in Mode 1 from one hour to six hours.

Petitioner objects to a relaxation of the outage time for a Reactor Coolant Loop in Mode 1, from one hour to six hours, because operation with two loops has not been analyzed. No Significant Hazards Evaluation at § 2.1.1 2)b.2. We conclude that this Contention shall be admitted.

Applicant's explanation is far from complete:

Relaxing the time limit to be in [get into]⁶ HOT STANDBY from one to six hours will allow the plant additional time to restore the loop or perform a normal shutdown. Increasing this ACTION statement time limit will have a *minimal impact* on a previously evaluated accident because the ACTION statement only applies in the *unlikely* event of a single RCS loop being lost during MODE 1 or 2. With power above the P-8 setpoint, a second plant accident transient during the time interval of the ACTION statement is *unlikely*. The Reactor Trip System continues to monitor plant conditions during the ACTION time interval and trip functions such as overtemperature delta-T, or loss of flow are available to provide protection during the ACTION time interval. Finally, adopting the proposed ACTION time has the potential benefit of reducing the number of reactor trip transients imposed on the plant.⁷ [All emphasis added but for all-caps.]

Petitioner challenges Applicant's justification for this change (Tr. 160):

Increasing this ACTION statement time limit will have a minimal impact on a previously evaluated accident *because the ACTION statement only applies in the unlikely event of a single RCS loop being lost during MODE 1 or 2*. No Significant Hazards Evaluation at App. A 3/4 4-2. [Emphasis added.]

The Board agrees with Petitioner that this particular justification is lacking. An ACTION statement should not be justified simply because it would be used only rarely. The question is whether it is safe when it is used.

Petitioner also challenges this new outage provision because Applicant has deleted the technical specifications governing operations with two loops, stating that the safety analysis for the plant has not analyzed the safety of operating with just two loops. Tr. 160-61; Proposed Technical Specification 2.1.1 at App. A 2-1 ("... power operation (MODES 1 and 2) with less than three loops is not analyzed in the safety analysis."). In an attempt to explain this problem, Applicant erroneously stated that this technical specification permits "hot standby" and not operation and that there is no need for a guideline governing *operation* with two loops when all that will be attempted is hot standby with two loops. Tr. 162. However, Proposed Technical Specifications 3/4.4.1.1 A. 2) c. at App. A 3/4 4-1 states that "The allowed outage time for a REACTOR COOLANT LOOP in MODE 1 is relaxed from one hour to six hours." [Emphasis added.]

Since the loss of a coolant loop reduces heat removal capacity, it is important that operation in this mode even for six hours be analyzed. However, that apparently has not been done. Nor are we pleased with the Applicant's use of the adjectives "minimal impact," "unlikely event," and "unlikely," in place of analysis. While it may be true that this change increases plant safety through reducing the number of reactor trip transients, that depends on whether this particular change is safe and can be justified.

⁶ Proposed Technical Specifications 3/4.4.1.1 A. 2) c, App. A 3/4 at 4-1 states that "The allowed outage time for a REACTOR COOLANT LOOP in MODE 1 [] is relaxed from one hour to six hours."

⁷ No Significant Hazards Evaluation, App. A 3/4 at 4-2.

2. Staff and Applicant Conclusions

Staff states in its Safety Evaluation at 30:

[T]he six hours set forth in this contention is not an allowed outage time. . . . In this case RTS 3.4.1.1 ACTION does not permit a remedial action with an opportunity for continued operation. Rather, it consists only of a specification that requires completion of shutdown. Throughout the Standard Technical Specifications 6 hours has been adopted as a standard time for achieving HOT STANDBY and has been implemented in many Westinghouse Plants. Generally the time of 6 hours to achieve HOT STANDBY allows sufficient time for the plant to be shutdown in a controlled and orderly manner, and thereby reduce the potential for challenges to safety systems and the initiation of plant transients.

* * *

[P]rovisions have been made for adequate heat removal capacity under all operating conditions. If reactor power is above 45% and flow in one loop is suddenly and significantly reduced, the reactor will automatically trip. Several diverse trip functions are provided to assure this, including overtemperature Δ -T, loss of flow, low voltage or low frequency on pump power supply bus, and pump circuit breaker opening. Therefore, this Action Statement will generally⁸ not be entered at power levels above 45%.

* * *

. . . Many years of reactor operating experience in various transient conditions provide confidence that the plant can be safely shut down with two loops operating. The staff concludes that provisions are in place to safely shut down the plant when one coolant loop is inoperable and that no serious issues exist.

Applicant adopts Staff's explanation without any comment of its own.

3. Conclusion

We join Staff and Applicant in concluding that there is no serious safety question concerning operation for 6 hours with one coolant loop down for the purpose of making an orderly transition to hot shutdown mode. We are uncomfortable that Applicant's No Significant Hazards Evaluation treated this technical specification as an allowed outage time. A passage we already quoted said:

Relaxing the time limit to be in [get into]⁹ HOT STANDBY from one to six hours will allow the plant additional time to restore the loop *or* perform a normal shutdown. [Emphasis added.]

⁸The use of the word "generally" suggests that Staff either is being very cautious in accepting the possibility that for some unknown reason (failure of an automatic trip?) the plant could continue at power above 45%, or that the Staff knows of an exception. We urge the Staff to examine this comment and determine for itself that its analysis is complete.

⁹Proposed Technical Specifications 3/4.4.1.1 A. 2) c, App. A 3/4 at 4-1 states that "The allowed outage time for a REACTOR COOLANT LOOP in MODE 1 [!] is relaxed from one hour to six hours."

We are puzzled that Applicant apparently misinterpreted its own revised technical specification. We are even more puzzled that the Staff did not comment on the Applicant's apparently careless use of language.

D. Overall Conclusion

We have concluded that there is no serious safety question with respect to any of the following contentions: 11, 14 and 30.¹⁰ As a consequence, we also conclude that there is no significant environmental question raised in the case.¹¹

On the other hand, we are outsiders from the Staff process and we are left uneasy by a few aspects of what we have seen. With respect to Contentions 14 and 30, there are unexplained differences of opinion between Applicant and Staff. With respect to Contention 14, there is an apparent unexplained difference of opinion concerning whether the ability to reduce modes might be lost. With respect to Contention 30, there is an unexplained difference of opinion between the No Significant Hazards Analysis and the Safety Evaluation concerning whether Applicant may return this nuclear plant to full power if flow is restored in the inoperative loop during the six hours that the plant is being placed in hot standby condition.

In addition to these Applicant "errors," Staff found an additional error with respect to Contention 6. It stated in the Safety Evaluation at 26 that the No Significant Hazards Report:

erroneously indicated that mode reduction would not be required for 14 hours after inoperability had been established for a diesel generator in one train and a different component in the opposite redundant train. This was inconsistent with the Revised Technical Specifications, which correctly requires mode reduction within 7 hours

We are aware that there is a level of error that is acceptable with respect to any complex task. Hence, we are not sure what to make of this particular level of error.

In addition, we are concerned because we cannot find any indication that in changing the technical specifications either Applicant or Staff has gone back to the bases for the initial technical specifications to ascertain whether there are special reasons why those initial specifications should not be varied in this particular plant. Similarly, we have advocated troubleshooting to determine

¹⁰ Our conclusion is without prejudice to a fresh examination should we be reversed in our determination to dismiss the parties in this case. Our review process in determining whether or not to declare a *sua sponte* issue obviously is less thorough than would occur in litigation. We would have no difficulty assessing fresh evidence that affects our conclusion.

¹¹ See Safety Evaluation at 31.

whether there are unique scenarios in this plant that would make the standard technical specifications unduly risky in this unique setting.

In making these observations, we are fulfilling the obligation of judges to review our record with care and with concern for public safety. At the same time, we are aware that Staff experience with operating plants is an invaluable resource and that this Board must be humble in comparing our combined skills with those available within the Staff. So we accept the possibility that our perspective is quite limited and our concerns may not be particularly weighty when considered by skilled, experienced Staff members.

On the other side of the balance, we also are aware that even skilled, experienced Staff members can at times fall into habits or thought patterns in which important information can inadvertently be overlooked. Consequently, we consider it important that the Staff know our concerns and evaluate them sympathetically. In this instance, what we have observed is one of many planned revisions of technical specifications, so it is particularly important that any difficulties be ironed out for the sake of the entire program.

We ask that the Staff seriously consider our views. We also ask that the Advisory Committee on Reactor Safeguards (ACRS), which is a technical check on the Staff, should consider whether or not it is worth its while to pursue any of the issues we have raised.¹²

On a more narrow legal note, we have decided that this case must be dismissed. With our limited expertise and limited exposure to this case, we do not find any important safety or environmental questions to declare to be *sua sponte* issues.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 25th day of September 1989, ORDERED, that:

¹² We considered retaining jurisdiction while the ACRS considered our concerns. However, we are satisfied that the ACRS and the Staff will determine whether our concerns are worth further pursuit and that, if appropriate, they will carefully follow up on any of our concerns that they find serious. In any event it is not necessary for us to retain jurisdiction. Furthermore, it ultimately is the Commission that decides whether or not *sua sponte* issues are appropriate for adjudication, and they are always free to declare such an issue and to remand it to us.

This case is dismissed.

**THE ATOMIC SAFETY AND
LICENSING BOARD**

**Dr. George C. Anderson (by PBB)
ADMINISTRATIVE JUDGE**

**Elizabeth B. Johnson (by PBB)
ADMINISTRATIVE JUDGE**

**Peter B. Bloch, Chair
ADMINISTRATIVE JUDGE**

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Thomas E. Murley, Director

In the Matter of

Docket No. 50-440

**CLEVELAND ELECTRIC ILLUMINATING
COMPANY, *et al.***
(Perry Nuclear Power Plant,
Unit 1)

September 25, 1990

The Director of the Office of Nuclear Reactor Regulation denies a petition filed by Ohio Citizens for Responsible Energy, Inc. (Petitioners), that requested the Nuclear Regulatory Commission (NRC) order the shutdown of the Perry Nuclear Power Plant, Unit 1 (Perry) and issue a Notice of Violation and impose a civil penalty on Cleveland Electric Illuminating Company (Licensee). The petition alleged that the Licensee had operated in violation of its Technical Specifications since November 1989. In denying the request, the Director found that the Licensee had not operated Perry in a manner contrary to that permitted by its operating license.

TECHNICAL ISSUE DISCUSSED

Essential Service Water System.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

By Petition of April 6, 1990, Ms. Susan Hiatt, on behalf of Ohio Citizens for Responsible Energy, Inc. (Petitioner), requested that the U.S. Nuclear Regulatory Commission (NRC) order the shutdown of the Perry Nuclear Power Plant,

Unit 1, (Perry) and issue a Notice of Violation and impose a civil penalty on Cleveland Electric Illuminating Company (Licensee). By letter of May 29, 1990, the NRC acknowledged receipt of the Petition and denied Petitioner's request for immediate shutdown of Perry.

The Petitioner asserts that in November 1989, the Licensee failed to return one of two redundant trains of the essential service water (ESW) system to an operable status within the time limit specified by the technical specifications, and subsequently failed to commence a shutdown of the plant as required by the technical specifications. The Petitioner asserts that Perry has been operating in this plant condition since November 1989. The Petitioner asserts that because the Licensee failed to comply with the provisions of the technical specifications, the Licensee operated Perry in violation of its operating license during the period from November 1989 to April 6, 1990.

The NRC has reviewed the Petition regarding the alleged operation of the ESW system during the specified time period and concludes that the Licensee did not operate Perry in a manner contrary to that permitted by the operating license, as defined by the requirements of the technical specifications. My formal decision in this matter follows.

II. BACKGROUND

On April 3, 1990, the Licensee declared an "alert" in accordance with the Perry Emergency Plan because of the declared inoperability of both loops "A" and "B" (also known as Divisions 1 and 2, respectively) of the ESW system.

While conducting a surveillance test of the Division 1 emergency diesel generator on April 3, 1990, the Licensee declared that the "A" loop of the ESW system was inoperable when a manway gasket failed on the pump's discharge strainer at 12:35 a.m. The resulting water spray wet several electrical components in the immediate vicinity of the discharge strainer, including the motor control center of ESW screen wash pump "A," causing the loss of that pump. At the time of the event, screen wash pump "B" for the Division 2 ESW traveling screen was out of service for maintenance and had been out of service since November 1989. At 2:32 a.m., as a result of both screen wash pumps being inoperable, the Licensee considered both traveling screens to be inoperable because of the loss of automatic backwash capability. With both of the redundant traveling screens considered inoperable, the Licensee declared Divisions 1 and 2 of the ESW system inoperable as well as the systems that they supported. At 2:37 a.m., the Licensee declared an "alert" in accordance with its emergency plan. At 6:01 a.m., the Licensee terminated the "alert" after restoring ESW loops "A" and "B" and their support systems to operable status, and after consulting with officials of the State of Ohio and of the local county.

III. DISCUSSION

The Petition is based on the assumption that in November 1989, Division 2 of the ESW system could not perform its required safety function when its screen wash pump was removed from service, and as such, Division 2 and the systems that it supports should also have been declared inoperable. Based on this assumption, Petitioner asserted that the Licensee had 72 hours to restore the Division 2 ESW system screen wash pump to service, and failing to do so, should have placed Perry, Unit 1, in hot shutdown within the next 12 hours and in cold shutdown within the following 24 hours as required by the technical specifications for the supported systems. The Petitioner asserted that by not shutting down the plant as required, the Licensee operated Perry Unit 1, in violation of its license, during the period November 1989 to April 6, 1990. As a result, Petitioner requested an immediate shutdown of Perry Unit 1, and enforcement action, including civil penalty, against the Licensee. By letter of May 29, 1990, I denied Petitioner's request for an immediate shutdown.

The Staff has determined that Petitioner's assumption is incorrect regarding the inability of Division 2 of the ESW system to perform its required safety function when ESW screen wash pump "B" is inoperable.

The ESW system supplies cooling water to the plant from Lake Erie and operates during hot standby, cold shutdown, and accident conditions. The ESW system is a safety-related system consisting of three independent and redundant cooling loops. Loops "A" and "B" provide cooling water to the heat exchangers of the emergency diesel generators, the emergency closed cooling system, the residual heat removal system, and the fuel pool cooling system. Loop "C" provides cooling water to the heat exchanger for the high pressure core spray (HPCS) diesel generator and to the HPCS pump room cooler. Each loop includes a full-capacity pump located in the ESW pumphouse, which takes suction from a common forebay. Two parallel, independent, and redundant full-capacity traveling screens located in the forebay are provided for rough filtration and debris removal. Debris that accumulates on the traveling screens is removed by water spray from their respective screen wash pumps. The ESW system pumps are not normally operating. Instead, all loops of the system are initiated manually or are initiated automatically by loss-of-coolant accident (LOCA) signals or by the loss of power to the associated electrical bus. The ESW system is designed such that any two of the three loops can provide all necessary cooling to meet the requirements in the technical specifications during emergency and accident conditions.

The technical specifications require that each of the ESW loops be operable and that, if a loop becomes inoperable that is associated with system(s) or component(s) required to be operable, then those associated system(s) or com-

ponent(s) be declared inoperable and that action required by those applicable specifications be taken.

In November 1989, at the time ESW screen wash pump "B" was taken out of service, the operability of loop "B" of the ESW system was not affected. The forebay area of the ESW pumphouse can serve the simultaneous needs of both Units 1 and 2 (although Unit 2 is currently not operational), i.e., the needs of the six ESW pumps and the respective unit's fire pumps. The two traveling screens located in the pumphouse structure are arranged in parallel; the screen wash pump designations "A" and "B" correspond to their respective traveling screen only, and do not denote their alignment to ESW loops "A" or "B." Each of the traveling screens is of sufficient size to independently supply the ESW flow requirement under emergency conditions for all six ESW pumps (i.e., ESW loops "A," "B," and "C" for Perry, Units 1 and 2). Because traveling screen "A" and its screen wash pump were still operable when ESW screen wash pump "B" was removed from service, the ability of ESW loops "A" and "B" to perform their required safety function was not adversely affected. Hence, ESW loops "A," "B," and "C" remained operable. Consequently, there is no basis for any NRC enforcement action on the allegation of a violation of technical specifications. On August 16, 1990, the NRC did issue a Severity Level IV violation (no civil penalty) for the Licensee's failure to take prompt corrective action to repair ESW screen wash pump "B," as required by 10 C.F.R. Part 50, Appendix B, Criterion XVI.

IV. CONCLUSION

Based on the foregoing discussion, I have determined that the Petitioner's claim that the Licensee violated the terms and conditions of the Perry Nuclear Power Plant, Unit 1 license, as defined by the plant technical specifications, is not supported. Thus, the Petition provides no basis for ordering the shutdown of Perry, Unit 1, or for the issuance of enforcement action. I hereby deny the Petitioner's request to suspend operation of Perry, Unit 1, and to take enforcement action against the Licensee, pursuant to 10 C.F.R. § 2.206.

In accordance with 10 C.F.R. § 2.206(c) a copy of this Decision will be filed with the Secretary of the Commission for the Commission's review.

**FOR THE NUCLEAR
REGULATORY COMMISSION**

**Thomas E. Murley, Director
Office of Nuclear Reactor
Regulation**

**Dated at Rockville, Maryland,
this 25th day of September 1990.**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kenneth M. Carr, Chairman
Kenneth C. Rogers
James R. Curtliss
Forrest J. Remick

In the Matter of

Docket No. 50-322

**LONG ISLAND LIGHTING
COMPANY**
**(Shoreham Nuclear Power Station,
Unit 1)**

October 17, 1990

The Commission considers a number of petitions seeking various remedies concerning the Shoreham Plant. On one aspect of the relief sought, the Commission determines that the National Environmental Policy Act (NEPA) and the Atomic Energy Act (AEA) of 1954, as amended, do not require the NRC, in this case, to consider "resumed operation" as an alternative to decommissioning. The Commission forwards the petitions to the Atomic Safety and Licensing Board for resolution of all other aspects of the requests.

DECOMMISSIONING PLAN: COMMISSION APPROVAL

Under NRC regulations, the Commission must approve of a licensee's decommissioning plan, including consideration of alternative ways whereby decommissioning may be accomplished, 10 C.F.R. § 50.82; but nowhere in NRC's regulations is it contemplated that the Commission would need to approve of a licensee's decision that a plant should not be operated.

NRC: SCOPE OF AUTHORITY

Except in highly unusual circumstances, such as those outlined in sections 108, 186(c), and 188 of the Atomic Energy Act, the NRC lacks authority to direct a licensee to operate a licensed facility.

DECOMMISSIONING: METHODS (NRC APPROVAL)

The decision on a *method* for decommissioning a facility — as opposed to the decision *whether* to decommission a facility — is a decision that requires NRC review and approval.

NRC: SCOPE OF AUTHORITY

The alternative of “resumed operation” — or other methods of generating electricity — are alternatives to the decision not to operate a plant and thus are beyond Commission consideration.

DECOMMISSIONING PLAN: ALTERNATIVE METHODS

In considering a proposed decommissioning plan, the NRC need only consider alternatives to the method of decommissioning that the plan proposes.

NEPA: RULE OF REASON

In considering alternatives under the National Environmental Policy Act (“NEPA”), the Commission need not consider those alternatives outside the “rule of reason.” *NRDC v. Callaway*, 524 F.2d 79, 92 (2d Cir. 1975).

NEPA: RULE OF REASON

“Resumed operation” of a nuclear facility that would require “significant changes in governmental policy or legislation,” or the “overhaul of basic legislation,” is an alternative outside the scope of what the “rule of reason” requires an agency to consider as a part of an EIS. See *NRDC v. Callaway*, 524 F.2d 79 (2d Cir. 1975), and *NRDC v. Morton*, 458 F.2d 827 (D.C. Cir. 1972).

MEMORANDUM AND ORDER

This matter is before the Commission on six (6) "Petition[s] to Intervene and Request[s] for Hearing[s]" related to various actions taken by the NRC Staff ("Staff") and the Long Island Lighting Company ("LILCO") concerning the Shoreham Nuclear Power Station ("Shoreham"). The Petitioners seek various remedies from the Commission, including an order directing the Staff to prepare an Environmental Impact Statement ("EIS") on the proposed decommissioning of the Shoreham facility and to consider in the EIS resumed operation as an alternative to decommissioning. After due consideration, we have determined that the National Environmental Policy Act ("NEPA") and the Atomic Energy Act ("AEA") of 1954, as amended, do not require the NRC to consider "resumed operation" as an alternative, at least under the facts of this situation. Accordingly, we find that at least one specific remedy sought by Petitioners — publication of an Environmental Impact Statement including an evaluation of resumed operation as an alternative to decommissioning — should not be granted. We hereby forward these petitions to the Atomic Safety and Licensing Board with directions to review and resolve all other aspects of these hearing requests in a manner consistent with this opinion.

I. INTRODUCTION

On March 29, 1990, the Staff issued a Confirmatory Order Modifying License (effective immediately) which modified the Shoreham full-power operating license held by LILCO. 55 Fed. Reg. 12,758 (Apr. 5, 1990). The Order prohibited LILCO "from placing any nuclear fuel in the Shoreham reactor vessel without prior approval from the NRC." *Id.* at 12,759. The *Federal Register* Notice announcing this action also provided that "[a]ny person adversely affected by this Confirmatory Order may request a hearing within twenty days of its issuance." *Id.* On April 18, 1990, each of two organizations, the Scientists and Engineers for Secure Energy ("SE2") and the Shoreham-Wading River Central School District ("Shoreham-Wading"), filed a "Petition to Intervene and Request for Hearing" in response to the Notice.

The Staff had previously published a *Federal Register* Notice announcing that LILCO had requested an amendment to the Shoreham operating license allowing changes in the physical security plan for the plant, including reclassification of the designated "Vital Areas" of the plant, various "safeguard commitments," and a proposed reduction in the security force. 55 Fed. Reg. 10,528, 10,540 (Mar. 21, 1990). The Notice contained the Staff's proposed finding that the amendment "did not involve a significant hazards consideration." *Id.* The Notice also provided that "any person whose interest may be affected by this proceeding

and who wishes to participate as a party in the proceeding must file a written petition to intervene." *Id.* On April 20, 1990, SE2 and Shoreham-Wading each filed a "Petition to Intervene and Request for Hearing."

Subsequently, the Staff published another *Federal Register* Notice announcing (1) LILCO's request for an amendment to the Shoreham operating license removing certain license conditions regarding offsite emergency preparedness activities and (2) the Staff's proposed finding of "No Significant Hazards Consideration." 55 Fed. Reg. 12,076 (Mar. 30, 1990). Again, the Notice provided that "any person whose interest may be affected by this proceeding and who wishes to participate as a party must file a written petition to intervene." *Id.* at 12,077. On April 30, 1990, SE2 and Shoreham-Wading each filed a "Petition to Intervene and Request for Hearing" regarding this proposed amendment.¹

Both the Staff and LILCO have responded to all three sets of petitions.

II. ISSUES RAISED BY PETITIONERS

Briefly, the Petitioners assert that the actions taken by LILCO and the Staff amount to "de facto" decommissioning of the Shoreham facility without preparing an Environmental Impact Statement ("EIS") on the decommissioning plan. Petitioners allege that an EIS is required under the National Environmental Policy Act ("NEPA"). Furthermore, Petitioners argue that any such EIS must consider resumed full-power operation of Shoreham as an alternative to decommissioning. Accordingly, they argue that the Confirmatory Order violates NEPA and is "arbitrary and capricious." Moreover, they argue that the two proposed license amendments, in addition to being a part of the "scheme" to decommission the plant without proper compliance with NEPA, fail to provide adequate protection of the public health and safety.

III. BACKGROUND

In order to understand the reasons for our decision today, a brief review of the background of this action is appropriate. For several years, the State of New York ("the State") opposed LILCO's application for an operating license for Shoreham. After intense and extensive negotiations, LILCO and the State reached a settlement agreement which was signed on February 28, 1989. Under the agreement, LILCO agreed, *inter alia*, to sell Shoreham to the Long Island Power Authority ("LIPA"), which was created by the New York State Legislature

¹ On June 14, 1990, the Staff issued the security plan amendment. On July 31, 1990, the Staff issued the emergency preparedness amendment together with various exemptions from certain Commission regulations dealing with that issue. Accordingly, any hearings would be post-amendment hearings.

for the express purpose of acquiring either all or a portion of LILCO's assets, including Shoreham. See New York Public Authorities Law § 1020, *et seq.* (McKinney Supp. 1990). The law expressly prohibits LIPA from operating Shoreham. *Id.* §§ 1020-h(9), 1020-t. In return, the State of New York agreed to support a series of rate increases for LILCO and to allow LILCO a tax deduction for a portion of its investment in Shoreham.

The settlement agreement became effective on or about June 28, 1989, when ratified by the LILCO Board of Directors. LILCO has now taken various actions in accordance with the settlement agreement, including agreeing to the Confirmatory Order and seeking the license amendments described above.²

LILCO has removed the nuclear fuel from the Shoreham reactor vessel, along with the in-core instrumentation, core internals, and guide tubes for the control rods, and has drained the reactor vessel. In addition, LILCO has disbanded a portion of its technical staff and begun training the remaining staff for "defueled" operation only. Moreover, LILCO has initiated attempts to sell the nuclear fuel that was used for startup activities and low-power testing to other nuclear utilities. In sum, LILCO gives every appearance of abiding by the settlement agreement.

Furthermore, the State of New York has not indicated any intention to abrogate the settlement agreement. For example, we understand that the State has agreed to, and LILCO has received, various rate increases. We also understand that LILCO has received a tax deduction for loss of the Shoreham facility. Moreover, LILCO and the State have also agreed to hold in abeyance a lawsuit against the Commission challenging our decision to dismiss the State along with Suffolk County and the Town of Southampton from the NRC's Licensing Board proceedings and to grant LILCO an operating license for Shoreham. See *County of Suffolk v. NRC*, Nos. 89-1184 and 89-1185 (D.C. Cir.). See generally CLI-89-2, 29 NRC 211 (1989). All parties in that case agree that the case will in all likelihood become moot with the transfer of Shoreham to LIPA. See Joint Motion to Hold the Case in Abeyance, Nos. 89-1184 and 89-1185 (D.C. Cir., June 26, 1990).

Finally, an intermediate New York State court has recently issued an opinion upholding the legislature's actions and the settlement agreement. See *Citizens for an Orderly Emergency Policy, Inc. v. Cuomo*, No. 59890, and *Dollard v. LILCO*, No. 59962, ___ A.D. 2d ___ (N.Y. App. Div., July 12, 1990).

²LILCO has also sought various exemptions to NRC regulations which Petitioners have not formally challenged before the Commission and, accordingly, are not at issue here.

IV. GOVERNING LAW

The National Environmental Policy Act of 1969 ("NEPA"), 42 U.S.C. § 4321, *et seq.*, as amended, requires all federal agencies, *inter alia*, to include in connection with proposals for "major Federal actions significantly affecting the quality of human environment, a detailed statement . . . on the environmental impact of that action and alternatives to the proposed action," 42 U.S.C. § 4332(2)(C), and "to describe appropriate alternatives to the recommended course of action in any proposal which involves conflicts concerning alternative uses of available resources," 42 U.S.C. § 4332(2)(E). An agency generally fulfills these requirements either by publishing an Environmental Assessment ("EA") determining that there is no significant impact on the environment from the proposed action or by publishing an Environmental Impact Statement ("EIS") describing and analyzing the alternatives.

Basic NEPA principles require that an agency consider "reasonable" alternatives, *NRDC v. Morton*, 458 F.2d 827, 834 (D.C. Cir. 1972). *See also* 40 C.F.R. § 1502.14 (1990). While an agency may not narrow the objectives of the action artificially and thereby circumvent the requirement that relevant alternatives be considered, the range of alternatives need only be "reasonably related" to the scope and goals of the proposed action. *Process Gas Consumers Group v. U.S. Department of Agriculture*, 694 F.2d 728, 769 (2d Cir. 1981). *See also City of New York v. U.S. Department of Transportation*, 715 F.2d 732, 742-43 (2d Cir. 1983). The courts have also pointed out that "there is no need to consider alternatives of speculative feasibility or alternatives which could only be implemented after significant changes in governmental policy or legislation or which require similar alterations of existing restrictions" *NRDC v. Callaway*, 524 F.2d 79, 93 (2d Cir. 1975). *See also City of New York, supra*, 715 F.2d at 743; *Sierra Club v. Lynn*, 502 F.2d 43, 62 (5th Cir. 1974), *cert. denied*, 421 U.S. 994 (1975). Even the expansive reading of the NEPA duty to consider alternatives in *NRDC v. Morton, supra*, was accompanied by the statement that

the need for an overhaul of basic legislation certainly bears on the requirements of the Act. We do not suppose Congress intended an agency to devote itself to extended discussion of the environmental impact of alternatives so remote from reality as to depend on, say, the repeal of the antitrust laws.

Id. at 837.

V. ANALYSIS

A. Definition and Scope of Federal Action

The precise federal actions at issue here are described above. They consist of an order requiring NRC approval prior to return of fuel to the reactor vessel, an amendment approving changes to the Licensee's physical security plan, and an amendment relating to emergency preparedness. It is fair to state that these actions would likely not have been proposed but for LILCO's decision not to operate the facility. But the NRC was not a party to that decision. Under NRC regulations, the NRC must approve of a licensee's decommissioning *plan* (see 10 C.F.R. § 50.82), including consideration of alternative ways whereby decommissioning may be accomplished; but nowhere in our regulations is it contemplated that the NRC would need to approve of a licensee's decision that a plant should not be operated. Indeed, except in highly unusual circumstances not present here (see sections 108, 186(c), and 188 of the Atomic Energy Act), the NRC lacks authority to direct a licensee to operate a licensed facility.

Accordingly, even if we characterize these NRC actions as preparatory to some future NRC decision approving of LILCO's decommissioning *plan*, this is a far cry from characterizing them as preparatory to some future NRC decision approving of LILCO's decision not to operate Shoreham. Thus, this situation is not like *Greene County Planning Board v. FPC*, 455 F.2d 412 (2d Cir. 1972), *cert. denied*, 409 U.S. 849 (1972), where the federal action is approval of a whole nonfederal program, or a federal action is a legal condition precedent to accomplishment of an entire nonfederal project. LILCO is legally entitled under the Atomic Energy Act and our regulations to make, without any NRC approval, an irrevocable decision not to operate Shoreham. The alternative of "resumed operation" — or other methods of generating electricity — are alternatives to the decision not to operate Shoreham and thus are beyond Commission consideration.³

The decision on a *method* for decommissioning a facility — as opposed to the decision *whether* to decommission a facility — is a decision that requires NRC review and approval. Once a licensee decides to seek NRC approval

³At this stage of the process, matters properly within the scope of our responsibility — and which will be the focus of the Commission's attention in this case — include the obligation to ensure that LILCO:

(1) complies with the requirements of its operating license and the regulations applicable to whatever mode or condition the plant might be in a given time (i.e., because the plant is currently defueled, the NRC should ensure that all systems required to ensure plant safety in the defueled mode are maintained in a fully operable status and that an adequate number of properly trained and qualified staff to ensure plant safety in this mode are available); and

(2) refrains from taking any actions that would materially and demonstrably affect the methods or options available for decommissioning or that would substantially increase the costs of decommissioning, prior to the submission and approval of a decommissioning plan in accordance with the requirements of the Commission's decommissioning rules.

of a plan to decommission a facility, our function is to review the plan to ensure that it provides for safe and environmentally sound decommissioning. The "purpose" of such a project, i.e., the purpose of decommissioning, would be to return the facility to a condition that "permits release of the property for unrestricted use . . ." 10 C.F.R. § 50.2 (1990). This purpose determines the scope of the alternatives the NRC must consider. Thus, in considering a proposed decommissioning plan, the NRC need only consider alternatives to the method of decommissioning that the plan proposes.⁴

In summary, the broadest NRC action related to Shoreham decommissioning will be approval of the decision of how that decommissioning will be accomplished. Thus, it follows that NRC need be concerned at present under NEPA only with whether the three actions that are the subject of the hearing requests will prejudice *that* action. Clearly they do not, because they have no prejudicial effect on *how* decommissioning will be accomplished. Therefore, because decommissioning actions are directed solely at ensuring safe and environmentally sound decommissioning, it follows that alternatives to the decision not to operate the plant are beyond the scope of our review and need not be considered under NEPA. See *NRDC v. EPA*, 822 F.2d 104, 126-31 (D.C. Cir. 1987).

B. Rule of Reason

In the alternative, we also find that even if "resumed operation" were an alternative to decommissioning, we would not be required to consider it under the NEPA "rule of reason." *NRDC v. Callaway*, 524 F.2d 79, 92 (2d Cir. 1975). First, LILCO clearly intends to abide by the settlement agreement that it entered with the State of New York. As we noted above, LILCO has taken various steps to comply with that agreement. Obviously, LILCO has determined that it will not operate Shoreham as a nuclear facility. As we noted above, we have no authority to overturn this determination.

Second, the State of New York has also indicated that it vigorously opposes operation of Shoreham. In fact, once LIPA gains control of Shoreham, it would require a reversal of position by both the Governor and the Legislature of the State of New York to allow Shoreham to operate. Furthermore, as noted above, the New York State courts have upheld the settlement agreement. Finally, both LILCO and the State are cooperating to hold in abeyance the lawsuit filed to

⁴In this regard, a recent letter from the Council on Environmental Quality on a related matter misperceives our authority under NEPA. See Letter from Michael R. Deland, Chairman, CEQ, to Chairman Kenneth M. Carr, NRC (October 9, 1990). Because we have no authority to mandate operation of the facility, we have no authority over the decision *whether* to decommission the facility. Instead, the "federal action" in this case is the NRC approval of a *method* of decommissioning a facility. Therefore, if and when a licensee proposes to decommission a facility, the NRC's environmental evaluation will review the proposed *method* of decommissioning and any alternative decommissioning plans.

challenge the NRC's grant of the Shoreham operating license, because both parties appear to agree that Shoreham will never be operated as a nuclear facility.

Taken together, these facts appear to us to indicate that "resumed operation" of Shoreham as a nuclear facility would require "significant changes in governmental policy or legislation," *NRDC v. Callaway, supra*, or the "overhaul of basic legislation," *NRDC v. Morton, supra*, which the courts have ruled place an alternative outside the scope of what the "rule of reason" requires an agency to consider as a part of an EIS. Accordingly, we find that "resumed operation" of Shoreham as a nuclear facility is not a "reasonable alternative" under the "rule of reason" established by the courts in interpreting NEPA. *NRDC v. Morton, supra; City of New York v. U.S. DOT, supra; NRDC v. Callaway, supra.*

VI. CONCLUSION

We conclude that the NRC Staff need not file an EA or an EIS reviewing and analyzing "resumed operation" of Shoreham as a nuclear power plant as an alternative under NEPA. We make no other conclusions either regarding the need for an EIS in decommissioning situations in general or with respect to Shoreham in particular or regarding what alternatives such an EA or EIS must consider. Likewise, we reach no other conclusions regarding the hearing requests that this Order transmits to the Licensing Board.

These petitions are forwarded to the Licensing Board for further proceedings not inconsistent with this Order.

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

Dated at Rockville, Maryland,
this 17th day of October 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kenneth M. Carr, Chairman
Kenneth C. Rogers
James R. Curtiss
Forrest J. Remick

Docket No. PR 90-1-MISC
(Amendment No. 1 to
Section 274 Agreement
Between NRC and Illinois)

STATE OF ILLINOIS

October 17, 1990

The Commission denies Kerr-McGee's motion for a full adjudicatory hearing on Illinois' proposed standards for the regulation of section 11e(2) byproduct material prior to amendment of the NRC/Illinois agreement to allow the State to assume regulatory authority over that material. The Commission believes that, before turning over that authority to Illinois, it is required only to assess the general standards put forward by the State without an adjudicatory application of those standards to the specific sites involved. However, the Commission also holds that if the State seeks to adopt alternatives to Commission requirements for disposal of the materials at the West Chicago site, the Commission will determine, after notice and opportunity for a hearing, whether the State's alternatives will achieve a level of protection to safety and the environment equivalent to or more stringent than the level achieved by Commission standards.

ATOMIC ENERGY ACT: SECTION 274o

The hearing requirements of the last paragraph of section 274o of the Act are triggered both when a state brings forward proposed general alternatives to Commission requirements for the regulation of section 11e(2) byproduct

material, and when a state brings forward site-specific alternatives to such Commission requirements.

ATOMIC ENERGY ACT: SECTION 274o

Notice and comment procedures are sufficient for the purpose of assessing a state's general alternatives to Commission requirements for the regulation of section 11e(2) byproduct material, and those procedures satisfy section 274o's hearing requirement with regard to the NRC's approval of the state's general standards and program. *See Siegel v. AEC*, 400 F.2d 778 (D.C. Cir. 1968).

ATOMIC ENERGY ACT: SECTION 274o

The Commission believes that it is required only to make a quasi-legislative judgment under section 274o on whether the generic standards within a state's program will, in general and without reference to a particular site or licensee, lead to a level of stabilization and containment of the sites concerned, and a level of protection for public health and the environment, equivalent to, to the extent practicable, or more stringent than the level that would be achieved by the Commission's standards.

ATOMIC ENERGY ACT: SECTION 274o

In addition to its obligation to assess a state's general standards, the Commission also has the very important obligation to ensure that a state's application of standards that differ from those established by the Commission also achieves a level of stabilization and containment of particular sites, and a level of protection of public health and the environment, equivalent to, to the extent practicable, or greater than, the level that would be achieved by the Commission's standards.

MEMORANDUM AND ORDER

I. INTRODUCTION

On March 28, 1990, the NRC issued a notice of a proposed amendment to the agreement that it had entered into with the State of Illinois in 1987 for State assumption of regulatory authority over specified radioactive materials. *See* 55 Fed. Reg. 11,459 (Mar. 28, 1990). The amended agreement would empower Illinois to regulate uranium and thorium mill tailings under the Uranium Mill

Tailings Radiation Control Act (UMTRCA), as amended, codified in scattered sections of 42 U.S.C.

The Kerr-McGee Chemical Corporation holds an NRC license for the West Chicago Rare Earths Facility, an Illinois site that contains a large quantity of thorium mill tailings. Kerr-McGee's license was recently amended by NRC Staff to authorize the company to dispose of the tailings on site in an earthen cell, but the amendment was contested and no final NRC action on it has yet been taken. *See Kerr-McGee Chemical Corp. (West Chicago Rare Earths Facility)*, LBP-90-9, 31 NRC 150 (1990). In addition to filing comments on the proposed amendment, together with a request for oral argument on the proposed amendment, Kerr-McGee filed a motion on April 27, 1990 requesting that the Commission comply with section 274o of the Atomic Energy Act (AEA) which Kerr-McGee reads to require a full adjudicatory hearing before deciding whether to amend the agreement with Illinois.

For the reasons given below, the Commission is denying both Kerr-McGee's motion and its request for oral argument on the proposed amendment.

II. BACKGROUND

Section 274 of the AEA empowers the Commission to enter into an agreement with a state whereby the state exercises regulatory authority over specified nuclear materials in lieu of the NRC. *See* 42 U.S.C. § 2021b and c. Before the agency can transfer any of its authority, it must find

that the State program is in accordance with the requirements of subsection o. [in cases where the State would regulate mill tailings] and in all other respects compatible with the Commission's program for the regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement.

42 U.S.C. § 2021d(2). Section 274 also empowers the Commission to

terminate or suspend all or part of its agreement with the State and reassert . . . regulatory authority . . . if the Commission finds that (1) such termination or suspension is required to protect the public health and safety, or (2) the State has not complied with one or more of the requirements of this section.

See 42 U.S.C. § 2021j(1).

Illinois and the NRC entered into a section 274 agreement in 1987. *See* 52 Fed. Reg. 22,864 (June 16, 1987). However, under that agreement, Illinois cannot exercise regulatory authority over mill tailings, or "byproduct" material as defined in section 11e(2) of the AEA (42 U.S.C. § 2014e(2)). Illinois now seeks to have the agreement amended so that the State can exercise such authority.

The State has adopted standards for the regulation of section 11e(2) byproduct material which differ in some respects from the Commission's standards for such material. Section 274o explicitly provides that, for the regulation of section 11e(2) byproduct material, the State may adopt alternatives (including site-specific alternatives) to the requirements adopted and enforced by the Commission for the same purpose. 42 U.S.C. § 2021o(2).

However, a state may adopt different 11e(2) byproduct material standards only

if, after notice and opportunity for public hearing the Commission determines that such alternatives will achieve [(1)] a level of stabilization and containment of the sites concerned, and [(2)] a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with such sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by standards and requirements adopted and enforced by the Commission for the same purpose

42 U.S.C. § 2021o (last paragraph).

On March 28, 1990, the NRC Staff published for comment its assessment of Illinois' program for the regulation of 11e(2) byproduct material. See 55 Fed. Reg. 11,459 (Mar. 28, 1990). As required by section 274o, the Staff reviewed those regulations of Illinois that differed from the NRC's. *Id.* at 11,462, col. 2. Considering the standards one by one, the Staff concluded that the differing regulations in a general sense (i.e., without reference or application to a specific site or licensee) were equivalent to, or more stringent than, the NRC's corresponding standards, *id.* at 11,462, col. 2, to 11,463, col. 1.

The Commission is today approving the amendment to the Illinois agreement. In doing so, the Commission is approving the Staff's final analysis of Illinois' generic program for regulation of 11e(2) byproduct material, including its analysis of areas where Illinois' program is more stringent. However, as this analysis makes clear:

The Staff is finding several of the sections discussed above [in the analysis] more stringent and in accord with section 274o of the Act only for the purpose of finding the Illinois program adequate, compatible and in compliance with statutory requirements so that authority may be relinquished lawfully to the State. In making the findings, NRC Staff expressed a programmatic judgment that, in the majority of reasonably foreseeable circumstances, the sections would achieve a level of stabilization and containment, and a level of protection of the public health, safety, and the environment from radiological and nonradiological hazards, which is equivalent to, to the extent practicable, or more stringent than the level that must be achieved by NRC's and EPA's requirements. The Staff offers no opinion whether, as applied to any particular site, the findings required by the last paragraph of section 274o can necessarily be made.

At the present time, Kerr-McGee is the only 11e(2) byproduct material licensee in Illinois. Moreover, the NRC Staff only recently amended Kerr-

McGee's license to permit permanent onsite disposal of the tailings at the company's West Chicago Rare Earths Facility. The NRC Staff had concluded that Kerr-McGee's proposed method of disposal, with certain modifications, "would have the smallest overall health effects" of all the methods the Staff had considered. See NUREG-0904, Suppl. No. 1, "Supplement to the Final Environmental Statement Related to the Decommissioning of the Rare Earths Facility, West Chicago, Illinois," April 1989, at 1-19. Illinois opposes permanent onsite disposal. The amendment was contested. While the NRC Staff has reaffirmed its position, conditioned on the incorporation into the license amendment of certain design details provided by Kerr-McGee in July 1990, no final agency action has been taken on the license amendment.

In addition to voluminous comments on Illinois' program for 11e(2) byproduct material and the Staff's assessment of that program, Kerr-McGee filed a motion on April 27, 1990, calling on the NRC to comply with the last paragraph of section 274o by holding a full adjudicatory hearing — before deciding whether to amend the agreement with Illinois — to determine whether, as applied to permanent disposal of the West Chicago tailings, Illinois' differing standards in fact achieved a level of protection of the public and the environment at least as high as that achieved by the onsite disposal program authorized by Kerr-McGee's license. Kerr-McGee requests that the Commission issue now a notice for an opportunity for such a hearing, or at least hold the hearing.

III. THE POSITIONS OF KERR-McGEE AND ILLINOIS

Kerr-McGee argues first that the Commission must hold a hearing before amending the agreement with Illinois because section 274d(2), quoted above, requires that the Commission find compliance with section 274o before entering into an agreement for regulation of 11e(2) byproduct material, and the last paragraph of section 274o in turn requires that a state's differing standards be assessed not in the abstract but rather with respect to the "sites concerned," in the words of the statute.

Kerr-McGee argues second that the "public hearing" required by the last paragraph of section 274o must be a formal adjudicatory hearing because assessing Illinois' alternative standards with respect to the one "site concerned" will necessarily involve factual disputes that will require formal adjudication to resolve properly. Kerr-McGee acknowledges in its hearing request that the State's differing standards are "more stringent in some respects than the NRC standards" but asserts that, paradoxically, an adjudicatory assessment of these standards would show that application of them to disposal of the West Chicago tailings would have a greater adverse impact on health, safety, and the environment than would the authorized program for onsite disposal.

In response, Illinois argues first that the provisions in the last paragraph of section 274o for notice and opportunity for a public hearing apply only after a state acquires regulatory authority of 11e(2) byproduct material. Illinois claims that those provisions are triggered only by a state's act of implementation with regard to an "identifiable area," but that the state regulations the NRC has assessed in considering Illinois' application for mill tailings authority are not tailored to a particular site but rather to all possible sites, present and future. Illinois believes that the hearing provisions of the last paragraph of section 274o were not intended to be yet another hurdle for a state to clear on the way to acquiring regulatory authority over 11e(2) byproduct material.

Illinois argues in the alternative that if the hearing provisions of section 274o have been triggered merely by Illinois' having proposed for the NRC Staff's consideration general standards that differ from the NRC's corresponding standards, then the notice and comment procedures that the NRC has employed with respect to the proposed amendment to its agreement with Illinois constitute the "public hearing" required by the last paragraph of section 274o, just as notice and comment procedures are sufficient to satisfy the requirement in section 189a of the AEA that there be a hearing in connection with the issuance or modification of rules and regulations. Illinois claims that if Congress had wanted a formal adjudication on a state's differing standards for 11e(2) byproduct material, it would have said so, as it did when, in another part of section 274o, it explicitly required states exercising 11e(2) authority to provide their licensees "a public hearing, with a transcript, . . . an opportunity for cross-examination, and . . . a written determination . . . based upon the evidence . . . and . . . subject to judicial review." See 42 U.S.C. § 2021o(3)(A). According to Illinois, its differing standards raise no factual dispute that would require resolution by adjudication: The question of whether Illinois has an adequate program for the regulation of mill tailings is, for Illinois, distinct from the question of the fate of the tailings at the West Chicago site.

IV. DISCUSSION

The Commission agrees with Kerr-McGee that the hearing requirements of the last paragraph of section 274o are triggered by Illinois' bringing forward general standards as well as site-specific alternatives. This much seems clear from the plain language of the statute. However, the Commission also agrees with Illinois that notice and comment procedures are sufficient for the purpose of assessing the State's general standards and satisfy the hearing requirement of section 274o with regard to the NRC's approval of the State's general standards

and program.¹ See *Siegel v. AEC*, 400 F.2d 778 (D.C. Cir. 1968). In reviewing the Illinois program, we believe that we are required only to make a quasi-legislative judgment under section 274o on whether the generic standards within the program will, in general and without reference to a particular site or licensee, lead to a level of stabilization and containment and a level of protection for public health and the environment equivalent to, to the extent practicable, or more stringent than the level that would be achieved by the Commission's standards. Consistent with this view of what the statute requires, the Commission is today reaching a final decision on entering into the amended agreement with Illinois and endorsing, as a rationale for that decision, Staff's proposed assessment of March 28, 1990, as supplemented by the Staff's analysis in SECY-90-253 and SECY-90-253A.

Kerr-McGee believes that we cannot assess a general standard without an adjudicatory application of that standard to the "sites concerned." We disagree. We believe that we are required only to make the quasi-legislative judgment discussed above for purposes of amending our agreement with the State of Illinois to relinquish our authority over 11e(2) byproduct material.

To subject every state proposal for a different standard to a formal adjudication would, where a state had a number of potentially affected sites, entail exhaustive licensee and site-specific hearings before any transfer of 11e(2) authority. The West Chicago site may be the only 11e(2) site in Illinois now, but we hesitate to presume what the future may yield. Moreover, section 274o applies to other states, and we cannot endorse an interpretation of that section that could prove generally unsound and unworkable for future agreements. Before relinquishing some of our authority over 11e(2) byproduct material, we should make programmatic judgments about the general standards that the State has proposed. It would be as much a mistake to approve the program because it could lead to sound results in a single case as it would be to disapprove the whole program because it could lead to unsound results in a single case.

In addition to its obligation to assess a state's general standards, the Commission also has the very important obligation to ensure that a state's application of standards that differ from those established by the Commission also achieves a level of stabilization and containment of particular sites, and a level of protection of public health and the environment, equivalent to, to the extent practicable, or greater than, the level that would be achieved by the Commission's standards. This latter obligation is quite distinct from the former, because it is not infrequent in the law that a body of general standards each of which is sound in the abstract may, when applied singly or together to a particular case, yield unsound results. We believe that this site-specific obligation will arise only later if and

¹For this reason, we are denying Kerr-McGee's request for oral argument on the proposed amendment to the agreement with Illinois.

when Illinois, having acquired authority over 11e(2) byproduct material, seeks to impose standards that differ from the Commission's own standards.

V. CONCLUSION

Kerr-McGee's request for oral argument on the proposed amendment to the Commission's agreement with Illinois, and Kerr-McGee's motion that a formal adjudication on Illinois' differing 11e(2) standards be held before the Commission decides whether to amend its agreement with Illinois, are denied. However, if the State seeks to adopt alternatives to any requirements adopted and enforced by the Commission for disposal of the materials at the West Chicago site, the Commission will determine, after notice and opportunity for a hearing, whether the State's alternatives will achieve a level of stabilization and containment of the West Chicago site, and a level of protection for public health, safety, and the environment from both radiological and nonradiological hazards associated with the site, which is equivalent to, to the extent practicable, or more stringent than, the level that would be achieved by any requirements adopted and enforced by the Commission for disposal of the materials at the West Chicago site.

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

Dated at Rockville, Maryland,
this 17th day of October 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kenneth M. Carr, Chairman
Kenneth C. Rogers
James R. Curtiss
Forrest J. Remick

In the Matter of

Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency Planning)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

October 26, 1990

The Commission denies Intervenor's Emergency Motion to Reopen the Record on the Adequacy of the Staffing of the NHRERP and for Immediate Shutdown, concluding that the request fails for lack of a showing of an actual safety problem to support reopening a closed record or plant shutdown.

**RULES OF PRACTICE: MOTIONS TO REOPEN RECORD;
REOPENING OF RECORD (SATISFACTION OF REQUIREMENTS;
BURDEN OF MOVANT; SIGNIFICANT SAFETY ISSUE;
TIMELINESS)**

Proponents of a reopening motion bear the burden of meeting all of the following requirements: (1) the motion must be timely, except that an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented; (2) it must address a significant safety or environmental issue; and (3) it must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially. 10 C.F.R. § 2.734.

RULES OF PRACTICE: REOPENING OF RECORD (SIGNIFICANT SAFETY ISSUE)

The request for reopening fails for a lack of showing of an actual safety problem.

RULES OF PRACTICE: MOTIONS TO REOPEN RECORD; REOPENING OF RECORD (TIMELINESS)

Absent exceptional circumstances, new letters or expressions of concern opposing a license which are not themselves *promptly* developed on new information cannot open anew an opportunity for a timely reopening motion. To permit otherwise would open a door to abuse and prolong further already overlong proceedings.

RULES OF PRACTICE: REOPENING OF RECORD (SIGNIFICANT SAFETY ISSUES)

Speculation about future effects of budget curtailments or freezes does not satisfy the Commission's reopening requirement that a significant safety issue must be addressed.

RULES OF PRACTICE: REOPENING OF RECORD (SIGNIFICANT SAFETY ISSUES)

Because this matter as presented is devoid of safety significance, the Commission sees no likelihood whatsoever — let alone a demonstration — that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

ORDER

The Commission decides today yet another in a series of reopening and "emergency" motions filed before it or its adjudicatory boards in the Seabrook nuclear facility operating license proceeding. The evidentiary record in *Seabrook* has long been closed save for remanded matters, and the Seabrook reactor is in commercial operation. The instant motion, styled "Intervenors' Emergency Motion to Reopen the Record on the Adequacy of the Staffing of the NHRERP and for Immediate Shutdown" claims that further evidentiary hearings are required with regard to allegedly inadequate staffing for the New Hampshire

Radiological Emergency Response Plan (NHRERP) and seeks an immediate shutdown of the reactor due to the alleged inadequacy. We conclude that the request fails for lack of a showing of an actual safety problem to support reopening a closed record or plant shutdown.

The Intervenor's motion,¹ dated August 7, 1990 — 9 months after the Licensing Board authorized issuance of a full-power license, is based on allegations by Mr. Michael C. Sinclair, an emergency planning consultant formerly employed by Applicants. The allegations appear in an affidavit executed by him on August 6, 1990. The essence of that affidavit is that since completing his work in 1989 to update Seabrook staffing rosters and based chiefly on his conversations with government officials, Mr. Sinclair has come to believe that staffing levels for the New Hampshire emergency response have fallen significantly. In his view, the extent of vacant positions is so unacceptably large as to prevent a current finding that the New Hampshire emergency plan would provide adequate protection for the public health and safety.²

Intervenor's motion was answered by the Applicants and NRC Staff who each opposed it. Both the Applicants and Staff provided affidavits by cognizant officials who attested to a current vacancy roster of three positions.³ In an affidavit provided by FEMA on August 21, 1990, in response to the Staff's inquiry and included by the Staff in its August 22 answer to Intervenor's motion, the responding FEMA official concluded that "the small number of vacancies that existed [in New Hampshire emergency plan staffing] did not affect the State's ability to staff and implement the NHRERP." Affidavit of Richard W. Donovan, dated August 21, 1990, ¶ 8. FEMA also separately reported to Staff by memorandum of August 21, 1990 (attached to Staff Response).

By letter dated August 29, 1990, counsel for Seacoast Anti-Pollution League advised that Intervenor would file a further affidavit in response to the Licensees' and Staff's affidavits. The supplemental affidavit of Mr. Sinclair, dated

¹ In this order the term Intervenor refers to the Attorney General of the Commonwealth of Massachusetts, the New England Coalition on Nuclear Pollution and the Seacoast Anti-Pollution League whose joint motion is before us and whose intervention has been the most active in this licensing matter.

² Intervenor's claim a violation of a specific condition imposed by the Licensing Board as a precondition of licensing. The Licensing Board required that:

(a) The Director of Nuclear Reactor Regulation, in consultation with the Federal Emergency Management Agency, shall confirm that the State of New Hampshire has provided for FEMA review satisfactory personnel rosters and call lists of compensatory plan and reception center emergency workers, as discussed in § 5.

LBP-88-32, 28 NRC 667, 804 (1988). That condition was met, as required, before license issuance.

³ On August 16, 1990, Mr. George L. Iverson, Director of the New Hampshire Office of Emergency Management, attested to three vacancies as of August 15. By a later affidavit, dated August 21, Mr. Iverson modified that statement to include an additional vacancy for a total of four vacancies as of August 15. FEMA's report by Region I Director Richard H. Strome acknowledged three vacancies, noting that a fourth vacancy, the position of Health Officer in the Town of Exeter, was filled on the afternoon of August 16, 1990, apparently unknown to Mr. Iverson when he submitted his affidavit of that date. See Memorandum from Richard H. Strome to Grant C. Peterson, Associate Director, NRC State and Local Programs and Support, dated August 21, 1990.

September 7, 1990, was filed under cover of a motion to accept it for filing. The cover motion characterized the supplemental affidavit as clarifying that the affidavits filed by Staff and the Applicants "do not support a finding of reasonable assurance that adequate protective measures can be taken, in regard to implementation of the NHRERP." The Sinclair supplemental affidavit was critical of the Staff and Applicants' affidavits for having failed to deal with the adequacy of training of the staffing resources. The affidavit itself also expressed concerns about the effect of New Hampshire employment freezes on future staffing levels and espoused the view that reasonable assurance that public health and safety will be protected only when federal regulations mandate the perpetual maintenance of a fixed level of trained emergency personnel response capability. Applicants filed a supplemental affidavit of Mr. George L. Iverson, dated September 24, 1990.⁴

The Commission considered all of these papers in reaching its decision.

DECISION

1. At the outset, there is doubt whether we need entertain this motion to reopen⁵ — coming as it does significantly after a license has issued and after resolution of any contentions on the adequacy of staffing for the New Hampshire plan had achieved administrative finality.⁶ See CLI-90-3, 31 NRC 219, 256 (1990). Because the motion, when considered in conjunction with all of the submittals of the parties, so clearly fails at least two of the three criteria required to obtain reopening of a closed record, we address the reopening criteria directly rather than the threshold issue that has not been fully briefed by the parties.

2. Litigants here have been made well aware that proponents of a reopening motion bear the burden of meeting all of the following requirements:

- (1) The motion must be timely, except that an exceptionally grave issue may be considered in the discretion of the presiding officer even if untimely presented.
- (2) The motion must address a significant safety or environmental issue.
- (3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.

10 C.F.R. § 2.734.

⁴ On September 27, 1990, the NRC Staff filed its "Response to Intervenor's Motion to File Supplemental Affidavit in Support of Emergency Motion to Reopen the Record." The response discussed the supplemental affidavits of the other parties, but sponsored no further affidavit on the Staff's behalf.

⁵ The motion is before us because Intervenor themselves apparently concluded that no jurisdiction lay before our subordinate boards to consider this matter. There are, of course, avenues to seek consideration of significant safety concerns other than the route of adjudicatory hearings. See, e.g., 10 C.F.R. § 2.206.

⁶ The Licensing Board's findings on the adequacy of NHRERP personnel resources were affirmed by the Appeal Board in ALAB-932, 31 NRC 371, 380-90 (1990), *Commission review declined* (July 12, 1990).

a. If we are to consider the proper base date for judging timeliness to be the date upon which Mr. Sinclair first made known his concerns on the record of this proceeding, we agree that the motion would be timely. However, Applicants have suggested that timeliness should be judged from the time of public knowledge of the root-cause budget cuts and employment freeze that underlie Mr. Sinclair's concerns. Applicants suggest that the Intervenor was then on notice of sufficient facts to alert them to raise earlier any issue of staffing deficiencies resulting from such cuts. Because we decide the remaining two criteria against Intervenor, we need not and do not resolve the issue raised by Applicants. However, we note as future guidance that, absent exceptional circumstances,⁷ new letters or expressions of concern opposing a license, which are not themselves *promptly* developed on new information, cannot open anew an opportunity for a timely reopening motion. To permit otherwise would open a door to abuse and prolong further our already overlong proceedings.⁸

b. With respect to safety significance, the short answer is that according to the affidavit of Mr. George L. Iverson, Director of the New Hampshire Office of Emergency Management "as of August 15, 1990, there are [4] vacancies in the 1263 positions needed to staff the NHRERP."⁹ That number hardly signals a deficiency with significant safety implications.¹⁰

In addition, FEMA has concluded that "the small number of vacancies that existed did not affect the State's ability to staff and implement the NHRERP." Affidavit of Donovan, ¶ 8. FEMA's views carry great weight and are rebuttably presumed correct in our emergency planning proceedings. See 10 C.F.R. § 50.47(a)(2). We agree with the Applicants and the Staff that Mr. Sinclair's belief and understanding of what he was told by cognizant officials as well as his conjecture on the implications of that information cannot stand against the affidavits of the same officials or others with first-hand knowledge and expertise. Thus, we find that the motion to reopen does not present a question of safety significance.

Apparently recognizing the weight of the evidence contrary to the claims in his first affidavit, in his latest affidavit Mr. Sinclair attempts to shift his emphasis from staffing numbers to uncertainties about training. While his first affidavit mentioned training, Mr. Sinclair did not there develop that theme so as

⁷ See 10 C.F.R. § 2.734(a)(1).

⁸ Other means to pursue safety concerns than litigation are of course open without limitation as to "timeliness."

⁹ Affidavit of George Iverson dated August 16, 1990. Bracketed material is in accordance with Mr. Iverson's affidavit dated August 21. See note 3 *supra*. Mr. Iverson's fact-specific affidavit is particularly significant in light of Mr. Sinclair's less-specific conclusions based on his recollection of Mr. Iverson's alleged statements and alleged agreement with Mr. Sinclair's speculation about possible future reductions in staffing. See, e.g., Affidavit of Sinclair, dated August 6, ¶ 8.

¹⁰ It should be abundantly clear that such figures or even the earlier figures of 22 vacancies (less than 2%) would not provide the predicate for an immediate shutdown, and we deny Intervenor's motion for such an order. Some minimal turnover is to be expected and is acceptable in both the public and the private sectors.

to have placed the parties on notice that they should reply to it. Mr. Sinclair's supplemental affidavit did not provide a sufficient factual basis for his training concerns to cause us to seek the responses of the Licensees or the Staff,¹¹ and is certainly not sufficient to find that there is an actual safety problem concerning training which needs to be addressed. Speculation about future effects of budget curtailments or freezes such as provided by Mr. Sinclair does not satisfy the Commission's reopening requirement that a significant safety issue must be addressed. It also does not warrant emergency action.

c. Because this matter as presented is devoid of safety significance, we see no likelihood whatsoever — let alone a demonstration — that a materially different result would be or would have been likely had the newly proffered evidence been considered initially. Accordingly, the third factor counts against Intervenor as well.

3. It remains only for us to add that Mr. Sinclair's final comments, linking a lack of assurance of protection for the public to the absence of a more rigid regulatory mandate, suggest his dissatisfaction with the current state of the regulations and a tacit admission that, as the regulations now stand, there are no grounds for an enforcement action against the Applicants. Mr. Sinclair's recourse, if any, lies in rulemaking — not in extending the Seabrook hearing. However, without deciding, it appears to us unlikely that the Commission will agree to propose a rule so unrealistic as not to allow for reasonably expectable personnel change and turnover.

Intervenor's motion is denied.

Commissioner Curtiss did not participate in this matter; Commissioner Remick abstained in this matter.

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

Dated at Rockville, Maryland,
this 26th day of October 1990.

¹¹Nonetheless, Applicants have provided a supplemental affidavit for Mr. Iverson dated September 24, 1990. The affidavit answers some confusion or questions posed by Mr. Sinclair's supplemental affidavit. We accept Mr. Iverson's supplemental affidavit for the record; however, we need not discuss it as Mr. Sinclair's supplemental affidavit standing alone had not provided information of sufficient weight to show a significant safety issue.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

Thomas S. Moore, Chairman
Howard A. Wilber
G. Paul Bollwerk, III

In the Matter of

Docket Nos. 50-443-OL-1
50-444-OL-1
(Low-Power Testing)

**PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.***
(Seabrook Station, Units 1
and 2)

October 18, 1990

The Appeal Board affirms the Licensing Board's decision in LBP-89-28, 30 NRC 271 (1989), denying intervenors' motions to admit into the full-power proceeding late-filed contentions or, in the alternative, to reopen the record based on low-power testing events.

OPERATING LICENSE(S): LOW-POWER LICENSE

Section 50.57(c) of 10 C.F.R. permits the grant of a low-power license upon the successful resolution of all issues relevant to low-power operation, even though other issues germane to full-power operation remain to be resolved in an ongoing licensing proceeding.

OPERATING LICENSE(S): LOW-POWER LICENSE

The term “low-power license” is generally understood to mean an operating license authorizing low-power testing up to five percent of rated power. *See* 10 C.F.R. §§ 2.764(f)(2)(i),(iii), 50.47(d); *id.* Part 50, Appendix E, § IV.F.1.

OPERATING LICENSE(S): FULL-POWER LICENSE

A “full power license” generally authorizes operation up to and including the full thermal power rating of a facility. The term is used in instances when the facility has received a separate low-power license, otherwise the term “operating license” is understood to mean a full-power license.

OPERATING LICENSE(S): LOW-POWER LICENSE

Because testing a commercial nuclear reactor at any power level necessarily involves operating the plant or, in the words of section 101 of the Atomic Energy Act, entails the “use” of a “utilization” facility, low-power testing can be conducted only after the Commission grants an applicant a license to operate the plant. *See* 42 U.S.C. § 2131.

ATOMIC ENERGY ACT: HEARING RIGHT

Under section 189a of the Atomic Energy Act (AEA), intervenor hearing rights attach only to a proceeding for the granting of an initial operating license. 42 U.S.C. § 2239a. The AEA affords no intervenor hearing rights relative to activities occurring as a consequence of facility operation undertaken pursuant to such a license, including low-power testing.

OPERATING LICENSE(S): FULL-POWER LICENSE

While low power-testing is material to the operation of a facility, such testing performed under the authority of a full-power license is not material to the *granting* of a full-power license.

ATOMIC ENERGY ACT: HEARING RIGHT

Low-power and power-ascension testing are matters of license compliance, not initial licensure, and therefore, no intervenor hearing rights accompany a licensee’s performance of such tests.

ATOMIC ENERGY ACT: HEARING RIGHT

OPERATING LICENSE(S): LOW-POWER LICENSE

In order to comply with the hearing rights provision of section 189a of the Atomic Energy Act, the low-power license can be granted only after all issues in the contested adjudicatory proceeding relevant to low-power testing authorization have been heard and decided by a Licensing Board. *See* 10 C.F.R. § 50.57(c).

OPERATING LICENSE(S): FULL-POWER LICENSE

Nothing in the agency's regulations dictates that low-power testing need be completed successfully as a precondition to the grant of a full-power license in order to meet the minimum regulatory requirements for a full-power license.

ENFORCEMENT ACTIONS: FORMAL PROCEEDINGS

The NRC's formal enforcement sanctions, which include notices of violations, civil penalties, and various orders such as license revocation or suspension orders, require prescribed notice and hearing procedures. *See* 10 C.F.R. Part 2, Appendix C, § II; *id.* §§ 2.201-205. In addition, NRC employs less formal administrative mechanisms, such as confirmatory action letters, to supplement its enforcement program. *See id.* Part 2, Appendix C, § V.H.

OPERATING LICENSE(S): FULL-POWER LICENSE

ENFORCEMENT ACTIONS: SCOPE OF PROCEEDINGS

An enforcement action concerning low-power testing authorized by a previously granted low-power license, is independent of, and immaterial to, any subsequent Commission licensing determination that applicants met all regulatory requirements for a full-power license.

OPERATING LICENSE(S): CRITERIA FOR ISSUANCE

PREOPERATIONAL TESTING: PURPOSE

As its name connotes, preoperational testing is conducted as part of the construction process for the plant pursuant to 10 C.F.R. § 50.56 before an operating license for the facility is issued. Such testing does not involve the "use" of the facility within the meaning of section 101 of the Atomic Energy Act and hence does not require an operating license.

OPERATING LICENSE PROCEEDINGS: ISSUES FOR CONSIDERATION

NRC cannot generically exclude from operating license hearings issues that its own regulations make material to the licensing decision. *See Union of Concerned Scientists v. NRC*, 735 F.2d 1437 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1132 (1985).

RULES OF PRACTICE: REOPENING OF RECORD

A motion to reopen the record must satisfy each of the following criteria: (1) it must be timely, (2) it must address a significant safety issue, and (3) it must demonstrate that a materially different result would have been likely. 10 C.F.R. § 2.734(a).

RULES OF PRACTICE: REOPENING OF RECORD (SATISFACTION OF REQUIREMENTS; BURDEN ON MOVANT)

“[T]o justify the granting of a motion to reopen the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition.” *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973).

RULES OF PRACTICE: REOPENING OF RECORD (SIGNIFICANT SAFETY ISSUE)

The most important of the three criteria for reopening the record is the raising of a significant safety issue. *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-834, 23 NRC 263, 264 (1986).

RULES OF PRACTICE: REOPENING OF RECORD (SIGNIFICANT SAFETY ISSUE)

In the context of a claimed violation of the Commission’s quality assurance regulations, “[f]or new evidence to raise a significant safety issue” for purposes of reopening the record, it must establish either that uncorrected . . . errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant’s capability of being operated safely.” *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1345 (1983). *See also Union Electric Co.* (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983).

APPEARANCES

John Traficonte, Boston, Massachusetts (Matthew T. Brock, Boston, Massachusetts, was on the brief), for the intervenors, James M. Shannon, Attorney General of Massachusetts, New England Coalition on Nuclear Pollution, and Seacoast Anti-Pollution League.

Thomas G. Dignan, Jr., Boston, Massachusetts (with whom George H. Lewald, Jeffrey P. Trout, Jay Bradford Smith, Geoffrey C. Cook, and William L. Parker, Boston, Massachusetts, were on the brief), for the applicants Public Service Company of New Hampshire, *et al.*

Richard G. Bachmann for the Nuclear Regulatory Commission staff.

MEMORANDUM AND ORDER

While the hotly contested full-power operating license proceeding for the Seabrook facility inched forward, the applicants sought, and eventually received, a low-power testing license for the completed plant pursuant to 10 C.F.R. § 50.57(c). That section permits the grant of such a license upon the successful resolution of all issues relevant to low-power operation, even though other issues germane to full-power operation remain to be resolved in the still ongoing licensing proceeding. After receiving a low-power license, the applicants initiated their testing program at the time the full-power proceeding was drawing to a close.¹ At the conclusion of the low-power testing program, the applicants also conducted a natural circulation test that went awry and was not completed under the authority of the low-power license. The events surrounding this incident formed the foundation for several motions filed jointly by the Massachusetts Attorney General, the Seacoast Anti-Pollution League, and the New England Coalition on Nuclear Pollution ("intervenors") to admit into the full-power proceeding late-filed contentions or, alternatively, to reopen the record.

¹The terms "low-power license" and "full-power license" are not used in the Commission's regulations. They are words of art employed in the lexicon of the licensing process to distinguish two types of operating licenses. Although the regulations are not completely consistent in describing a low-power license, it is generally understood to mean an operating license authorizing low-power testing up to five percent of rated power. See 10 C.F.R. §§ 2.764(f)(2)(i),(iii), 50.47(d); *id.* Part 50, Appendix E, § IV.F.1. *But see* 10 C.F.R. § 50.57(c) ("an operating license authorizing low-power testing (operation at not more than 1 percent of full power for the purpose of testing the facility), and further operations short of full power operation"). On the other hand, a full-power license generally authorizes operation up to and including the full thermal power rating of the facility. The latter term is only used in instances when the facility in question has received a separate low-power license. If no low-power license is involved, the term operating license is understood to mean a full-power license.

The Licensing Board denied the intervenors' motions,² an action the intervenors now appeal. For the reasons that follow, we affirm the result reached by the Licensing Board.

I.

The events that triggered the intervenors' motions are set forth in the Licensing Board's memorandum and need not be repeated fully here.³ It suffices to note that, while the applicants were conducting the natural circulation test, a steam dump valve failed in the open position causing the pressurizer water level to drop below the seventeen percent level at which the applicable test procedure required a manual trip to shut down the reactor. From the time the pressurizer level fell below this point, the applicants' operators waited seven minutes before tripping the reactor, even though NRC personnel monitoring the test brought the water level of the pressurizer to the operators' attention on at least two occasions. When the applicants' operators finally ordered the manual trip, it was not in response to the pressurizer water level, but rather in response to an approaching pressure trip criterion.

After the incident, the applicants' operating personnel, led by its Vice President—Nuclear Production, participated in a conference telephone call with the NRC's onsite inspectors and the agency's regional office staff. The applicants then asserted what they now concede was an unwarranted defense of their actions and omissions, claiming their actions were more conservative than otherwise would have resulted from strict adherence to test procedures and that their then-existing policy for following those procedures was adequate. The applicants also proposed to the agency that reactor restart occur in parallel with an evaluation of the event; however, when NRC personnel expressed concern over this proposal, the applicants agreed not to restart the reactor without NRC concurrence. After a second telephone call between the applicants and the agency on the following day, the NRC issued a confirmatory action letter (CAL) to the applicants. This letter confirmed the agency's understanding that, prior to any restart of the reactor, the applicants would conduct a review of the event; institute short-term corrective actions to address the deficiencies identified by the review; identify and schedule needed long-term corrective actions; and obtain the NRC's concurrence before restarting the reactor.⁴

² LBP-89-28, 30 NRC 271 (1989).

³ See *id.* at 284-86.

⁴ See Confirmatory Action Letter 89-11 from William T. Russell, Regional Administrator, to Edward A. Brown, President and Chief Executive Officer, New Hampshire Yankee Division, Public Service [sic] of New Hampshire (June 23, 1989) [hereinafter CAL], appearing as Exhibit 2 to Intervenor's Motion to Admit Contention, or, in the Alternative, to Reopen the Record, and Request for Hearing (July 21, 1989) [hereinafter Intervenor's Motion].

The applicants' review efforts were subsequently documented in a response letter to the staff's CAL. The applicants' submission included a corrective action plan, an event evaluation report, an operational issues evaluation, and a management effectiveness analysis report.⁵ The applicants also filed with the agency a Licensee Event Report on the incident.⁶ In response to the incident, the agency dispatched an augmented inspection team to Seabrook and its findings were documented in a lengthy inspection report.⁷

Almost a month after the natural circulation test transient, the intervenors filed their first motion to admit a contention arising from the test incident or, alternatively, to reopen the record.⁸ The intervenors repeatedly refer to this contention as a low-power testing contention. The gist of the intervenors' contention was that the natural circulation test incident demonstrated that the applicants' operators and management personnel were neither adequately trained nor qualified. According to the contention, the test incident also showed that the applicants' managerial and administrative procedures and controls were insufficient for the applicants to operate Seabrook in accordance with the license application, the Commission's regulations, and the Atomic Energy Act.⁹ The intervenors' motion was accompanied by the joint affidavit of their experts. In the affidavit, the affiants recited the events surrounding the transient, outlined their view of the applicable regulatory requirements, and opined that the applicants violated certain regulations. The intervenors' experts also concluded that some improvement in the applicants' training program was essential, that the applicants' failure to follow procedures has significant safety implications, and that another recent agency inspection report suggests that the natural circulation test incident might not be an isolated instance but rather part of a pattern of procedural noncompliance.¹⁰

A month after their first filing, the intervenors filed a second motion seeking leave to submit additional bases for their original contention, bases that they had culled from the staff's recently issued inspection report. The motion also sought to admit two additional so-called low-power testing contentions or, in the alternative, to reopen the record.¹¹ The two further contentions alleged, first, that

⁵ See Letter from Edward A. Brown, President and Chief Executive Officer, New Hampshire Yankee, to United States Nuclear Regulatory Commission (July 12, 1989) and Enclosures 1-4, appearing as Attachment A to Applicants' Answer to Intervenors' Motion to Admit Contention (August 7, 1989) [hereinafter Applicants' Answer].

⁶ See Attachment D to Applicants' Answer.

⁷ See Inspection Report No. 50-443/89-82 (August 17, 1989), appearing as Attachment 5 to NRC Staff Response to Intervenors' Motion to Admit Contention (August 18, 1989).

⁸ See Intervenors' Motion.

⁹ *Id.*, Exhibit I.

¹⁰ *Id.*, Attachment A.

¹¹ Intervenors' Motion for Leave to Add Bases to Low Power Testing Contention Filed on July 21, 1989 and to Admit Further Contentions Arising from Low Power Testing Events or, in the Alternative, to Reopen the Record and Second Request for Hearing (August 28, 1989).

the applicants' maintenance practices for valves and quality control over such practices were seriously defective, and, second, that the applicants currently did not have adequate staff and procedures to conduct any operational testing.¹² Like their initial contention, the intervenors' second and third contentions were accompanied by the joint affidavit of their experts. The affidavit set forth the affiants' views on the probable safety significance of the applicants' omissions with respect to test training, maintenance, and quality control.¹³

The Licensing Board denied both of the intervenors' motions. With respect to the first, the Board determined, *inter alia*, that the intervenors' motion must meet the Commission's standards for reopening the record.¹⁴ In applying those standards, it then found that the motion failed to present a significant safety issue and failed to demonstrate that a materially different result would have been likely had the intervenors' proffered evidence been considered initially.¹⁵ With regard to the second motion, the Board found it contained fatal pleading defects.¹⁶ Unlike its detailed treatment of the intervenors' first motion, however, the Board did not closely analyze the substance of the intervenors' second and third proffered contentions, other than to indicate that the second contention failed to raise a significant safety issue as required of a motion to reopen the record.¹⁷

II.

A. Before us, the intervenors claim that by rejecting their low-power testing contentions the Licensing Board violated their right under section 189 of the Atomic Energy Act¹⁸ to a hearing on all issues material to the issuance of a full-power license. They argue, therefore, that the Board erred in encumbering their statutory hearing right by requiring their contentions to meet the Commission's stringent criteria set forth in 10 C.F.R. § 2.734 for reopening the record. In elaborating upon this proposition, the intervenors first offer various arguments as to why low-power testing is material to the grant of a full-power license. They then argue that two decisions, *Union of Concerned Scientists v. NRC*¹⁹ and *San*

¹² *Id.*, Exhibit 1 at 15, 17-18.

¹³ *Id.*, Exhibit 3.

¹⁴ LBP-89-28, 30 NRC at 277-83.

¹⁵ *Id.* at 284-92.

Even though it found the motion did not meet the standards for reopening the record, the Board nevertheless went on to consider the intervenors' first proffered contention under the criteria for late-filed contentions and apparently found those factors weighed against its admission. *See id.* at 292-93.

¹⁶ *Id.* at 294.

¹⁷ *Id.* at 295-97.

¹⁸ 42 U.S.C. § 2239.

¹⁹ 735 F.2d 1437 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1132 (1985) [hereinafter *UCS*].

Luis Obispo Mothers For Peace v. NRC,²⁰ establish their right to a hearing on all issues material to the grant of a full-power license without their contentions having to meet the Commission's standards for reopening the record.²¹

The staff counters by focusing upon the "hearing rights" premise of the intervenors' argument. It asserts that neither of the cited decisions bestows such an unfettered right to a hearing upon the intervenors and, therefore, the Licensing Board correctly applied the Commission's reopening standards to the intervenors' contentions.²² The applicants, on the other hand, disagree with the "materiality" premise of the intervenors' argument as well as their "hearing rights" claim.²³

Initially, we note that the intervenors have attempted to structure their argument before us to parallel the *UCS* decision. That case involved the mandatory test of a facility's offsite plan for responding to a radiological emergency — a matter incidental to the safe physical operation of a commercial nuclear reactor. In *UCS*, the court held that, because the NRC's regulations made the correction of emergency planning deficiencies identified during the exercise a requirement of the Commission's ultimate licensing decision, issues concerning the exercise were "material" to the grant of a license and, therefore, the agency could not eliminate such issues from the statutorily required licensing hearing.²⁴ In an effort to reach the same outcome on materiality as that reached in *UCS*, the intervenors seek to equate low-power testing of the Seabrook reactor with emergency planning exercises even though these two regulatory concepts are totally distinct.

Further, in an attempt to give their argument an even tighter fit in the *UCS* mold, the intervenors also resort to a bit of legerdemain. They label their contentions "low-power testing contentions" and then argue that low-power testing is material to full-power licensure, so they are entitled to a hearing on such material issues (i.e., *their low-power testing contentions*) without having to satisfy the Commission's standards for reopening the record. But the intervenors' label for their contentions is misleading. The issues raised by the contentions are not unique to low-power testing. Rather, the questions presented raise more generic matters concerning plant readiness for full-power operation, not issues inherent in low-power testing. This being so, the intervenors' so-called low-power testing contentions are no different from any other contention that

²⁰ 751 F.2d 1287 (D.C. Cir. 1984). See *infra* note 44.

²¹ Intervenors' Brief on Appeal of LBP-89-28 (Dec. 19, 1989) at 10-23 [hereinafter Intervenors' Brief].

²² NRC Staff's Brief in Opposition to Intervenors' Appeal of LBP-89-28 (Jan. 30, 1990) at 4-14.

²³ Applicants' Brief (Jan. 19, 1990) at 17-30.

²⁴ 735 F.2d at 1441-42.

focuses upon whether it is appropriate to license a facility for actual operation.²⁵ Nevertheless, even if we ignore the intervenors' sleight of hand and accept their argument as presented, it still fails.

To establish their materiality premise, the intervenors initially maintain that low-power testing performance is per se material to the issuance of a full-power license where, as here, the applicants conduct such testing under a separate low-power license granted pursuant to 10 C.F.R. § 50.57(c) while the full-power operating license proceeding is still ongoing. In these circumstances, the intervenors claim that the applicants must successfully complete the testing as a precondition for meeting the minimum regulatory requirement for a full-power license, i.e., that there is reasonable assurance the plant will be operated without endangering the public health and safety and in accordance with the Commission's regulations. In the next breath, however, the intervenors argue that, even if a separate low-power license is not issued, low-power testing performance is also a material component of full-power licensing when it is conducted under the authority of a full-power license prior to full-power operation. In either situation, the intervenors assert that low-power testing is per se material to full-power licensing and, therefore, they are entitled to a hearing pursuant to section 189a of the Atomic Energy Act on their low-power testing contentions.

Because it might seem a bit incongruous to issue a full-power operating license for a facility that has yet to complete successfully a low-power testing program, the intervenors' materiality argument has a certain surface appeal. But closer examination of this argument in the context of the Atomic Energy Act and the Commission's regulations shows it to be fatally flawed. This flaw is most easily highlighted by first examining that portion of the intervenors' argument positing that low-power testing performance is per se material to the grant of a full-power license even when such testing is conducted pursuant to a full-power license (rather than a separate low-power license) but before full-power operation has been achieved.

Because testing a commercial nuclear reactor at any power level necessarily involves operating the plant or, in the words of section 101 of the Atomic Energy Act, entails the "use" of a "utilization" facility, low-power testing can be conducted only *after* the Commission grants an applicant a license to operate the

²⁵ For example, the intervenors' first late-filed contention alleges that the applicants' operators and management personnel are not adequately trained or qualified to operate the plant. Yet that is essentially the same issue another intervenor, the State of New Hampshire, filed as contention NH-13 at the start of the operating license proceeding. The Licensing Board admitted that contention (see LBP-82-76, 16 NRC 1029, 1042 (1982)) and then granted the applicants' motion for summary disposition on it. See Memorandum and Order (Memorializing Prehearing Conference, and Ruling on Motion for Summary Disposition) (May 11, 1983) at 14-18 (unpublished).

plant.²⁶ Low-power testing thus involves *operating* an *already licensed* reactor. Further, under section 189a of the Atomic Energy Act and as pertinent here, an intervenor's hearing rights attach only to a proceeding for the "granting" of an initial operating license.²⁷ The statute affords no intervenor hearing rights relative to activities occurring as a consequence of facility operation undertaken pursuant to such a license. Once the full-power license has been granted, those licensee and agency actions that relate to facility operation conducted pursuant to that license, including low-power testing, involve compliance with the license under which the operations are performed.²⁸ Thus, while it might be said to be material to the *operation* of the facility, low-power testing performed under the authority of a full-power license has absolutely nothing to do with, and therefore cannot be material to, the *granting* of a full-power license.

This point is further illustrated by examining the power-ascension testing that is performed after low-power testing in the initial startup of a facility. Low-power testing is conducted up to five percent of rated power. Power-ascension testing, on the other hand, is performed above this level up to and including the power level permitted by the operating license, normally 100% or full power. As in the case of low-power testing, power-ascension testing involves the "use" of the facility, so it can only be conducted under the authority of an operating license — generally a full-power license. Again, like low-power testing, power-ascension testing is a necessary step in the initial operational life of every plant. Indeed, both test programs involve some operational tests that must be conducted every time the reactor is restarted after being refueled. By its very nature, power-ascension testing is conducted incrementally and entails a number of operating hold points, typically at twenty-five percent, fifty percent, and seventy-five percent of rated power.²⁹ Any agency action with respect to the actual performance of such tests also is a matter of license compliance, not initial licensure, and no intervenor hearing rights accompany a licensee's performance of such tests. Hence, as with low-power testing, power-ascension testing plainly is material to the ultimate full-power operation of the facility because such tests have to be performed before full-power operation can be achieved. But all operation in reaching full-power as well as full-power operation itself is regulatively distinct from, and hence immaterial to, the initial licensure of the plant that must precede *any* operation of the facility.

²⁶ 42 U.S.C. § 2131. That section provides in pertinent part that "[i]t shall be unlawful . . . for any person within the United States to . . . use . . . any utilization . . . facility except under and in accordance with a license issued by the Commission. . . ."

²⁷ 42 U.S.C. § 2239a. That section provides in relevant part that "[i]n any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license . . . the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding. . . ."

²⁸ See 10 C.F.R. §§ 2.200-.206; *id.* Part 2, Appendix C.

²⁹ See NRC Regulatory Guide 1.68 (Rev. 2), "Initial Test Programs for Water-Cooled Nuclear Power Plants" (Aug. 1978) at 1.68-15 to -18.

This basic regulatory scheme does not change just because low-power testing is conducted under the authority of a separate low-power license granted pursuant to 10 C.F.R. § 50.57(c) while the full-power operating license adjudicatory proceeding is still ongoing. Whether low-power testing has been *completed* is not germane to the question whether the full-power license should be granted to the applicant. In such circumstances, a low-power license is required because low-power testing still involves the operation or “use” of the facility within the meaning of section 101 of the Atomic Energy Act. Further, in order to comply with the hearing rights provision of section 189a of the Act, the low-power license can be granted only after all issues in the contested adjudicatory proceeding relevant to low-power testing authorization have been heard and decided by the Licensing Board.³⁰ The successful performance of the low-power tests authorized under that license, however, remains immaterial to the determination whether a full-power operating license should be granted for the facility.

Contrary to the intervenors’ claim, nothing in the agency’s regulations dictates that low-power testing need be completed successfully as a precondition to the grant of a full-power license in order to meet the minimum regulatory requirements for a full-power license. Similarly, there is no regulatory bar to the issuance of a full-power license while low-power testing is still under way pursuant to an earlier granted testing license. Indeed, an applicant that receives a low-power license under section 50.57(c) is under no regulatory obligation to use it and the applicant remains free to defer low-power testing until a full-power license is issued. And, as in the case of all plant operations, any agency action with respect to the performance of low-power testing in such circumstances is a matter of compliance with the low-power license.

That low-power testing is not a prerequisite to the grant of a full-power operating license is amply demonstrated by a review of the regulatory history of 10 C.F.R. § 50.57(c). When the NRC’s predecessor, the Atomic Energy Commission (AEC), amended its rules to add section 50.57(c), its expressed purpose was to shorten, without adversely affecting the public health and safety, the time it takes to get a licensed plant to full-power operation by allowing for the early performance of low-power testing while the contested full-power operating license proceeding was still ongoing.³¹ The Statement of Consideration accompanying the rule amendment indicates that the AEC specifically rejected proposals that would have made completion of low-power testing a precondition of full-power licensure. Such proposals would have mandated that “every applicant be required to have completed 6 months of low-power testing prior

³⁰ See 10 C.F.R. § 50.57(c).

³¹ See 35 Fed. Reg. 16,687, 16,687 (1970); 36 Fed. Reg. 8861, 8862 (1971).

to issuance of the final operating license”³² This history convincingly demonstrates that, in adopting the separate low-power license provisions, the AEC did not make the performance of low-power testing “material” to the grant of a full-power license. Nor did it alter the established regulatory scheme in which low-power testing performance is material only to plant operation. Accordingly, the intervenors’ argument that low-power testing is per se material to full-power licensure is simply wrong.

Equally fallacious is intervenors’ second argument that, in this instance, the staff has made low-power testing performance material to full-power licensing. Intervenors assert that this occurred as a consequence of the staff’s enforcement action requiring the applicants to demonstrate to the staff’s satisfaction adequate corrective actions before restarting the facility. Although the intervenors describe the staff’s action in issuing a confirmatory action letter to the applicants as a “suspension” of the low-power license, they concede that for purposes of their argument the label placed upon the action is irrelevant.³³

Like their first argument, this one also confuses plant licensure with plant operation and erroneously attempts to make the two distinct regulatory concepts synonymous. Here, the staff’s issuance of a CAL immediately after the natural circulation test incident was an enforcement action directly linked to the applicants’ low-power license — the only operating authority extant at the time of the staff’s license compliance action. The staff’s action was taken to ensure that the applicants complied with all agency regulations and the terms and conditions of the low-power license before they could restart the facility under that license authority. As previously explained, pursuant to the Commission’s regulatory scheme the staff’s enforcement action was independent of, and immaterial to, any subsequent Commission licensing determination that the applicants met all regulatory requirements for a full-power license. Thus, contrary to the intervenors’ assertion, the staff’s enforcement action — in this case or in general — did not make the performance of low-power testing material to the issuance of a full-power license.

The intervenors’ third argument is pure sophistry. Initially, they state that the Commission previously represented to the Court of Appeals in the *UCS*

³² 36 Fed. Reg. at 8862.

³³ Intervenors’ Brief at 12 n.17. In any event, the intervenors are incorrect in describing the staff’s enforcement action as a license suspension. The NRC’s formal enforcement sanctions include notices of violations, civil penalties, and various orders such as license revocation or suspension orders. See 10 C.F.R. Part 2, Appendix C, §II. Each of these formal enforcement sanctions requires prescribed notice and hearing procedures. See *id.*, §§ 2.201-.205. In this instance, none of these formal regulatory requirements was followed, so the staff’s action could not be a suspension within the meaning of the regulations.

In contrast to formal enforcement actions, the agency also employs less formal administrative mechanisms, such as the confirmatory action letter issued by the staff here, to supplement its enforcement program. See *id.*, Part 2, Appendix C, § V.H. Specifically, confirmatory action letters are “letters confirming a licensee’s or a vendor’s agreement to take certain actions to remove significant concerns about health and safety, safeguards, or the environment.” *Id.*, § V.H(3).

case that *preoperational* testing must be completed successfully prior to the issuance of an operating license. The intervenors then claim that, “[b]y necessary inference,” the Commission has recognized the importance of successfully completing the entire *initial test program* (i.e., preoperational testing and low-power testing).³⁴ Next, they declare that *emergency exercises* and the *initial test program* should be treated similarly and, therefore, because the court in *UCS* ruled that emergency exercises are material to licensing and subject to the hearing rights provisions of the Atomic Energy Act, so too are the results of low-power testing.

Although it is true that preoperational testing generally must be completed successfully prior to the issuance of a full-power operating license as the intervenors represent, the other conclusions they attempt to stack upon that truism simply do not follow. As its name connotes, preoperational testing is conducted as part of the construction process for the plant pursuant to 10 C.F.R. § 50.56 before an operating license for the facility is issued.³⁵ Such testing does not involve the “use” of the facility within the meaning of section 101 of the Atomic Energy Act and hence does not require an operating license. Contrary to the intervenors’ claim, the Commission has not recognized, “by necessary inference” or otherwise, that preoperational testing and low-power testing — testing that the intervenors incorrectly lump together under the label of an initial test program — must be completed successfully before the grant of an operating license. As already explained, the scheme of the Commission’s regulations does not make the performance of low-power testing material to the grant of a full-power operating license and neither the regulations nor Commission practice join preoperational testing with low-power testing for the purpose of determining whether the applicants should be granted an operating license. Accordingly, the intervenors’ argument fails.

B. Building upon their first premise that low-power testing is material to the grant of a full-power license, the intervenors next argue that they have a right to a hearing pursuant to section 189a of the Atomic Energy Act on all issues material to the grant of a full-power license without having to meet the Commission’s standards for reopening the record. As previously seen, the intervenors’ first premise is erroneous. Hence, the remainder of their argument founded upon that faulty premise cannot stand. Nevertheless, for the sake of completeness, we will address it.

³⁴ Intervenors’ Brief at 13.

³⁵ In pertinent part, 10 C.F.R. § 50.56 provides that

[u]pon completion of the construction . . . of a facility, in compliance with the terms and conditions of the construction permit and subject to any necessary testing of the facility for health or safety purposes, the Commission will, in the absence of good cause shown to the contrary issue a license of the class for which the construction permit was issued

The intervenors assert that *UCS* and *Mothers for Peace* establish their right to a hearing on their so-called low-power contentions without having to meet the Commission's standards for reopening the record set forth in 10 C.F.R. § 2.734. In particular, they point to a portion of the decision in *Mothers for Peace*, which in turn partially relies upon *UCS*, stating, *inter alia*, that "we cannot conclude that the *opportunity to seek reopening* was an adequate substitute for the hearing guaranteed petitioners *as a matter of right* under section 189(a)."³⁶ Contrary to the intervenors' assertion, however, neither of these cases precludes the application of the Commission's reopening standards in the circumstances presented. Moreover, the quoted language from *Mothers for Peace* upon which the intervenors so heavily rely was used by the court in a completely different context that makes it inapposite here.

In the cited portion of *Mothers for Peace*, the court faced the question whether the Commission violated section 189a by refusing to give the petitioners a hearing on each of the applicants' two requests for an extension of its low-power license for the Diablo Canyon facility. In defense of its refusals to grant the hearing requests, the Commission argued that the section 189a hearing provision did not apply to the extension of the term of a low-power operating license. Alternatively, it argued that, if section 189a did apply, the petitioners had been accorded a sufficient hearing because of their attempts to reopen the record in the then ongoing full-power operating license proceeding where petitioners had sought to raise the same issues.³⁷

The court found that the extension of the term of a low-power license was a license amendment within the meaning of section 189a. Because a license amendment is one of the eight categories of agency action specifically enumerated in that section, the court held that the petitioners were entitled to a hearing on the applicants' extension requests and that, therefore, the Commission erred in denying the petitioners' hearing requests.³⁸ Next, the court rejected the Commission's argument that the petitioners had received a sufficient hearing by being referred to the ongoing full-power operating license proceeding for the facility where they could attempt to reopen the record on the same construction quality assurance issues that the petitioners sought to raise in their hearing requests on the low-power license extension amendments. It was in this context that the court employed the language quoted by the intervenors, indicating that the opportunity to seek reopening in a second ongoing proceeding was not an adequate substitute for a guaranteed right to a hearing on an independent license extension amendment, even if the issues sought to be raised were the same.³⁹

³⁶ 751 F.2d at 1316 (emphasis in the original).

³⁷ *Id.* at 1311.

³⁸ *Id.* at 1312-14.

³⁹ *Id.* at 1316.

The situation addressed by the court in *Mothers for Peace* was considerably different from the circumstances presented here. If the intervenors are to litigate their contentions at all, they must do so in the context of the existing operating license proceeding held pursuant to section 189a, in which their concerns would constitute additional late-filed contentions in the proceeding where the record already has closed. As we read it, *Mothers for Peace* does not preclude the agency from insisting that the intervenors comply with its reopening standards in this circumstance. The court's decision does not indicate, as the intervenors apparently would have it, that a fresh and unencumbered right to be heard exists each time arguably new information seemingly related to the licensing process arises. Indeed, to read the case that broadly would make it virtually impossible to conclude the hearing process. We find no such result mandated by *Mothers for Peace*.

Nor do we read *UCS* to guarantee the intervenors a hearing on their late-filed contentions even if they do not meet the Commission's standards for reopening a closed record. As noted previously, in *UCS* the court had under review a Commission rule providing that in operating license proceedings licensing boards need not consider the results of emergency preparedness exercises before authorizing a full-power operating license for a nuclear power plant.⁴⁰ The agency rule also required that such exercises be held within one year prior to the grant of a full-power license; hence, the results of the exercise necessarily could become known only when the licensing hearings were nearly over or already concluded. The court found that, in spite of the new rule, the Commission nevertheless considered the results of the offsite emergency preparedness exercise material to its decision whether to grant a full-power license for the facility.⁴¹ In these circumstances, the court held that the Commission acted beyond its statutory authority in categorically excluding from operating license hearings required by section 189a of the Atomic Energy Act a class of issues that the Commission itself considered material to licensure.⁴²

Contrary to the intervenors' apparent belief, *UCS* does not stand for the broad proposition that the Commission must allow any and all information arguably relevant to licensing, whenever raised, to be the subject of a hearing. Rather, *UCS* teaches that the agency cannot generically exclude from operating license hearings issues that its own regulations make material to the licensing decision. But we find nothing in the case to preclude the Commission from applying its reopening rules to the instant situation when the *issues* sought to be raised are of a type that could have been raised when the proceeding commenced. As previously noted, the intervenors' late-filed contentions do not

⁴⁰ 735 F.2d at 1438.

⁴¹ *Id.* at 1441.

⁴² *Id.* at 1438, 1441-42.

raise *issues* unique to low-power testing, even though they label them low-power testing contentions.⁴³ Rather, the *issues* the intervenors seek to raise each involve ordinary operational questions of the sort that the intervenors could have raised at the beginning of the proceeding.⁴⁴ Accordingly, we find *UCS* inapposite here.⁴⁵

III.

Finally, the intervenors assert that, if we reject their other arguments and approve the application of the Commission's standards to reopen the record to their contentions, they meet those standards. They claim, therefore, that the Licensing Board erred in denying their motions.⁴⁶ As the Licensing Board found, however, the intervenors' low-power testing contentions do not meet the Commission's standards for reopening the record set forth in 10 C.F.R. § 2.734.⁴⁷

That section provides, in pertinent part, that a motion to reopen the record must satisfy each of the following criteria:

- (1) The motion must be timely
- (2) The motion must address a significant safety or environmental issue.

⁴³ See *supra* pp. 233-34.

⁴⁴ Even assuming we have read *UCS* too narrowly, the intervenors' argument still fails. Upon rehearing en banc of a portion of *Mothers for Peace* not relied upon by the intervenors, the court stated that *UCS* "holds only that the Commission cannot exclude from a section 189(a) hearing issues that its rules of [sic] regulations require it to consider in its licensing decisions." *San Luis Obispo Mothers for Peace v. NRC*, 789 F.2d 26, 30 (D.C. Cir. 1986), cert. denied, 479 U.S. 923 (1986). The Commission's regulations do not require it to consider the results of low-power testing in determining whether to grant a full-power license. Hence, the intervenors' argument lacks merit for this additional reason even if we further assume that the intervenors' so-called low-power contentions deal with issues inherent in such low-power testing.

⁴⁵ The intervenors also argue that the Licensing Board erred in denying its May 31, 1989, motion to hold open the record pending low-power testing. Intervenors' Brief at 23-26. The intervenors' motion was filed before the applicants conducted low-power testing and before the June 22, 1989, natural circulation test incident. In an oral ruling on June 30, 1989, at the conclusion of the evidentiary hearings and several weeks before the intervenors filed their first motion to reopen the record, the Licensing Board denied the intervenors' motion. It concluded, *inter alia*, that the Board had come to the natural ending of the hearings and, therefore, it was closing the record. Tr. 28,287-89. Before us, the intervenors repeat their earlier argument that because low-power testing performance is material to the grant of a full-power license and they have a right to a hearing on all such material issues, the Licensing Board violated their hearing rights by closing the record before resolving any issues arising out of low-power testing. For the reasons we have already set forth in rejecting intervenors' earlier argument, their argument also fails in this context. Thus, the Licensing Board did not abuse its discretion in closing the evidentiary record on June 30.

⁴⁶ Intervenors' Brief at 26-40.

⁴⁷ In arguing that their so-called low-power testing contentions meet the Commission's reopening standards, the intervenors have not explicitly admitted that their contentions raise issues that are not inherent in actual low-power testing. As we have previously explained, the intervenors have mischaracterized their contentions because they actually raise more generic matters relating to plant readiness for full-power operation. In considering the intervenors' last argument, we assume that the intervenors would have us ignore their label and view their contentions in this broader framework given our rejection of the notion that low-power testing performance is material to the grant of a full-power license. Without this assumption, we would be faced with the incongruity of applying the Commission's reopening standards to the intervenors' so-called low-power testing contentions when we already have determined that the performance of low-power testing (and hence the resolution of their contentions) is not material to the grant of a full-power license.

(3) The motion must demonstrate that a materially different result would be or would have been likely had the newly proffered evidence been considered initially.⁴⁸

With regard to the application of this standard, we have stated that

to justify the granting of a motion to reopen the moving papers must be strong enough, in the light of any opposing filings, to avoid summary disposition. Thus, even though a matter is timely raised and involves significant safety considerations, no reopening of the evidentiary hearing will be required if the affidavits submitted in response to the motion demonstrate that there is no genuine unresolved issue of fact, *i.e.*, if the undisputed facts establish that the apparently significant safety issue does not exist, has been resolved, or for some other reason will have no effect upon the outcome of the licensing proceeding.⁴⁹

In an attempt to meet the reopening standards, the intervenors do not claim that the natural circulation test incident itself presented any threat to the public health and safety or that reactor safety was ever in question. Rather, the gist of the intervenors' first contention is that the incident demonstrates that the applicants' operators and management personnel are not adequately trained or qualified, and that they lack adequate management and administrative controls to operate Seabrook as required by the Commission's quality assurance regulations, 10 C.F.R. Part 50, Appendix B. In their affidavit in support of this contention, the intervenors' experts recite the events surrounding the incident and opine that these events reveal a number of procedural noncompliances with the quality assurance regulations. The intervenors' experts also allege, based upon an unrelated staff inspection report listing four minor instances of a possible lack of attention to detail by the applicants,⁵⁰ that the circulation test incident may not be an isolated event. They then conclude that the test incident represents a pervasive pattern of procedural noncompliance and thereby raises a significant safety issue.

⁴⁸ 10 C.F.R. § 2.734(a).

⁴⁹ *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973) (footnote omitted).

In their brief, the applicants suggest that ALAB-138 is no longer sound authority because it was decided 13 years before the Commission enacted 10 C.F.R. § 2.734. Applicants' Brief at 31. As the applicants should be aware, however, the Commission's adoption of section 2.734 was a codification of NRC case law. See 51 Fed. Reg. 19,535, 19,535 (1986). In the Statement of Consideration accompanying the rule, the Commission explicitly stated that "[t]he present rule is not, except where noted, intended to wipe out NRC case law concerning motions to reopen." *Id.* at 19,537. Neither section 2.734 nor its history notes any change to the gloss provided by the above-quoted portion of ALAB-138. Indeed, in its Statement of Consideration (*id.* at 19,536), the Commission itself referenced the same general discussion on motions to reopen from ALAB-138 that includes the quoted language — a most unlikely action if the Commission were disavowing the case. Additionally, the applicants' further suggestion that this portion of ALAB-138 only set a floor or a minimum standard for a reopening motion so that a licensing board is free to decide outcome-determinative, disputed facts on the basis of contested affidavits ignores both the plain language of the decision and its context.

⁵⁰ The intervenors' affidavits referenced NRC Inspection Report 50-443/89-3 but, as the Licensing Board noted (LBP-89-28, 30 NRC at 296), that inspection report was not an exhibit to the intervenors' reopening motions. Further, that inspection report is not otherwise part of the adjudicatory record in this proceeding.

In like fashion, the intervenors' second contention alleges that the events surrounding the test incident demonstrate that the applicants' maintenance practices for valves violate the NRC's quality assurance regulations. In their affidavit in support of this contention, the intervenors' experts assert that the post-event inspection of the plant's steam dump valves revealed some deficiencies in seven of the twelve valves. The affiants then opine that this fact may indicate a pervasive deficiency in the applicants' testing, verification, and maintenance of all valves throughout the plant, which, in turn, raises a significant safety issue. Similarly, the intervenors' third contention alleges that the events surrounding the test incident establish that the applicants' training and procedures for conducting start-up testing violate the agency's quality assurance regulations. As support for this claim, the intervenors' experts again detail many of these events and claim they demonstrate a breakdown in the applicants' quality assurance program for testing.

None of these contentions, however, raises a significant safety issue — the most important of the three criteria for reopening the record.⁵¹ At bottom, all three of these contentions are nothing more than quality assurance contentions alleging violations of the Commission's quality assurance regulations: the first, an alleged pattern of procedural noncompliances in training and administrative controls; the second, an asserted pattern of deficiencies in the testing and maintenance of valves; and, the third, a purported pattern of deficiencies in test training. In analogous circumstances, we have stated that

for new evidence to raise a "significant safety issue" for purposes of reopening the record, it must establish either that uncorrected . . . errors endanger safe plant operation, or that there has been a breakdown of the quality assurance program sufficient to raise legitimate doubt as to the plant's capability of being operated safely.⁵²

The intervenors have not attempted to demonstrate that safe operation of the plant was threatened by the natural circulation test incident or that the staff's CAL and the applicants' response to it have left any uncorrected deficiencies. Rather, they have focused on the second prong of this test by attempting to show that failures in the applicants' training, maintenance, and start-up quality assurance programs are so pervasive as to raise legitimate doubt that the plant can be operated safely. Even if we accept the intervenors' underlying factual representations as true, however, their motions simply do not raise an authentic doubt that the plant can be operated safely. In the final analysis, the intervenors and their experts have attempted to turn a single incident of personnel error into a wholesale and widespread breakdown of the applicants' quality assurance

⁵¹ *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-834, 23 NRC 263, 264 (1986).

⁵² *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1345 (1983). See also *Union Electric Co.* (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983).

programs. Without a great deal more, the intervenors have failed, as a matter of law, to raise a legitimate doubt that the plant can be operated safely. Hence, they have failed to raise a significant safety issue and we need not explore whether they meet the other criteria for reopening the record. The Licensing Board was correct, therefore, in denying the intervenors' motions to reopen the record.

For the foregoing reasons, the result reached by the Licensing Board in LBP-89-28, 30 NRC 271, is *affirmed*.

It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(RE: TRUMP-S Project)
(Byproduct License No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

October 3, 1990

The Presiding Officer granted a portion of Intervenor's motion to add additional documents to the hearing record. The Staff responsibility to add the documents was contingent on Intervenor certifying that they do not already have them. Appropriate judgments were made to the filing schedule in light of this Order.

**RULES OF PRACTICE: SUBPART L; MOTION FOR COMPLETION
OF HEARING FILE**

When the case pertains to amendments to a special materials license and byproduct license, it is not necessary (in the absence of special evidence establishing a link) for the Staff to include in the hearing file documents related to another license that Applicant has to operate a research reactor at the same site. Nor is it necessary, under 10 C.F.R. § 2.1231(b) to include in the hearing

record reports that were not submitted by the Applicant or prepared by the Staff — even though those reports might be relevant to the case.

Material need not be added to the hearing file if a party already has gained access to it. Having access, the party can use the material in its case and the proceeding need not be delayed for a meaningless procedural step to be taken.

RULES OF PRACTICE: SUBPART L; EVIDENCE NEED NOT BE IN THE HEARING FILE

Parties may include in their written filings evidence that is not included in the hearing file.

RULES OF PRACTICE: SUBPART L; FORMAT OF HEARING FILE

The Staff is urged to complete a hearing file that is orderly and simple to use, thus saving the presiding officer and the parties the triplicated effort of sorting the file for themselves. However, when a motion directed at the lack of order was served after weeks had passed, it was found that there was no relief appropriate in this case.

MEMORANDUM AND ORDER
(Intervenors' Renewed Motion for Completion of
Hearing File and Related Matters)

Memorandum

The Staff of the Nuclear Regulatory Commission (Staff) submitted what it considered a complete hearing file on August 16, 1990. In response, the Missouri Coalition for the Environment, the Mid-Missouri Nuclear Weapons Freeze, Inc., and the Physicians for Social Responsibility/Mid-Missouri Chapter (Intervenors), joined by ten named intervenors (Individual Intervenors), filed a motion¹ characterizing the hearing file as a "hearing pile," enumerating ten alleged deficiencies in the file, and suggesting that I issue a further order that

¹ See "Intervenors' Renewed Motion for Completion of Hearing File," September 11, 1990 (Motion); "Licensee's Response to 'Intervenors' Renewed Motion for Completion of Hearing File,'" September 19, 1990 (Licensee Response); "NRC Staff Response to Intervenors' Motion to Set Aside Order of September 4, 1990 and Motion for Completion of Hearing File and Motion for Order Requiring Staff to Notify Parties and Presiding Officer of New Information," October 1, 1990 (Staff Response).

would specify particular documents to be added to the file and would leave no discretion to the Staff in "completing" the hearing file.²

I have decided to grant a portion of the Motion and to deny the rest. For the most part, Intervenor's seek material that is not required to be included in the Hearing File pursuant to the applicable procedural regulations (Subpart L). This does not, of course, mean the end of access to information for the Intervenor's. It does mean that as soon as the Staff complies with my Order, the hearing file will be entirely complete and that written presentations pursuant to 10 C.F.R. § 2.1233 must then be submitted. Further access to information may be gained by supporting the need with reasons, documents, or affidavits. The vehicle for obtaining the further information shall be through questions that I may choose to ask.³

I. GENERAL BACKGROUND

The Intervenor's objected strenuously to the way in which the hearing file was served on them. First, they found it "intolerable that the NRC Staff took one month from the time of the Presiding Officer's June 27 Memorandum and Order to submit their notification that they intended not to comply. . . ." With this comment, I am generally in sympathy. Indeed, I was very surprised that in a proceeding in which motions are required to be responded to within 10 business days (15 for the Staff) it took Staff a month to notify me that it was not complying with an order that I confidently expected them to follow. Indeed, my confidence in the Staff's cooperation was so complete that I did not even bother to issue an order in support of my determination — confident that the Staff would voluntarily comply. I found that my confidence was misplaced.

Second, the Intervenor's objected to the hearing file as "an unindexed, unnumbered, uncitable pile of random documents." Again, I am sympathetic to this complaint because it required extensive work by my office to put these documents into an orderly form so that I would be able easily to find citations to individual documents. I would expect that in future cases an extensive hearing file would be placed in a more usable form so that each of the parties and the presiding officer would not have to accomplish an organizational job that could be done once, by the Staff. A swift motion to require the Staff to index the file might indeed have fallen on receptive ears.

²In this Memorandum and Order, I use the term Intervenor's to refer both to the party filing the Motion and to both the intervening parties, who share a common position with respect to this Motion.

³Parties may, of course, allege deficiencies in the record and suggest specific questions for me to ask. Complete explanations, thorough documentation and careful communication will assist me in reaching my determination concerning whether to ask follow-on questions.

On the other hand, the Staff is not applying for a license and there is no apparent remedy for these irritating circumstances. It is not appropriate to redress complaints against the Staff with sanctions against Licensee.

I find that the hearing file, while difficult to sort and order, is usable and that there is *therefore no lasting complaint for me to sustain.*⁴ All I can do is to exhort the Staff to be more cooperative in the future.

II. ASSESSMENT OF THE ADEQUACY OF THE STAFF'S RESPONSE

The principal response of the Staff⁵ is that it has now responded in full to the order I issued concerning the hearing file. It states (Staff Response at 4):

On August 16, 1990 the Staff provided the hearing file with (a) the entire NRC files concerning the University's Part 30 [Byproduct Material] and Part 70 [Special Nuclear Material] licenses for 10 years and (b) all documents in the University's Part 50 Reactor File related to the six areas of concern [admitted into the proceeding]⁶ . . . , from 1980 to the present. The documents provided by the Staff fully comply with the June 29, 1990 Order and provide more material than ordered by the Board, since all NRC file documents from 1980 to present concerning the materials licenses are now in the hearing file.

* * *

. . . The only material not provided involves the Part 50 license file in matters unrelated to the six areas of concern admitted for litigation, or does not exist in NRC files.

Although the Intervenorers have mounted a multipronged attack on the adequacy of the Staff filing, I find only one prong to be persuasive.

First, the Intervenorers argue that the hearing file is too disorderly to be used. I disagree. While difficult to index, my office has managed to accomplish that task. Furthermore — judging from the Intervenorers' detailed description of the contents of the "pile" on pages 8-9 of the Motion and from their specifications

⁴The Motion, at 13, may be based in part on an erroneous premise. It states that: "Such a practice would produce an incomplete record from which the parties must make their case and the Presiding Officer must make his decision . . ." [Emphasis added.] However, it is clear that the intervening parties are free to attach whatever documents and affidavits they wish to their written case or to answers to questions from the presiding officer. 10 C.F.R. § 2.1233. I wish to stress that the intervening parties are not restricted to the hearing file for their evidence.

⁵I have decided to deny Intervenorers' request that the Staff not be made a party to this case for the purpose of responding to its motion about the hearing file. "Intervenorers' Motion to Set Aside Order of September 4, 1990 (Completeness of the Hearing File)," September 11, 1990. Intervenorers' concerns about the adversary nature of the Staff's participation have not persuaded me to do without the Staff's response concerning its own actions in assembling a hearing file.

⁶The Staff correctly summarizes the admitted concerns, at page 4 of its Response, as: (1) risks related to fire and explosion, (2) the need for a buffer zone around the area of experimentation in order to protect public health and safety, (3) the adequacy of administrative controls, (4) the adequacy of emergency plans, (5) the need for an environmental assessment and environmental impact statement, and (6) the particularization of personnel responsibilities (particularly the personnel of Rockwell International, Inc., who will be on site).

of exclusions from the "pile" on pages 9-12 of the Motion — Intervenor also appear to have accomplished that task.

Second, Intervenor alleges a series of omissions from the file. I find only one of the allegations to be persuasive. The analysis of each allegation is set forth in Table 1. The allegation that I am sustaining is set forth in bold face, for ease of reference.

In addition, much of the information sought is a matter of public record and is available in publicly available files in Washington, D.C. Therefore, my ruling on what is included in the hearing file, pursuant to the rules, often affects ease of access to information more than it does the availability of information.

TABLE 1
ALLEGED OMISSIONS FROM THE HEARING FILE

Allegation	Inspection reports and notices of violation for the Missouri University Research Reactor (MURR) should be included in the hearing file because they are relevant to the area of concern relating to the inadequacy of administrative and managerial controls.
Analysis	Intervenor has been provided with all inspection reports and notices of violation occurring during the last decade, ⁷ with respect to the byproduct materials license and special nuclear materials license that are being amended. It does not seem to be appropriate at this time to consider the University's administration of MURR, whose license is not now being renewed or amended, to be relevant to the limited license amendment now before me. I reach this conclusion after considering all the facts before me and it is specific to those facts. Should Intervenor's written filing (basic case) provide additional facts, I could be persuaded to enlarge the scope of relevance at a subsequent stage of this proceeding.
Allegation	Annual reports of MURR contain information that could be relevant and they should be included in the hearing file.
Analysis	Since the license for MURR is not at issue and since there is no allegation that the annual reports contain information about the relevant licenses, I do not consider the annual reports to be relevant.

⁷They request that the period of time be enlarged to encompass the past 20 years, citing my ruling in the *Santa Susana* proceeding. However, in that case there were reports of surface contamination that needed to be accounted for. In this case, there is no reason to require documentation to be in the hearing file beyond a decade.

TABLE 1 (Continued)

Allegation	Reports of unusual occurrences and other events at MURR should be included in the hearing file.
Analysis	The license for MURR is not at issue. These reports are not relevant.
Allegation	Documents concerning the need for a buffer zone for MURR should be included in the hearing file.
Analysis	The license for MURR is not at issue. There is no reason to believe that decisions about whether or not to have a buffer zone around the research reactor would be relevant to a determination about the need for a buffer zone around TRUMP-S experiments.
Allegation	Documents relating to a Department of Energy (DOE) Environmental Impact Statement about TRUMP-S should be included.
Analysis	Staff asserts that all documents in its files on the licenses being amended have been included. I accept their assertion. I also note that 10 C.F.R. § 2.1231(b) does not appear to require the inclusion in the hearing file of DOE documents or of correspondence with DOE.
Allegation	Intervenors seek two regulatory guides not included in the file. This allegation is <i>moot</i> since the Staff voluntarily has filed these guides in this case.
Allegation	All correspondence between the Staff and the University of Missouri, Rockwell, or DOE relevant to the TRUMP-S project should be placed in the hearing file.
Analysis	The Staff states that it has no documents concerning TRUMP-S. It does not, however, comment on the TRUMP-S documents included in a prior, somewhat related proceeding in California, Docket No. 70-25-SNM No. 21. ⁸ It is therefore necessary to consider the TRUMP-S materials with respect to 10 C.F.R. § 2.1231(b). I conclude that they are not required to be in the hearing file as they are not NRC reports or correspondence with the Applicant. Hence, I will not require these documents to be included in the hearing file.

⁸ Many of the documents relate to peculiarities of the Santa Susana Laboratory or to equipment to be used by Rockwell International Corporation; these documents generally are irrelevant. Some portions of documents deal with processes still being planned for TRUMP-S by the University of Missouri. Without careful comparison of the two dockets and related Staff files, it is not possible to ascertain whether some of the information would lead to a fuller understanding of the processes planned by the University of Missouri.

- Allegations** Documents included in MURR license applications or prepared by the Staff with respect to those applications should be included in the record.
- Analysis** Operation of the MURR reactor is not relevant. The documents are therefore not relevant and need not be included.
- Allegation** There are twelve letters allegedly related to Amendment 74 to License No. 24-00513-32 that should be included in the hearing file. These letters restrict the authority under one of the licenses being amended.
- Analysis** The Staff Response, at 2-3 n.1, did not list the Intervenors' request for this information and the Staff does not appear to have responded to it specifically. I am puzzled that these letters are not already in the hearing file. I will require the Staff to respond within 7 working days.

In light of the area of information concerning which Staff must now make a determination, a brief further extension of time for the Intervenors may be appropriate. However, the appropriateness of the extension depends on the information to which they may already have access. I am ordering that the Staff complete the hearing file on the assumption that Intervenors do not already have the information being requested. However, Intervenors' request for information seems very knowledgeable and may, in fact, be based on access to the documents that the Staff is being required to add to the file. Before an extension of time would be appropriate, it is essential to ascertain whether Intervenors already have access to the letters for which the Staff is being asked to search. I will, therefore, require Intervenors to certify to me, within 3 business days, whether or not they have gained access to those letters.

If Intervenors certify that they have gained access to the letters, then the Staff will not have to add documents already available to Intervenors to the hearing file, whose principal purpose is to make information available to Intervenors. Additionally, Intervenors will not have an extension of time.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 3d day of October 1990, ORDERED, that:

1. Within 3 business days of their actual receipt of this Order, Intervenors⁹ shall file with me a statement, which need not be in the form of an affidavit, concerning whether they have gained access to the letters that the Staff might be required to examine in the remaining paragraphs of this Order.

2. The Staff need not add to the hearing file any documents to which Intervenors already have gained access.

3. Unless Intervenors' statement pursuant to ¶ 1 states that the Intervenors already have gained access to these documents, the Staff should exercise its best efforts to ascertain the location of twelve letters allegedly related to Amendment 74 to License No. 24-00513-32. These letters apparently restrict the authority under one of the licenses being amended in this case. The Staff shall respond within 7 working days from the issuance of this opinion concerning the appropriateness of adding these letters to the hearing file.

4. Should the Staff be required to respond to ¶ 3 of this Order, by its own terms, then Intervenors shall have 7 business days from their receipt of the Staff response to file their basic case.

5. To the extent that Intervenors' Renewed Motion for Completion of Hearing File, September 11, 1990, has not been granted by this Order, it is denied.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

⁹The filing must be made separately by each of the intervening parties or in a single filing indicating that it is made on behalf of both.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(RE: TRUMP-S Project)
(Byproduct License No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

October 15, 1990

Intervenors' request is for an Order that the Staff and Licensee "notify the parties and the Presiding Officer of any new information which is relevant and material to the matters being adjudicated" is denied. Those parties have that obligation and no order need issue.

RULES OF PRACTICE: SUBPART L; STAFF TO UPDATE RECORD

Pursuant to 10 C.F.R. § 2.1231(c) the Staff has: "a continuing duty to keep the hearing file up to date . . . in the way the hearing file was made available initially."

**RULES OF PRACTICE: SUBPART L; PARTIES TO UPDATE
RECORD (McGUIRE RULE)**

Licensee must conform to the *McGuire* rule, which requires that relevant materials continue to be served in licensing cases so that the facts will come to bear on the litigation.

**RULES OF PRACTICE: McGUIRE RULE; MATERIALITY MET
BEFORE LICENSEE ANALYZES IMPORTANCE OF DOCUMENT**

The test of relevance and materiality for a document is met *before* it is analyzed. If a party thinks it necessary to analyze a document further to determine its significance to the case, then the document has met the test of relevance and materiality and should be served in the case pursuant to the *McGuire* rule.

**MEMORANDUM AND ORDER
(Motion for Order Concerning Documents)**

Memorandum

In this Memorandum, I deny the request for an Order put forth in Intervenors' Motion of September 17, 1990.¹

Intervenors' principal request is for an Order to both the Staff of the Nuclear Regulatory Commission (Staff) and to The Curators of the University of Missouri (Licensee) "to notify the parties and the Presiding Officer of any new information which is relevant and material to the matters being adjudicated." When their request is stated in this form, Intervenors are largely correct about the obligations of the Staff and Licensee; but they, nevertheless, have not established the need for an Order that merely restates existing obligations.

The Staff's obligation stems from 10 C.F.R. § 2.1231(c) and is: "a continuing duty to keep the hearing file up to date . . . in the way the hearing file was made available initially under paragraph (a)." As I stated in my unpublished memorandum of September 4, 1990, "Completeness of the Hearing File," at 2:

¹"Intervenors' Motion for Order Requiring Applicant to Serve Documents Upon Parties, and Requiring Staff and Applicant to Notify Parties and Presiding Officer of New Information Relevant and Material to the Matters Being Adjudicated." See also "Licensee's Response to Intervenors' Motion . . ." October 8, 1990. Note that Intervenors refer to the University of Missouri as Applicant and I refer to them as Licensee. Although I usually prefer Intervenors' usage, in this case the license has already been granted and the term Licensee therefore seems more accurate.

[I]n LBP-90-27, [32 NRC 40 (1990)], I ordered the Staff to complete the hearing file. At the conclusion of my memorandum, I stated that:

. . . [I]t shall . . . include in the record and serve on the parties all documents that comply with my Memorandum and Order of June 29. . . . Staff should include in the file all documents that intervenors may reasonably believe relevant to the admitted areas of concern. This should prevent recurrent litigation concerning this "non-discovery" phase of this Subpart L proceeding.

Licensee's obligation is governed by the *McGuire* rule,² which it concedes to be applicable to Subpart L proceedings.³ That rule requires that relevant materials be served in licensing cases so that the facts will come to bear on the litigation, which otherwise might be an empty charade diverging from the facts. As Licensee correctly states, the parties are required to inform other parties and the Presiding Officer of "new information which is relevant and material to the matters being adjudicated."⁴

This principle was reiterated in *Georgia Power Co.* (Alvin W. Vogtle Nuclear Plant, Units 1 and 2), ALAB-291, 2 NRC 404, 408 (1975), which states:

In *McGuire*, the Board criticized the failure of the applicant and the staff to have advised the Licensing Board promptly of certain modifications which the applicant had made in its quality assurance organization. Even though the adequacy of that organization was a contested issue in the proceeding, the modifications (which had occurred prior to the rendition of the initial decision) had not come to the attention of either the Licensing Board or ourselves until evidence was later received at a hearing on remand. We admonished the Bar that, "[i]n all future proceedings, parties must inform the presiding board and other parties of new information which is relevant and material to the matters being adjudicated", adding that otherwise "reasoned decision-making would suffer. Indeed, the adjudication could become meaningless, for adjudicatory boards would be passing upon evidence which would not accurately reflect existing facts". ALAB-143, 6 AEC at 625-26.

I conclude that the Staff and Licensee are already obligated to comply with the general outline of what Intervenor's seek. In consequence, there is no reason for me to issue an Order unless, perhaps, there had already been egregious violations of these obligations and an Order would be a warning not to repeat the violations.

Intervenor's motion apparently seeks an order because they consider that Staff and Licensee have been seriously remiss in failing to file documents. However, on careful examination, I find that only one of the allegations is a violation of the *McGuire* obligation and, since this is an isolated incident, I am not persuaded that it is appropriate at this time to redress the situation through issuing an Order.

² *Duke Power Co.* (McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625-26 (1973).

³ Licensee's Response at 7.

⁴ *Id.*

I. INTERVENORS' ALLEGATIONS EVALUATED

Intervenors allege three specific violations of the alleged obligation to keep them informed. I find that the first two allegations are without substance and the third is correct but of insufficient seriousness to support issuance of an Order.

A. Department of Energy Environmental Review

Intervenors allege that Licensee should have filed the Department of Energy's Environmental Assessment of TRUMP-S, February 1990, which made a finding of No Significant Impact. However, Licensee states that Nuclear Regulatory Commission regulations do not require an environmental assessment and that the DOE findings were therefore irrelevant. It relies on 10 C.F.R. § 51.22(c)(14)(v), which exempts from the environmental assessment requirement the “[u]se of radioactive materials for research and development and for educational purposes” (emphasis added). I conclude that Licensee correctly interprets the regulations as exempting TRUMP-S from the requirement for an environmental assessment and that the DOE study is therefore irrelevant to the admitted concern on the need for an environmental assessment.

B. Financial Assurance Statement

Intervenors have asserted that Licensee should have filed the financial assurance statement and statement of intent that it submitted to the Director, Nuclear Regulatory Commission Region III. However, they have not shown the relevance of these statements to any admitted area of concern or to the two challenged amendments. Consequently, they have not shown any breach of anyone's obligation to file these documents.

C. Memorandum: “Major Flaw in the Facility Design”

Intervenors assert that a document, attached as Exhibit 2 to its Application for Temporary Stay and to Preserve the Status Quo, August 21, 1990, should have been filed by Licensee. That document was a memorandum that summarized the findings of a consultant, hired by Licensee, who said that there was a “major flaw in the facility design” for conducting the TRUMP-S study.

When I considered the significance of the memorandum in LBP-90-30, 32 NRC 95 (1990), I stated (at 97):

Although the documents filed by Intervenors caused me to have enough concern about the safety of the Alpha Laboratory to consider granting a temporary stay, I have now analyzed the answering documents submitted by Licensee. I am persuaded by the affidavit of the

University of Missouri-Columbia Research Reactor's (MURR's) Interim Director, Dr. J. Steven Morris, that there is no serious risk either to the health of members of the public or to workers in the Alpha Laboratory. Consequently, after weighing each of the factors required for a stay or temporary stay, I have decided that the request for a temporary stay should be denied.

Licensee's Response at 8-9 states that there was no new information "relevant and material to the matters being adjudicated." It further states that:

Licensee's evaluation of that design question had demonstrated that there was no "major design flaw," that applicable NRC requirements had been met, and that there was reasonable assurance that the health and safety of both the public and MURR personnel were protected.

I find that Licensee's explanation is an inadequate response to the purpose of the *McGuire* rule. Licensee's suggested test of relevance is its own conclusions after careful study that went beyond the document itself. By analogy, I recall that in the *Comanche Peak* operating license case, in which I was Chair of the Licensing Board, Applicants had many studies that indicated that their nuclear power plant's pipe supports were properly engineered. However, that was the issue being litigated, and a hypothetical consultant study reaching the opposite conclusion would have been *relevant and material* regardless of that applicant's evaluation of its merit.

Here as well, the test of relevance and materiality was met *before* Licensee analyzed the underlying questions. The opinion of Licensee's own consultant was sufficiently important to deserve my careful attention, with respect to a motion for a temporary stay, as well as Licensee's careful followup. It was because of the importance of the charges in the memorandum that a reasonable person would decide to inquire further and would complete supplemental analyses.

The need for those further studies suggests to me that the document met the *McGuire* test. Therefore, I would have Licensee be more careful in the future to ascertain the relevance of documents *before* it conducts further analysis. See *Houston Lighting and Power Co.* (South Texas Project, Units 1 and 2), LBP-86-15, 23 NRC 595, 624 (1986). I believe that Licensee has been demonstrating its good faith in this proceeding and that it can be expected to comply with this ruling without a formal Order. Hence, no Order will be issued. See *id.* at 625.

II. CONCLUSION

The Licensee and Staff already are obligated to update the hearing file, pursuant to the regulations of the Commission and the *McGuire* rule, and there is no need for me to issue an Order in that regard.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 15th day of October 1990, ORDERED, that:

“Intervenors’ Motion for Order Requiring Staff and Applicant to Notify Parties and Presiding Officer of New Information Relevant and Material to the Matters Being Adjudicated,” September 17, 1990 is *denied*.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(RE: TRUMP-S Project)
(Byproduct License No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

October 20, 1990

The Presiding Officer, in this Subpart L proceeding, granted a temporary stay of experiments being conducted by the Licensee with americium, neptunium, and plutonium. He found that Intervenor was likely to succeed on the merits of a variety of allegations, including: failure to demonstrate compliance with requirements for emergency planning or an alternative evaluation of potential radiation exposures, failure to fully document the radionuclides being worked with (including contaminants), the adequacy of HEPA filters that have not been DOP tested, and the competence of personnel.

EMERGENCY PLANNING OR EVALUATION

Since the license covers the use of 25 curies of americium, it is subject to the emergency planning or evaluation requirements of 10 C.F.R. §§ 30.32(i)(1) and 30.72. Those sections, in Schedule C, exempt from their provisions only the use of two or fewer curies of americium. Hence, the license is not exempt.

SPECIAL NUCLEAR MATERIALS: ACCOUNTING FOR

Section 70.22(a)(4) of 10 C.F.R. requires that an application for a license include the name, amount, and specifications (including the chemical and physical form and, where applicable, isotopic content) of the special nuclear material. Regulatory Guide 10.3 suggests that the accounting include significant contaminants. In this instance, Licensee accounted for Pu-239 and Pu-240, which are known to be accompanied by Pu-241, whose curie content may exceed that of the isotopes that are accounted for. This is an apparent violation of Commission regulations.

HEPA FILTERS: DOP TESTING

Industry standards require that all HEPA filters be DOP tested in place from time to time. No credit can be claimed for filters not properly tested.

HEPA FILTERS: CREDIT IN A FIRE

Without demonstrating that a HEPA filter would survive a fire or explosion, no credit may be taken for such a filter with respect to a radiation release scenario.

RULES OF PRACTICE: TEMPORARY STAY

The Presiding Officer granted a temporary stay in response to a motion for a stay and a previous motion for a temporary stay. He found that the stay criteria were met, granted a temporary stay, and provided for an early hearing to dissolve the stay. 10 C.F.R. §§ 2.1263 and 2.788.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed:

- Plutonium isotopes;
- Curie content of special nuclear materials;
- HEPA Filters, DOP Testing;
- Release of unencapsulated radionuclides;
- Emergency planning for special nuclear materials.

MEMORANDUM AND ORDER
(Grant of Temporary Stay)

Memorandum

[This Memorandum contains some minor editorial changes made on October 22, 1990, 2 days after copies were issued by fax to the parties.]

I. SUMMARY

After reflecting on Intervenors' Renewed Request for Stay Pending Hearing, October 15, 1990, and on the entire record of this case, I have decided that it is appropriate and necessary to treat that Request as seeking the lesser included remedy of a temporary stay, pursuant to 10 C.F.R. § 2.1263.¹

At the outset of this case, as required by 10 C.F.R. § 2.1263, Intervenors filed a request for a stay. In LBP-90-18, 31 NRC 559, 575-77, 578 (1990), I deferred action on the stay request.

Subsequently, Intervenors filed "Intervenors' Application for Temporary Stay to Preserve the Status Quo," August 20, 1990, and "Supplemental Memorandum," August 20, 1990. I denied that Application in LBP-90-30, 32 NRC 95 (1990). This Memorandum and Order may also be considered to be a reconsideration of LBP-90-30 in light of information now filed by Intervenors.

At this point, I am convinced that the grounds for a temporary stay are present and that a temporary stay should be granted. Among other things, Licensee has not filed an essential part of its Application demonstrating that it is in compliance with the Commission's Emergency Planning Rules or demonstrating that it is exempt from them. This omission has occurred because both Licensee and the Staff of the Nuclear Regulatory Commission apparently have misread the regulations. Whatever the reasons, I have concluded that such an emergency plan or evaluation is necessary and that permitting the licensed activity to proceed in the absence of a showing that this requirement is met would unduly risk the public safety. In this instance, Intervenors have also shown by affidavit that the local fire battalion chief does not have a plan with which to combat a fire at the Alpha Laboratory, where the TRUMP-S experiments are taking place, and that he would respond to the scene but might stand by while the laboratory burned.

Although this would be enough by itself to grant a temporary stay, Intervenors also have raised a serious question concerning whether Licensee has fully

¹ Although the motion does not mention a temporary stay to preserve the status quo directly, the referenced section (10 C.F.R. § 2.1263) refers to 10 C.F.R. § 2.788, which contains a provision for a temporary stay in extraordinary cases in subsection (g).

disclosed its full inventory of plutonium, including Pu-241, which may have a far higher curie content than the Pu-239 and Pu-240 isotopes whose curie content has been disclosed. As a consequence, Intervenor has raised a serious question that has not yet been answered by Licensee concerning whether Licensee is in compliance with the amended license that has been issued to it — which permits it to possess a total of 2 curies of plutonium. A further serious issue with respect to Pu-241 is that Licensee appears not to have fully disclosed the isotopic content of the plutonium pursuant to 10 C.F.R. § 70.22(a)(4); consequently, there may be another serious deficiency in its application — itself a serious omission as well as casting doubt on the technical qualifications of the personnel who were seeking the license but did not fully disclose the isotopic content of the material with which they were dealing.

Given the seriousness of the issue of accounting for the isotopic content of its plutonium, I would expect Licensee to have voluntarily suspended its experiments until it could at least be assured that it was in compliance with its license. Hence, I anticipate that the granting of the temporary stay prior to permitting Licensee an opportunity to respond will have only a minimal impact on its actual operations.

Licensee will be permitted to move for a dissolution of the temporary stay at any time. The earliest time a court reporter can be available is Monday afternoon, October 22.

II. LEGAL AUTHORITY

A. Authority to Issue a Temporary Stay

Pursuant to 10 C.F.R. § 2.1263, I have authority to issue a stay. The terms of section 2.1263 refer me to 10 C.F.R. § 2.788 for the standards governing the granting of a stay of the Staff's licensing action. Under that section, the criteria for determining whether or not to grant a stay are set forth in subsection (e). Additionally, subsection (g) permits me to grant a temporary stay in extraordinary cases, even without waiting for the filing of any answer.

In this case, it is my understanding that Licensee's work with the special nuclear materials americium, neptunium, and plutonium is ongoing. Whatever risks might accrue from this work are being accrued right now. Given that Intervenor has met the criteria for a temporary stay, it is important that the NRC Staff's licensing action be stayed in order to maintain "the status quo" prior to licensing. 10 C.F.R. §§ 2.1263, 2.788(g).

B. Applicable NRC Regulations

Sections 30.33(a)(2) and 70.23(a)(3) of 10 C.F.R. require that "[t]he Licensee's proposed equipment and facilities are adequate to protect health and minimize danger to life or property." Section 30 applies to byproduct materials licenses and Section 70 to special nuclear materials licenses.

Sections 20.105 and 20.106 of 10 C.F.R. limit the extent to which Licensee may release neptunium or plutonium into the air or water in excess of natural background radiation. Additionally, Licensee must keep releases of radiation As Low As Reasonably Achievable (ALARA). 10 C.F.R. § 20.1(c).

In addition, since the license covers the use of 25 curies of americium, it is subject to the requirements of 10 C.F.R. §§ 30.32(i)(1) and 30.72. Those sections, in Schedule C, exempt from their provisions use of 2 or fewer curies of americium. Hence, since 25 is more than 2, Intervenor seems to be correct in arguing that the license application must either contain an emergency plan or an evaluation demonstrating that the maximum dose to a person off site is within permissible limits.²

III. ARGUMENTS

A. Intervenor's Arguments

Intervenor's arguments are supported by impressive factual testimony by a panel of experts (TRUMP-S Review Panel) consisting of:

- James C. Warf, Professor Emeritus of Chemistry at the University of Southern California and former Group Leader of the Analytic and Inorganic Chemistry Sections of the Manhattan Project.
- Daniel Hirsch, former Director of the Adlai E. Stevenson Program on Nuclear Policy, a research and teaching program on nuclear matters at the University of California, Santa Cruz. In 1986, he was appointed by the NRC to an advisory committee on Containment Performance Design Objectives. Subsequently, he was asked by the Subcommittee on General Oversight and Northwest Power of the Interior Committee of the U.S. House of Representatives to assemble a panel of experts to inspect and review the safety of the Hanford N-reactor, which subsequently was closed in keeping with the panel's recommendation.
- Sheldon C. Plotkin, a consulting safety engineer specializing in accident analysis.

²"Written Presentation of Arguments of Intervenor and Individual Intervenor," October 15, 1990 (Written Presentation) at 28.

I note that Intervenor also has argued (Written Presentation at 16-19) that Licensee is subject to 10 C.F.R. § 70.22(i)(1), which requires a similar showing with respect to plutonium in excess of 2 curies in unsealed form. Hence, Licensee either would need an emergency plan or to conduct an analysis that included all the covered materials on site, showing that the maximum combined dose to a member of the public would not exceed "1 rem effective dose equivalent or an intake of 2 milligrams of soluble uranium."

- Miguel Pulido, a consulting mechanical engineer specializing in energy, ventilation, and airflow matters.
- Lowell Wayne, an environmental scientist and chemist specializing in the behavior of airborne pollutants.³

I find that these experts appear to be well-qualified for the subjects they are covering and that their testimony seems well-organized and well-reasoned.

1. Need for Emergency Plan or Evaluation (10 C.F.R. § 30.32(i)(1))

Intervenors correctly point out that Licensee's possession of 25 curies of americium requires them to conduct an evaluation or to have an applicable emergency plan. The Declaration of the Trump-S Review Panel at 17-22 persuades me that Intervenors are likely to succeed on the merits of the following arguments:

- the only analysis of potential release fractions provided to me so far by Licensee is a "summary" of a study that does not exist and that does not provide adequate assurance of safety to the public;
- the assumptions in the "summary" are not conservative;
- emergency action is likely to be needed beyond 1 mile from the Alpha Laboratory;⁴
- the local fire department may respond to a fire but would not fight it.⁵

2. Need for Emergency Plan or Evaluation (10 C.F.R. § 70.22(i)) and for Disclosure Concerning Pu-241

Section 70.22(a)(4) of 10 C.F.R. requires that an application for a license include the name, amount, and specifications (including the chemical and physical form and, where applicable, isotopic content) of the special nuclear material. Regulatory Guide 10.3, which has suggestive force in this proceeding, requires in section 4.3:

the special nuclear material requested should be identified by isotope; chemical or physical form; activity in curies, *millicuries*, or *microcuries*; and mass in grams. Specification of isotopes should include principal isotope and significant contaminants. [Emphasis added.]

³Declaration of Trump-S Review Panel at 2 (professional credentials attached).

⁴*Id.*, Table III at 21b; attached ANSI/ANS15.16 (1982), "Emergency Classes."

⁵Declaration of Henry Ottinger, Exh. 2.

The Declaration of the Trump-S Review Panel persuades me that Intervenor are likely to succeed on the merits of the following arguments:

- Licensee failed to disclose that there were other forms of plutonium present in its material other than just PU-239 and PU-240 and that those forms may contain *curie* amounts of other plutonium isotopes, not just millicuries or microcuries;
- the total curie content of plutonium possessed by Licensee, whether the source of the material be weapons grade plutonium or reactor grade plutonium, is substantially in excess of 2 curies;
- Licensee's personnel should have known that the curie content of its plutonium was far more than it disclosed and this casts doubt on their competence.⁶

3. Use of Improperly Tested HEPA Filters

The Declaration of the Trump-S Review Panel at 22-25 persuades me that Intervenor are likely to succeed on the merits of the following arguments:

- Licensee has not installed two DOP tested HEPA filters as required by industry practice, supported by DOE Order 6430.1A, § 1300-3.6, which references ASME N510;
- it is not proper to take credit for HEPA filters that are not DOP tested in place;
- in the event of a fire or explosion, it is not proper to take credit for HEPA filters whether or not they are DOP tested;
- a serious fire or explosion could result in substantial release of contamination directly to the environment.

B. Licensee's Arguments

Licensee has not had an opportunity to respond. However, in a telephone conference call held yesterday, Licensee admitted that it was subject to the provisions of 10 C.F.R. § 30.32(i)(1) and that it had informed the Staff of that conclusion. Licensee will be permitted to respond at the earliest opportunity it chooses.

C. Conclusion

The criteria for a stay are met.

As discussed above, the moving party has made a strong showing that it is

⁶Declaration of Trump-S Review Panel at 6-10.

likely to succeed on the merits. There are multiple possible grounds for success, as well as additional grounds for likely success that I have not discussed at this time because of the voluminous filing on which they are based.

I find that Intervenors would be irreparably injured if a stay were not granted. It appears likely that Licensee has not complied with the licensing regulations. Hence, I conclude that its activities are unduly dangerous to public safety. The regulations are the standard of what is required for an adequate assurance of safety and at this time Licensee appears to be unlikely to demonstrate compliance. Hence, continuation of the licensed activities is unduly dangerous.

Although the granting of a stay will delay Licensee's work, the consequences are primarily financial. The NRC has traditionally placed safety concerns above financial concerns. Therefore, I do not find that the harm to the Licensee is adequate to offset the injury to the public.

I also find that the public interest lies in requiring strict compliance to NRC regulations before licensed activity takes place. In this case, the Staff of the Nuclear Regulatory Commission never prepared a safety analysis and appears to have been incorrect in at least one aspect of the proper application of the regulations. Since there is no assurance of adequate protection of the safety of the public, the TRUMP-S experiment must not proceed.

I will permit Licensee to challenge this order at its earliest convenience. Hence, the damage to it may be limited should it be able to persuade me that my conclusions are incorrect.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 20th day of October 1990, ORDERED, that:

Licensee shall immediately cease further experimentation with neptunium, americium, or plutonium. It shall do so in a safe and reasonable manner, with due regard to safety.

An on-the-record telephone conference or other appropriate prehearing conference will be expeditiously arranged at Licensee's request to discuss dissolution of this temporary stay.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Walter H. Jordan
Dr. Jerry R. Kline

In the Matter of

Docket Nos. 030-31379-OM
030-01615-OM
(ASLBP No. 90-612-04-OM)
(EA No. 90-071)
(Order Suspending
Brachytherapy Activities
and Modifying License)

ST. MARY MEDICAL CENTER—
HOBART
ST. MARY MEDICAL CENTER—
GARY

October 31, 1990

The Licensing Board denies a motion to strike certain documents from the record of the proceeding.

RULES OF PRACTICE: RESPONSIBILITIES OF PARTIES

Parties in Commission proceedings have an obligation to alert adjudicatory bodies regarding information of which they become aware bearing upon a matter being adjudicated. *Duke Power Co.* (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625-26 (1973); *Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387, 1388, 1394 (1982).

ADJUDICATORY PROCEEDINGS: AVAILABILITY OF INFORMATION

Documents provided by a party to a Licensing Board during an adjudicatory proceeding represent publicly available agency records and, absent a prior attempt by a party to limit their public availability (for example, as provided by the procedures and standards spelled out in 10 C.F.R. § 2.790), the documents will not be stricken from the record of the proceeding.

MEMORANDUM AND ORDER (Motion to Strike Certain Documents)

On September 28, 1990, all parties to this proceeding submitted to this Licensing Board a document titled "Parties' Joint Status Report on Settlement Negotiations." The report was filed in response to our request, made at the time we granted an extension of time to the parties to October 1, 1990, to complete ongoing settlement negotiations, to detail the matters remaining in controversy and the reasons why settlement had not yet been agreed upon (assuming that were the case). As a result of that report and a further request of the parties for additional time to complete settlement negotiations, we granted an extension to December 3, 1990, for the parties to complete settlement negotiations or (if not successful) to file an additional report with explanations. *See* Memorandum and Order (Further Deferral of Filing Dates), dated October 3, 1990 (unpublished).

The September 28, 1990 report consisted of a brief descriptive statement together with an enclosed letter dated September 21, 1990, from the NRC Region III Administrator to counsel for the Licensees. The Administrator's letter contained two enclosures, the second of which (hereinafter, "Enclosure 2") was a group of background "License Documents" relating to a September 18, 1990 meeting between the parties and bearing upon the one remaining open item in the ongoing settlement negotiations, the selection of an independent auditor. Among other matters, "Enclosure 2" included certain letters from counsel for the Licensees to counsel for the Intervenor (Dr. Koppolu P. Sarma).

On October 11, 1990, the Intervenor, through counsel, filed a letter (which we are treating as a motion) requesting that the "Enclosure 2" documents be "stricken from the record" and disregarded by us. The Intervenor claims that the "Enclosure 2" documents are "patently prejudicial to Dr. Sarma." By responses dated October 22, 1990, and October 24, 1990, respectively, the Licensees and NRC Staff each oppose this request.

We are denying the Intervenor's request for three separate reasons. First, prior to our receipt of the motion, we had already granted the relief on behalf

of which "Enclosure 2" was submitted. The Intervenor favored such relief. As a practical matter, therefore, the motion is in effect moot.

Second, however, "Enclosure 2" was manifestly pertinent to the joint motion for an extension of time to complete settlement negotiations. It clearly sets forth the details of settlement negotiations, which we had requested if settlement had not been reached, and therefore is responsive to our outstanding orders. We agree with the NRC Staff that "Enclosure 2" represents a publicly available agency record. That being so, absent any prior attempt by the Intervenor to limit the release by the Staff of those documents (for example, as provided by the procedures and standards spelled out in 10 C.F.R. § 2.790),¹ the Staff would be obligated under long-standing Commission precedent to provide the Board and parties with the information set forth in those documents. See *Duke Power Co.* (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625-26 (1973); *Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387, 1388, 1394 (1982).

Finally, we do not regard "Enclosure 2" as including information prejudicial to Dr. Sarma, as claimed by the Intervenor. Rather, it appears to us to set forth cogent reasons why settlement negotiations had not as yet been concluded. Beyond that, should the settlement negotiations not be successful, "Enclosure 2" will likely assist us in establishing the boundaries of any hearing that may have to be held. For that reason, "Enclosure 2" is likely to be useful to all parties (and not prejudicial to any of them) if a hearing proves to be necessary.

For all of the above reasons, the Intervenor's motion to strike "Enclosure 2" from the record of this proceeding is hereby *denied*.²

IT IS SO ORDERED.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Bethesda, Maryland
October 31, 1990

¹ We see no basis for the Intervenor's claim that he was prevented in some manner from seeking to limit the public release of "Enclosure 2."

² The Intervenor's reference to "admission into evidence" is misplaced. Although documents such as "Enclosure 2" have been included in the docket file of this proceeding, no material has yet been admitted into evidence. See 10 C.F.R. § 2.743.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

B. Paul Cotter, Jr., Chairman
Glenn O. Bright
Dr. Jerry R. Kline

In the Matter of

Docket Nos. 50-599-ESR
50-600-ESR
(ASLBP No. 79-422-01-ES)

COMMONWEALTH EDISON COMPANY,
et al.
(Carroll County Nuclear Station,
Units 1 and 2)

October 31, 1990

The Licensing Board grants an unopposed joint motion to withdraw an application for a construction permit for a nuclear power facility and terminates the proceeding.

**ORDER APPROVING WITHDRAWAL AND
TERMINATING PROCEEDING**

Upon consideration of the joint motion filed October 23, 1990, by counsel for the Nuclear Regulatory Commission Staff and counsel for Applicant, Commonwealth Edison Company, *et al.*, to withdraw the application to construct the captioned facility and to terminate the proceeding, and upon consideration of the representations contained therein that the Carroll County site has been restored and stabilized to the satisfaction of the Nuclear Regulatory Commission Staff, it is, this 31st day of October 1990, ORDERED:

1. That the joint motion to withdraw the application for a construction permit for Carroll County Nuclear Station Units 1 and 2 is granted; and
2. That the motion to terminate the proceeding is granted without prejudice.

**THE ATOMIC SAFETY AND
LICENSING BOARD**

**Glenn O. Bright
ADMINISTRATIVE JUDGE**

**Jerry R. Kline
ADMINISTRATIVE JUDGE**

**B. Paul Cotter, Jr., Chairman
ADMINISTRATIVE JUDGE**

**Bethesda, Maryland
October 31, 1990**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Thomas E. Murley, Director

In the Matter of

Docket Nos. 50-528

50-529

50-530

ARIZONA PUBLIC SERVICE

COMPANY, *et al.*

(Palo Verde Nuclear Generating

Station, Units 1, 2, and 3)

October 31, 1990

In a Petition dated May 22, 1990, and filed with the U.S. Nuclear Regulatory Commission (NRC), Mrs. Linda E. Mitchell (Petitioner) requested that the NRC take actions pursuant to 10 C.F.R. § 2.206 with respect to the Palo Verde Nuclear Generating Station (PVNGS) of the Arizona Public Service Company, *et al.* (APS or Licensee).

The Petitioner stated that she is employed by the Licensee as an associate electrical engineer at the PVNGS. She alleged that serious violations existed at PVNGS in the systems for emergency lighting and fire protection which were uncovered by the NRC during routine inspections, and that Licensee personnel acted improperly to "water down" the inspection findings, suppress other serious violations, and discredit an NRC inspector. In addition, the Petitioner alleged that NRC Region V management retaliated against the NRC inspector in question and agreed to "water down" inspection report findings as a result of the efforts made by the Licensee. Petitioner claimed that these actions would chill efforts by NRC inspectors and employees of NRC-licensed facilities to raise safety concerns.

The allegations in the Petition fall into three categories. First, the Petition alleges improprieties by NRC personnel regarding NRC inspection activities. This matter has been referred to the Office of the Inspector General. Second, the Petition alleges that serious safety violations exist at PVNGS. At this time,

the Director of the Office of Nuclear Reactor Regulation (NRR) has decided to issue a Partial Director's Decision dealing with these safety allegations. The last category of allegations involves alleged improprieties by APS personnel which have been referred to the NRC's Office of Investigations (OI). Upon receipt of the OI Report, the Director of NRR will issue a Final Director's Decision in this matter.

In his Partial Director's Decision, the Director of NRR concluded that NRC inspection activities had identified deficiencies and violations regarding the fire protection program at PVNGS. The Licensee has addressed these deficiencies with an acceptable plan for corrective actions. Corrective actions addressing immediate concerns have been completed. NRC inspection staff is monitoring the remaining corrective actions to ensure timely completion. Consequently, the Director of NRR determined that no action pursuant to section 2.206 need be taken at this time.

The Director of NRR notes in his Decision that the NRC Staff has issued a Notice of Violation and Proposed Imposition of Civil Penalty to APS in the amount of \$125,000 for violations of NRC requirements in the fire protection area, in part to emphasize the need for lasting remedial action.

PARTIAL DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

I. INTRODUCTION

On May 22, 1990, David K. Colapinto, Esq., submitted a Petition on behalf of Mrs. Linda E. Mitchell (Petitioner) requesting that the U.S. Nuclear Regulatory Commission (NRC) take actions pursuant to 10 C.F.R. § 2.206 with respect to the Palo Verde Nuclear Generating Station (PVNGS) of the Arizona Public Service Company, *et al.* (APS or Licensee). The Petitioner stated that she is employed by the Licensee as an associate electrical engineer at the PVNGS. She alleges that serious violations exist at PVNGS in the systems for emergency lighting and fire protection which were uncovered by the NRC during routine inspections, and that Licensee personnel acted improperly to "water down" the inspection findings, suppress other serious violations, and discredit an NRC inspector. In addition, the Petitioner alleges that NRC Region V management retaliated against the NRC inspector in question and agreed to "water down" inspection report findings as a result of the efforts made by the Licensee. Petitioner claims that these actions will chill efforts by NRC inspectors and employees of NRC-licensed facilities to raise safety concerns.

Based on these allegations, Petitioner sought a variety of relief including institution of a proceeding pursuant to 10 C.F.R. § 2.202 to modify, suspend, or revoke the licenses issued by the NRC for PVNGS; issuance of citations to the Licensee for violations improperly and illegally deleted from an NRC Inspection Report; issuance of fines to certain employees of the Licensee for allegedly tampering with, obstructing, and impeding an ongoing NRC inspection; disciplinary actions against any and all NRC employees allegedly involved in retaliation against an NRC inspector; and such other and further relief as the NRC may deem appropriate.

In a letter to Mr. Colapinto of June 21, 1990, I acknowledged receipt of the Petition and informed him that the Petition would be treated under 10 C.F.R. § 2.206 of the Commission's regulations. I also informed Mr. Colapinto that allegations in the Petition concerning improprieties by NRC personnel have been referred to the Office of the Inspector General and that any inquiries regarding those allegations should be directed to the Office of the Inspector General. These matters seek relief outside the scope of 10 C.F.R. § 2.206 and will not be addressed further by me.

The allegations in the Petition fall into three categories. First, Petitioner alleges improprieties by NRC personnel regarding NRC inspection activities. As noted above, this matter has been referred to the Office of the Inspector General. Second, the Petitioner alleges improprieties by APS personnel regarding NRC inspection activities. These allegations of wrongdoing have been referred to the NRC's Office of Investigations (OI). At a later time, upon receipt of the OI Report, I will issue a Final Director's Decision dealing with these allegations. Finally, the Petitioner alleges that serious safety violations exist at PVNGS in the systems for emergency lighting and fire protection which were uncovered as a result of routine NRC inspection activities. At this time, I have decided to issue this Partial Director's Decision dealing with these safety allegations. Due to the nature and extent of the deficiencies found, the Office of Nuclear Reactor Regulation (NRR) has participated with Region V in the evaluation and resolution of this matter. In addition to participating in the referenced inspections, NRR has been reviewing the emergency lighting and fire protection programs at PVNGS.

II. DISCUSSION

From January through August 1990, the NRC conducted several inspections regarding the fire protection program at PVNGS, particularly the area of emergency lighting. The inspections were documented in Inspection Report Nos. 50-528/90-02 of April 24, 1990, 50-528/90-25 of July 5, 1990, and 50-528/90-35 of September 21, 1990. In general, the findings of these Inspection Reports raised

major concerns in the emergency lighting area. These concerns were also raised in the Petition of May 22, 1990, in a broader sense. The concerns documented in the Inspection Reports included deficiencies in the application of quality assurance (QA) to emergency lighting, failure to test emergency lights in their "as-found" condition, and rates of emergency light failure in conjunction with inadequate preventive maintenance associated with emergency lighting. The inspections also determined that APS had repeatedly failed to conduct appropriate evaluations of deficiencies in the emergency lighting area to determine the cause and to prevent recurrence and that the Licensee had failed to apply appropriate engineering and quality oversight involvement to the emergency lighting system.

The results of these inspections were discussed during a transcribed Enforcement Conference held in Region V on July 10, 1990. Based on questions raised at the Enforcement Conference regarding the Licensee's application of its QA Program to fire protection equipment, the NRC could not determine the extent to which the Licensee had applied its QA Program to fire protection in the past and that a potential safety issue existed in this regard. As a result, on July 10, 1990, NRC Region V requested the Licensee to justify continued operation of the PVNGS facility in regard to the APS fire protection program. APS submitted to NRC Region V an evaluation and justification for continued operation on July 20, 1990. Although the Licensee's evaluation identified deficiencies in the application of its QA Program to fire protection equipment, the Licensee concluded that the deficiencies did not have a significant adverse effect on the safety of the public. Specifically, the deficiencies consisted of a failure to comply fully with the QA requirements for PVNGS fire protection systems (e.g., fire detection and alarm, fire barriers, lube oil collection, in-plant communications, ventilation, manual fire-fighting equipment, and emergency lighting systems) called for by the QA guidelines of Branch Technical Position Auxiliary Power Conversion System Branch (BTP APCSB) 9.5-1, Appendix A. BTP APCSB 9.5-1 Appendix A is an NRC document entitled "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976." The Licensee's evaluation concluded that the deficiencies did not preclude the fire protection systems and equipment being adequate to support the continued safe operation of PVNGS. Although QA deficiencies were identified, the continued safe operation of PVNGS was based on: the adherence to existing administrative procedures governing the fire protection program, the completion of ongoing inspections and testing, assurances that the design basis is complied with based upon extensive walkdowns by the Licensee of its fire protection systems, and the increased frequency of preventive maintenance. In addition, APS initiated efforts to ensure implementation of upgraded QA program requirements to the fire protection program at PVNGS. Consequently, NRC Region V concluded that there was reasonable assurance that PVNGS could continue to operate safely.

With respect to the other deficiencies identified as a result of the NRC inspection activities at PVNGS, the Licensee has initiated acceptable corrective actions. Specifically, APS has indicated that the following corrective actions will be completed:

- Emergency lighting has been designated as "QAG" (quality augmented) which is consistent with the PVNGS QA Criteria Manual. Plant procedures will be reviewed to ensure that the QAG program is being fully implemented in the fire protection area.
- Holophane batteries are currently being replaced to ensure adequate capacity.
- Emergi-lites are being replaced with more reliable Holophane units and fluorescent fixtures.
- The low-voltage disconnect relay setpoint will be lowered on all Exide uninterrupted power supplies to prevent early disconnect of the batteries.
- The preventive maintenance (PM) program will be upgraded. One of the enhancements will ensure that lights are properly aimed. The PM interval will also be changed from quarterly to monthly on selected lighting units.
- Test procedures will be revised to ensure that emergency lights are tested in their as-found condition and that the battery capacity is measured. Surveillance frequencies have also been increased.

On August 1, 1990, APS submitted the details and schedules for the corrective actions summarized above. Corrective actions addressing immediate concerns have been completed. The remaining corrective actions will provide assurance that the Licensee's fire protection program, including emergency lighting, remains acceptable in the future. The NRC inspection staff is monitoring these corrective actions to ensure timely completion. Until these remaining actions are completed, there is reasonable assurance that the facility can be operated with adequate protection of the public health and safety, based on the adherence to existing administrative procedures governing the fire protection program, the completion of ongoing inspections and testing, assurances that the design basis is complied with based upon extensive walkdowns by the Licensee of its fire protection systems, and the increased frequency of preventive maintenance.

As a separate matter during the aforementioned NRC inspection activities, APS contracted with an independent consultant to review the emergency lighting issues at PVNGS. At the request of NRC Region V, on August 3, 1990, APS submitted the independent review of emergency lighting that was completed by APS's consultant, ABB Impell Corporation. Although Impell confirmed the existence of previously identified deficiencies, these deficiencies did not negate the earlier conclusion as to the continued safe operation of PVNGS. Impell identified the following four areas of concern in its independent review:

deficiencies in QA classifications, problems in design adequacy including battery sizing, misdirected lighting, and inadequate maintenance. Impell noted that APS's past corrective actions regarding emergency lighting have addressed the immediate concerns without focusing on the underlying programmatic issues. The corrective actions undertaken by the Licensee and listed above adequately address the programmatic issues identified by Impell. In response to continuing NRC concern, APS appears to be addressing the broader programmatic issues with regard to emergency lighting and fire protection at PVNGS.

As to the deficiencies identified in the NRC inspections, on October 16, 1990, the NRC Staff issued a Notice of Violation and Proposed Imposition of Civil Penalty (EA 90-121) to the Licensee in the amount of \$125,000 for violations of NRC requirements in the fire protection area. The civil penalty was proposed in part to emphasize the need for lasting remedial action in this area.

III. CONCLUSION

NRC's review of the history of fire protection deficiencies at PVNGS, particularly in the area of emergency lighting, indicates that APS should have applied more effort to identify and resolve the technical problems. APS's failure to apply the required QA program to its fire protection program appears to have been a major root cause of previously identified deficiencies.

As discussed herein, APS has implemented extensive corrective actions to ensure compliance with applicable fire protection program requirements, especially regarding the reliability of its emergency lights. Although many of the deficiencies noted above were identified as a result of rigorous NRC oversight and were not initially acknowledged and resolved by APS, it appears that APS recognizes the importance of NRC fire protection requirements and is now approaching full compliance.

The institution of proceedings pursuant to 10 C.F.R. § 2.202, as requested by Petitioner, is appropriate only where substantial health and safety issues have been raised. *See Consolidated Edison Co. of New York* (Indian Point, Units 1, 2, and 3), CLI-75-8, 2 NRC 173, 175 (1975), and *Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), DD-84-7, 19 NRC 899, 923 (1984). As discussed above, there is reasonable assurance that PVNGS can be operated with adequate protection of the public health and safety pending completion of ongoing corrective actions. Based on the foregoing, I find that the institution of a proceeding pursuant to 10 C.F.R. § 2.202 to modify, suspend, or revoke the NRC licenses held by APS is not warranted. This decision is based on the corrective actions initiated by APS to deal with the concerns that were identified by NRC inspection activities conducted at PVNGS in the areas of emergency lighting and fire protection. Therefore, I have decided to deny this aspect of

Petitioner's request for action pursuant to 10 C.F.R. § 2.206. Consideration of Petitioner's remaining requests will be based upon the completion and outcome of OI activities at which time a Final Director's Decision will be issued. As provided in 10 C.F.R. § 2.206(c), a copy of this Decision will be filed with the Secretary of the Commission for its review.

FOR THE NUCLEAR
REGULATORY COMMISSION

Thomas E. Murley, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 31st day of October 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kenneth M. Carr, Chairman
Thomas M. Roberts
Kenneth C. Rogers
James R. Curtliss
Forrest J. Remick

In the Matter of

Docket Nos. PRM 50-31
PRM 50-45
PRM 50-46

CITIZENS TASK FORCE OF
CHAPEL HILL, *et al.*

February 13, 1990

The Nuclear Regulatory Commission is denying three petitions for rulemaking concerning emergency preparedness at nuclear power plants. These petitions were submitted by the Citizens Task Force of Chapel Hill, North Carolina; the Department of Attorney General, State of Maine; and an individual, Kenneth G. Sexton, Ph.D. The Citizens Task Force petition (PRM 50-31) requested that (1) the emergency planning zone radius around nuclear power plants be extended from 10 miles to 20 miles, (2) independent radiological monitoring systems operated by local communities be established, and (3) mandatory utility funding of the emergency preparedness efforts of local communities be required. The petition submitted by Mr. Sexton (PRM 50-45) requested that the size of the plume exposure pathway EPZ be determined on a site-specific basis, using the most up-to-date methodologies and that the size of the EPZ be reevaluated at least every 5 years. The petition submitted by the State of Maine (PRM 50-46) requested (1) expansion of the emergency planning zone for both the plume exposure pathway and the ingestion pathway; (2) a requirement that emergency planning be done before any construction of a nuclear facility is permitted and that the governor or governors of any affected state approve the emergency plans as a precondition to construction; and (3) a requirement that offsite emergency

preparedness findings be made before any fuel loading or low-power operations are permitted.

The Commission considers that these three petitions have a common theme, thus warranting simultaneous evaluation. Additionally, the State of Maine formally requested that "the Maine Petition be consolidated with the so-called Sexton Petition. . . ." In denying the petitions, the Commission concludes that its present regulations on emergency preparedness are adequate to protect public health and safety.

EMERGENCY PLANNING: EMERGENCY PLANNING ZONE (SIZE); REGULATORY GUIDANCE (NUREG-0396); EFFECTS OF "RAINOUT"

The deposition of radioactivity on the ground due to rain scouring radioactive materials from the air ("rainout") was considered in NUREG-0396. The statement that the dosage estimates in NUREG-0396 assume a uniform rate of deposition of radioactive material is in error. A full page (p. I-25) of NUREG-0396 is devoted to a discussion of rainout effects. While NUREG-0396 does not explicitly say so, the calculated doses presented in Figures I-10 through I-15 do, in fact, include the effects of rainout.

EMERGENCY PLANNING: "ADEQUATE PROTECTIVE MEASURES"

REGULATIONS: INTERPRETATION (10 C.F.R. § 50.47(a))

Implicit in the concept of "adequate protective measures" is the fact that emergency planning will not eliminate, in every conceivable accident, the possibility of serious harm to the public. Emergency planning can, however, be expected to reduce any public harm in the event of a serious but highly unlikely accident. The proper interpretation of the rule would call for adjustment to the exact size of the EPZ on the basis of such straightforward administrative considerations as avoiding boundaries that run through the middle of schools or hospitals, or that arbitrarily carve out small portions of governmental jurisdictions. The goal is merely planning simplicity and avoidance of ambiguity as to the location of the boundaries. Given these circumstances, the Commission has concluded that adequate protection can be provided by an EPZ that is about 10 miles in radius.

**EMERGENCY PLANNING: EMERGENCY PLANNING ZONE
(SIZE)**

There is no line at 10 miles beyond which radiation cannot pass. However, the hazard from an accident tends to gradually decrease as one moves further from the accident. How far from a nuclear power plant is the potential hazard small enough that specific detailed planning is not worthwhile? In the Commission's judgment, that distance is about 10 miles for the considerations stated in this discussion.

**EMERGENCY PLANNING: EMERGENCY PLANNING ZONE
(SIZE); PROTECTION OF PERSONS OUTSIDE EPZ**

The Commission believes that if protective actions were warranted beyond 10 miles, those actions, whether evacuations, sheltering, or relocation, would certainly be recommended to the state officials. Nonetheless, due to the additional time that is available for the taking of protective actions out to greater distances from the reactor, the implementation of these additional protective actions would not require detailed plans.

**EMERGENCY PLANNING: EMERGENCY PLANNING ZONE
(SIZE)**

The 10-mile and 50-mile EPZs were chosen as a planning basis to demonstrate a capability and to provide emergency plans with the flexibility of dealing with a broad range of accident releases, rather than being based solely on a single highly unlikely event, such as the worst case. It was recognized that protective actions might need to be taken beyond these planning zone distances for the most severe releases.

**EMERGENCY PLANNING: EMERGENCY PLANNING ZONE
(SIZE); LESSONS LEARNED FROM CHERNOBYL ACCIDENT**

A release magnitude similar to the one associated with Chernobyl and the possibility that ad hoc actions beyond the planning zone boundaries might be needed for very unlikely events were considered and have been factored into the development of U.S. requirements, including the sizes of the EPZs. The Chernobyl accident and the Soviet response do not reveal any apparent deficiency in U.S. plans and preparedness, including the 10-mile plume exposure pathway EPZ size and the 50-mile ingestion exposure pathway EPZ size. These zones provide an adequate basis to plan and carry out the full range of protective

actions for the populations within these zones, as well as beyond them, if the highly improbable need should arise.

EMERGENCY PLANNING: EMERGENCY PLANNING ZONE (SIZE); REGULATORY GUIDANCE (NUREG-1150)

The Commission agrees that the size of the 10-mile EPZ was determined using the methodologies available in 1980 and that today there exist more sophisticated techniques and computer models to estimate radiation releases and doses to the public. Nonetheless, the most sophisticated and up-to-date methodologies were used in the development of NUREG-1150 (February 1987) which does not provide evidence that the size of the plume exposure pathway EPZ should now be increased. Draft NUREG-1150 (February 1987) provides insights concerning (1) the way offsite doses would be expected to vary with distance from the plants analyzed and (2) the relative effectiveness of different offsite protective actions at various distances.

EMERGENCY PLANNING: EMERGENCY PLANNING ZONE (PLUME EPZ); REGULATORY GUIDANCE (NUREG-0386; NUREG-0654)

The Commission determined, based on information available at the time that it promulgated the emergency planning regulations, that a plume exposure pathway emergency planning zone (plume EPZ) of about 10 miles in radius was the proper and appropriate area for detailed planning for protective actions in the event of a radiological emergency. At that time, the Commission specifically recognized that detailed planning in that zone would more readily permit the development and implementation of ad hoc actions beyond the 10-mile plume EPZ should the need arise. See NUREG-0386, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants" (December 1978); NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980), at 12; *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 392-93 (1987); *Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 NRC 1163, 1171-73 (1982). In effect, the Commission accounted for the possibility of spontaneous evacuation outside the plume EPZ when it established the size of that EPZ in the first instance. The petitions provide no justification for expansion of the plume EPZ to further account for the possibility of spontaneous evacuations.

EMERGENCY PLANS: MONITORING CAPACITY

Equipment capability is continually checked by NRC and FEMA. The Commission does not believe that there is a lack of monitoring equipment and therefore does not see lack of equipment as a reason to amend its regulations to require that monitoring equipment be given to and operated by local communities.

EMERGENCY PLANS: MONITORING CAPACITY

Offsite monitoring is not intended and cannot be used properly by itself to make initial decisions on protective actions. Elevated radiation levels off site are among the very last indicators of an serious accident and tend to occur at a time when protective action decisions should already have been made.

EMERGENCY PLANNING: UTILITY FUNDING

Funding arrangements are essentially a matter of state and local government interest; therefore, the Commission finds no factual basis to conclude that the proposed funding is necessary to enable state or local governments to establish adequate emergency preparedness plans. Accordingly, we do not reach the question of our legal authority to require licensee funding in the manner requested by the Petitioner.

REGULATIONS: INTERPRETATION (10 C.F.R. § 52.79(d))

The provisions of 10 C.F.R. § 52.79(d) provide that to the maximum feasible extent emergency plans will be approved by the NRC before it issues the construction permit for a new nuclear power plant.

TECHNICAL ISSUE DISCUSSED

The following technical issue is discussed: Emergency Planning.

DENIAL OF PETITION FOR RULEMAKING

I. BACKGROUND

PRM 50-31

A petition filed before the Commission on December 21, 1981 by the Citizens Task Force of Chapel Hill, North Carolina, requested the Commission to amend its emergency preparedness regulations in 10 C.F.R. Part 50, "Domestic Licensing of Production and Utilization Facilities," and Part 70, "Domestic Licensing of Special Nuclear Material." The petition requested the Commission to amend the regulations to require that the present 10-mile emergency planning zone (EPZ) radius for nuclear power plants be extended from 10 miles to 20 miles and include any towns bordering on or partially within this EPZ, that towns within the EPZ with a population in excess of 5,000 persons operate their own radiological monitoring equipment, and that utilities be required to finance the emergency preparedness efforts of the towns around the nuclear power plants.

A notice of filing the petition, Docket No. PRM 50-31, was published in the *Federal Register* on March 24, 1982 (47 Fed. Reg. 12,639). Public comments were requested by May 24, 1982. The comment period was extended to March 9, 1987 (51 Fed. Reg. 40,335 (Nov. 6, 1986)).

A total of seventy-four comment letters were received. Twenty-three of the letters were from individuals, of whom fifteen favored the petition and eight opposed it. Thirteen letters were from environmental-, nuclear-, or energy-oriented citizen activist groups. Of these, twelve favored the petition and one opposed it. Twenty-nine letters were from utilities, their law firms, or other companies associated with the nuclear industry. All twenty-nine opposed the petition. Seven letters were received from state or local emergency preparedness agencies. All seven opposed the petition. A letter from a political club and a letter from a county commission were received; both favored the petition.

PRM 50-45

A petition filed before the Commission on August 6, 1986, by Mr. Kenneth G. Sexton requested the Commission to amend its emergency preparedness regulations in 10 C.F.R. Part 50, "Domestic Licensing of Production and Utilization Facilities." The petition requested the Commission to amend 10 C.F.R. § 50.47(c)(2) for nuclear power plants to require that

the plume exposure pathway EPZ for all nuclear power plants shall consist of an area to be determined by the NRC on a site-specific basis, after allowing for review of the determination report by interested parties. The report shall list, describe, and reference all input data and

methodologies used and all other factors considered. The NRC shall use methodologies and procedures which are generally accepted as reasonably current and appropriate by recognized professional groups in each supporting field (including the American Meteorology Society (AMS) and Environmental Protection Agency (EPA)). Likewise, best available estimates for model input (such as source terms) shall be used. This distance shall be reevaluated at least every five years, using latest techniques and information, unless petitioned earlier by the NRC, another professional group (such as the EPA or AMS), or the general public. Generally, the models shall be at least as complex and realistic as described in NUREG-0654 for Class B models. Meteorological submodels shall consider all factors which can have an effect on the impact of the release of radioactive materials to the environment. The exact size and configuration of the EPZ surrounding a particular nuclear power reactor shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as power plant specifics (type, power output, age, etc.), local meteorology (including data from both the power plant site and local national weather service), demography, topography, land characteristics, access routes, jurisdictional boundaries, and proximity of seats of local government.

A notice of filing of the petition, Docket No. PRM 50-45, was published in the *Federal Register* on October 6, 1986 (51 Fed. Reg. 35,518). Public comments were requested by December 5, 1986.

A total of 314 comment letters were received of which 278 favored the petition and 14 opposed it. Two hundred thirty-five of the letters were from individuals. Four letters were from environmental-, nuclear-, or energy-oriented citizen activist groups. Of these, three favored the petition and one opposed it. Ten letters were from utilities, their law firms, or other companies associated with the nuclear industry. All ten opposed the petition. Seven letters were received from local government emergency preparedness agencies, of whom four favored the petition and three opposed the petition.

PRM 50-46

A petition filed before the Commission on October 14, 1986, by the Attorney General, State of Maine, requested the Commission to amend its emergency preparedness regulations in 10 C.F.R. Part 50, "Domestic Licensing of Production and Utilization Facilities." The petition requested that the Commission amend 10 C.F.R. § 50.47(c)(2) for nuclear power plants to (1) expand both the emergency planning zone for the plume exposure pathway and for the ingestion pathway; (2) require that emergency planning be done before any construction of a nuclear facility is permitted and that the governor or governors of any affected state approve the emergency plans as a precondition to construction; and (3) require that offsite emergency preparedness findings be made before any fuel loading or low-power operations are permitted. Subsequently, the State of Maine, Department of the Attorney General, in a letter dated February 13, 1987, requested "that the Maine Petition be consolidated with the so-called

Sexton Petition, Docket No. PRM 50-45, 51 *Federal Register* 35,518 (Oct. 6, 1986)”

A notice of filing of the petition, Docket No. PRM 50-46, was published in the *Federal Register* on December 30, 1986 (51 Fed. Reg. 47,025). Public comments were requested by March 2, 1987.

A total of thirty-seven comment letters were received. Seven of the letters were from individuals, all favoring the petition. Five letters were from environmental-, nuclear-, or energy-oriented citizen activist groups. Of these, four favored the petition and one opposed it. Twenty-two letters were from utilities and law firms. Of these, four favored the petition and sixteen opposed the petition. One letter was received from a state and favored the petition.

II. SUMMARY OF PETITIONS

Each of the three Petitioners requested, among other things, a fundamental change to the NRC emergency planning regulations that would or could change the size of the plume exposure pathway EPZ. Each Petitioner provided a different rationale to support its request, and many comment letters surfaced additional reasons to either support or oppose the Petitioners' requests. Sixteen separate issues have been identified in the petition and comments. Issues 1 through 11 focus on this common theme, to change the size of the EPZ, while addressing different rationales. Issues 12 through 16 focus on emergency planning areas of tangential concern. Each issue with accompanying rationale is fully discussed and evaluated, followed by a Commission response to that particular concern.

III. ISSUES RAISED AND FINDINGS MADE

Issue 1. Extend the Emergency Planning Zone Radius from 10 Miles to 20 Miles Because the Most Severe Accidents Were Not Adequately Considered

The rationale used for expressing the opinion that a 10-mile EPZ is inadequate is that following a core-melt accident that results in an atmospheric release of radiation, large doses of radiation could occur outside the 10-mile radius. The petition filed by the Citizens Task Force of Chapel Hill quoted the joint NRC-FEMA report, NUREG-0654.¹

¹ NUREG-0654, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," November 1980.

On the other hand, for the worst possible accidents, protective actions [evacuation of the population]² would need to be taken outside the planning zones [of 10 miles].

NUREG-0654, Rev. 1, at 11.

The Petitioner argued that the size of the EPZ should be based on the worst-case core meltdown accident stating, "It is disturbing that the evacuation preparedness EPZ zone is limited to 10 miles despite the clear recognition that in a worst-case accident, evacuation would need to be taken outside the zone." The Petitioner further argued that evacuation should be taken not only to avoid "immediate life threatening doses" but other severe adverse health risks as well.

Several commenters supported the idea that the EPZ should be based on the worst-case accident: an accident involving a core-melt, a major breach of containment resulting in an atmospheric release of large amounts of radioactivity especially during adverse weather conditions. These commenters said that people beyond 10 miles were in danger from such an accident. For example, the Union of Concerned Scientists said:

Although the NRC alleged in NUREG-0396³ that it considered accidents beyond the traditional design basis, the consideration given such accidents was minimal at best.

It is clear that the 10-mile plume EPZ was not directed toward accidents in which the containment fails either concurrently with a core-melt or consequent to a core-melt. It is precisely such accidents which dominate the risk to the public from the operation of nuclear power plants.

Commenters cited large consequences from a severe accident. For example, Pollution and Environmental Problems, Inc., said:

The Reactor Safety Study⁴ estimates that a core-melt could cause 48,000 fatalities; 285,000 non-fatal illnesses and 5,000 genetic injuries. These consequences — as bad as they are — assume that most people downwind of an accident within a 45 degree sector extending 25 miles from a plant could be evacuated within a few hours. The NRC requires — only a 10-mile evacuation zone — so it must be assumed that NRC is willing to accept a larger number of deaths and injuries than the Reactor Safety Study assumes.

²Note that the words in brackets, [evacuation of the population], were added to the quote by one of the Petitioners. The words change the meaning intended in NUREG-0654, wherein protective action includes other actions besides evacuation, such as seeking shelter indoors.

³NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants" (December 1978).

⁴WASH-1400 (also numbered NUREG-75/0014), "Reactor Safety Study," often called the "Rasmussen Report" or "WASH-1400" (October 1975).

Commission Response to Issue 1

The Commission dealt extensively with the issue of the adequacy of the 10-mile EPZ in the context of severe accidents, in its decision in *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383 (1987). The discussion in that case summarizes the Commission development of the 10-mile EPZ concept and it is appropriate to quote extensively from it in response to the petitions here. The Commission noted that,

For design-basis/loss-of-coolant accidents (DBA/LOCA), the Report [NUREG-0396] concluded, among other things, that for most plants the 25-rem (thyroid) and 5-rem (whole-body) EPA protective action guides⁵ would not be exceeded beyond 10 miles from the plant, even using conservative assumptions and analyses. Report, Appendix I at 4-6. As for serious Class 9 accidents involving core melt and containment failure, the Report [NUREG-0396] concluded that these protective action guides generally would not be exceeded beyond 10 miles unless the containment failed catastrophically and there was a very large release of radioactive material . . . [and] that even for very large releases, emergency actions such as sheltering or evacuation within 10 miles would result in significant reductions in deaths and early injuries. *Id.* at 6-7. From a probability standpoint, the Report concluded that the probability of large doses from core-melt accidents drops off substantially at about 10 miles from the reactor. *Id.* at 37.

Based on these considerations, the Report concluded that:

[E]mergency response plans should be useful for responding to any accident that would produce offsite doses in excess of the PAGs. This would include the more severe design basis accidents and the accident spectrum analyzed in the [Reactor Safety Study] RSS. After reviewing the potential consequences associated with these types of accidents, it was the consensus [*sic*] of the Task Force that emergency plans could be based upon a generic distance out to which predetermined actions would provide dose savings for any such accidents. Beyond this generic distance it was concluded that actions could be taken on an ad hoc basis using the same considerations that went into the initial action determinations.

The Task Force judgment on the extent of the Emergency Planning Zone is derived from the characteristics of design basis and Class 9 accident consequences. Based on the information provided in Appendix I [of NUREG-0396] and the applicable PAGs a radius of about 10 miles was selected for the plume exposure pathway and a radius of about 50 miles was selected for the ingestion exposure pathway, as shown in table 1. Although the radius for the EPZ implies a circular area, the actual shape would depend upon the characteristics of a particular site. The circular or other defined area would be for planning whereas initial response would likely involve only a portion of the total area.

Report at 16.

26 NRC at 393.

⁵"Protective action guides are units of radiation doses which, if projected to be received by an individual, would warrant protective action." *Shoreham*, 26 NRC at 393 n.18, citing *Manual of Protective Action Guides and Protective Actions for Nuclear Incidents*, EPA-520/1-75-001 (September 1975).

A reading of the Report [NUREG-0396] indicates clearly that the margins of safety provided by the recommended 10-mile radius were not calculated in any precise fashion, but were qualitatively found adequate as a matter of judgment. Given the uncertainties in estimations of Class 9 accident probabilities and consequences, there was no other feasible choice in this regard. The EPZ's shape could be somewhat different than the 10-mile circular radius implies, without compromising emergency planning goals. Indeed, the Report [NUREG-0396] is explicit that "judgment . . . will be used in determining the precise size and shape of the EPZs considering local conditions such as demography, topography, and land use characteristics, access routes, local jurisdictional boundaries and arrangements with the nuclear facility operator for notification and response assistance." These are, of course, the considerations later cited in § 50.47(b)(2) with regard to determining the "exact size and configuration" of the EPZ.

Nothing in the Report [NUREG-0396] or in any other material in the emergency planning rulemaking record compels a finding that EPZ adequacy is especially sensitive to where exactly the boundary falls, and any such conclusion would seem to be at odds with the overall thrust of the Report [NUREG-0396]. In particular, the task force's analysis indicates that "adequate protective measures" in the context of emergency planning is not a precisely defined concept.

26 NRC at 394.

The concept of "adequate protective measures" as used in our emergency planning regulations is explained in *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22, 30 (1986), as follows:

This root question cannot be answered without some discussion of what is meant by "adequate protective measures." Our emergency planning regulations are an important part of the regulatory framework for protecting the public health and safety. But they differ in character from most of our siting and engineering design requirements which are directed at achieving or maintaining a minimum level of public safety protection. See, e.g., 10 C.F.R. § 100.11. Our emergency planning requirements do not require that an adequate plan achieve a preset minimum radiation dose saving or a minimum evacuation time for the plume exposure pathway emergency planning zone in the event of a serious accident. Rather, they attempt to achieve reasonable and feasible dose reduction under the circumstances; what may be reasonable or feasible for one plant site may not be for another.

As the Commission has made clear in *Shoreham*, CLI-87-12, *supra*:

It is implicit in this concept of "adequate protective measures" that a determination that a particular EPZ size will provide "adequate protective measures" does not in fact mean that emergency planning will eliminate, in every conceivable accident, the possibility of serious harm to the public. If this were actually the criterion, it would be difficult if not impossible to set any *a priori* limits to the size of the EPZ or to the scope of required emergency planning. Emergency planning can, however, be expected to reduce any public harm in the event of a serious, but highly unlikely accident.

But the rule clearly was intended to set such limits. Even under the Appeal Board's analysis, the rule amounts to a Commission finding that adequate protection can be provided by an EPZ of limited size, 10 miles in radius, give or take a few miles, but certainly much less than 20.

. . . .
. . . the proper interpretation of the rule would call for adjustment to the exact size of the EPZ only on the basis of such straightforward administrative considerations as avoiding EPZ boundaries that run through the middle of schools or hospitals, or that arbitrarily carve out small portions of governmental jurisdictions. The goal is merely planning simplicity and avoidance of ambiguity as to the location of the boundaries. With such clarity, plans can be implemented with an understanding as to who is being directed to take particular protective actions.

26 NRC at 394-95.

In conclusion, the Commission still finds that the 10 mile EPZ should not be increased to 20 miles.

Issue 2. Extend the EPZ from 10 Miles to 20 Miles Because the Effect of Rainout Was Not Adequately Considered When the Size of the EPZs Was Determined

Another reason given in support of an expansion of the EPZ was that rainout was not adequately considered when the size of the EPZs was determined. "Rainout" is the deposition of radioactivity on the ground due to rain scouring radioactive materials from the air. For example, the Seacoast Anti-Pollution League said,

Yet another reason to extend the EPZ to at least 20 miles is the danger of rainout of the radionuclides from the plume. The dosage estimates in NUREG-0396 assume a uniform rate of deposition of radioactive material from the plume . . . if half the material remaining in the plume were to be washed out by a rainstorm between a radius of 15 to 20 miles from the reactor, the doses would be as high as they were within the 5 to 10 mile interval.

Commission Response to Issue 2

Rainout was considered. The statement that the dosage estimates in NUREG-0396 assume a uniform rate of deposition of radioactive material is in error. A full page (p. I-25) of NUREG-0396 is devoted to a discussion of rainout effects. While NUREG-0396 does not explicitly say so, the calculated doses presented in Figures I-10 through I-15 do, in fact, include the effects of rainout.

Rainout is included in the following manner. The entire release of radioactivity is assumed to be contained in a small highly concentrated puff. The probability of such a puff occurring is approximately 1 time in 100,000 years. Wind is assumed to blow the puff directly over a large population center during a period of extreme atmospheric stability with minimal dilution of the puff so it never becomes much more than a mile in diameter. When the puff is directly over the population center, an extremely heavy rainfall scours most of the non-

gaseous radioactive material from the cloud and deposits it on the ground. If such a puff is released, the probability of the puff encountering these weather conditions is approximately 1 in 10,000. The radioactivity is assumed to remain on the surface of the ground with no entrance into sewers, no runoff, and no sinking into the ground to remove or shield the radioactivity. The calculations assume that 100 percent of the radioactivity will remain on the surface without any runoff, but in reality the probability of this is near zero. The people are assumed to be exposed with minimal shielding to the radiation from the deposited material; in other words, that no one is in an apartment building, no one is in an office building, no one is in a basement, and no one is in any other type of building that provides more shielding than a small one-story frame house. The assumed probability of this is one, whereas it is in reality near zero. The people remain where they are with no evacuation or other protective action for 24 hours. The probability of no emergency response for 24 hours is assumed in the calculations of consequences to be one, but in reality the probability is near zero. It is this specific series of events that gives rise to the largest casualty figures that have been calculated for severe nuclear accidents and which are presented in NUREG-0396. Because of these assumptions, the calculated consequences are greatly overestimated.

Issue 3. Extend the EPZ from 10 Miles to 20 Miles Because Ad Hoc Actions Beyond 10 Miles Would Not Be Adequate

Another reason given by the Citizens Task Force of Chapel Hill petition and several commenters to expand the EPZ is that they did not believe the NRC's statement in its final rule on emergency planning, 45 Fed. Reg. 55,402 (Aug. 19, 1980) and NUREG-0396 at 16, that the 10-mile plume EPZ was "large enough to provide a response base that would support activity outside the planning zone." The Citizens Task Force petition quoted a FEMA report,⁶ "Like the '5-mile plans at TMI they [emergency plans with a 10-mile EPZ] may reflect inadequate definitions of the threat, encourage a false sense of readiness, and delay preparations for a more suitable response to a crisis." The Union of Concerned Scientists noted that it would require only 1 to 4 hours for the plume to reach 10 miles. Thus, there would not be adequate time to notify people beyond 10 miles to evacuate.

Commenters opposed to the petition said that the detailed planning for the 10-mile EPZ could be applied outside the 10-mile EPZ if necessary. They also noted that the Commission had already made a judgment on this question in

⁶Evacuation Planning in the TMI Accident, FEMA, January 1980.

its rulemaking on emergency preparedness (45 Fed. Reg. 55,402, 55,406). For example, the law firm of Shaw, Pittman, Potts, and Trowbridge argued:

Thus, it is likely given the means usually used to distribute public information materials, that the geographic area actually covered will be greater than the plume exposure pathway EPZ. Similarly, the systems used to notify the public to take protective actions provide coverage substantially beyond the EPZ boundary, since the radio and television stations used in the Emergency Broadcast System ("EBS") can be received at distances in excess of 10 miles. And, with respect to actual protective measures, it is clear that sheltering can be accomplished with equal ease by people both inside and outside the EPZ. As to evacuation, even that measure can easily be built upon and use evacuation plans developed for within the 10-mile EPZ.

Commission Response to Issue 3

NUREG-0396 noted that:

it was the consensus of the [NRC-EPA] Task Force that emergency plans could be based upon a generic distance out to which predetermined actions would provide dose savings for any such accidents. Beyond this generic distance it was concluded that actions could be taken on an ad hoc basis using the same considerations that went into the initial actions determinations. [Thus], the size of the EPZ's need not be site specific, [as] emergency planning needs seem to be best served by adopting uniform EPZs for initial planning studies for all light water reactors.

Additionally, the Commission firmly believes that emergency actions could be successfully carried out beyond the 10-mile EPZ for the following reasons: First, the 10-mile planning basis established an infrastructure consisting of emergency organizations, communication capabilities, training, and equipment that are similar to other normal community emergency organizations, such as police and fire departments that can be used in the event of an accident at the facility. Second, the radio and TV emergency broadcasting systems that NRC requires for prompt notification of the public within the 10-mile EPZ does reach beyond 10 miles. Third, if emergency actions were necessary beyond 10 miles, the time available to take those actions would be significantly greater than the time available for the taking of protective actions for persons close to the reactor (within 2 miles). This significant additional time (many hours to days) would permit the use of resources from other states, other utilities, the federal government, and even the international community.

Beyond these reasons, the relationship between wind speed and hazard may have been misunderstood. Higher wind speeds result in lower radiation doses because the radioactive plume becomes greatly diluted and dispersed at higher wind speeds. This was discussed in NUREG-0396.

Further, the radioactive plume is not likely to originate without warning. The nuclear power plant operators, in most cases, would be able to declare an emergency hours before a release, based on what they understand to be happening in the plant. The NRC requires utilities to set emergency action levels for in-plant measurements for which emergencies should be declared (see 10 C.F.R. Part 50, Appendix E, and NUREG-0654, Appendix I). Thus, evacuation recommendations should be made before releases of radioactivity would occur, giving people time to evacuate before the radioactivity would arrive. The Petitioners may not be aware that the need for evacuation beyond a few miles from the plant is extremely unlikely. If protective actions were needed beyond 10 miles, the action required would most likely be sheltering while the plume passes and then evacuation of relatively small areas afterwards if much deposition of radioactive materials on the ground were to occur.

Another reason not to expand the EPZ is based upon the fact that risk is highly concentrated in the areas near the nuclear power plant, rather than spread uniformly throughout the 10-mile EPZ. However, the Commission notes that despite the technical information to the contrary, the entire EPZ tends to be thought of by many members of the public as a single homogeneous zone to be treated in a uniform manner. Expanding the EPZ radius from 10 miles to 20 miles might even further aggravate this situation.

Issue 4. Extend the EPZ from 10 Miles to 20 Miles Because the Reduction of Early Injuries and Latent Cancer Fatalities Were Not Considered When the Size of the 10-Mile EPZ Was Determined

Several commenters said a reason to expand the EPZ is that in establishing the emergency planning zone, not only early fatalities, but also early injuries and future disease such as cancer should be considered. The Union of Concerned Scientists wrote:

It is by no means clear that prompt fatalities are the dominant health effect from serious reactor accidents. In addition to prompt fatalities, the following additional effects must be considered in establishing an appropriate plume EPZ: (a) latent fatalities, (b) early radiation injuries (c) non-fatal cancers, (d) genetic effects, and, to a lesser extent, (e) property damage and restrictions on land use caused by accidents. Risk assessment studies have shown consistently that effects other than prompt fatalities constitute a significant portion of the total effects of serious reactor accidents. For instance, Dr. Jan Beyea has pointed out that for the accident in WASH-1400 which was postulated to cause 10 prompt fatalities, the following additional consequences would occur: 7000 cancer deaths, 4000 genetic defects, 60,000 thyroid tumor cases, and 3000 square miles of land contaminated above acceptable levels.

Commission Response to Issue 4

The Commission agrees with the commenter that for most accidents, long-term effects — cancer and genetic defects in offspring — are the most significant effects, from the standpoint of the gross number of effects. Only the most severe accidents could result in any prompt fatalities or injuries. With the existing levels of emergency preparedness it is likely that no one who followed the recommended protective actions would be killed or injured.

Our emergency planning requirements do not require that an adequate plan achieve a preset minimum radiation dose saving or a minimum evacuation time for the plume exposure pathway emergency planning zone in the event of a serious accident. Rather, they attempt to achieve reasonable and feasible dose reduction under the circumstances; what may be reasonable or feasible for one plant site may not be for another.

Shoreham, CLI-86-13, *supra*, 24 NRC at 30.

A fair reading of the Commission's *Shoreham* discussion is that implicit in the concept of "adequate protective measures" is the fact that emergency planning will not eliminate, in every conceivable accident, the possibility of serious harm to the public. Emergency planning can, however, be expected to reduce any public harm in the event of a serious but highly unlikely accident. The proper interpretation of the rule would call for adjustment to the exact size of the EPZ on the basis of such straightforward administrative considerations as avoiding EPZ boundaries that run through the middle of schools or hospitals, or that arbitrarily carve out small portions of governmental jurisdictions. The goal is merely planning simplicity and avoidance of ambiguity as to the location of the boundaries.

Given these circumstances, the Commission has concluded that adequate protection can be provided by an EPZ that is about 10 miles in radius.

Issue 5. Extend the EPZ from 10 Miles to 20 Miles Because the Radiation from an Accident Would Not Stop at 10 Miles

Several commenters who favored the recommended change to expand the EPZ gave as a reason that radiation "is not likely to stop at the 10-mile mark in the case of a serious accident." One said, "No one believes that people are any safer at 11 miles than at 10 miles out." Another said, "There is no 10-mile island with lead walls to the sky to prevent radioactivity from blowing beyond the NRC's emergency planning zone."

Commission Response to Issue 5

Obviously, there is no line at 10 miles beyond which radiation cannot pass. However, the hazard from an accident tends to gradually decrease as one moves further from the accident. How far from a nuclear power plant is the potential hazard small enough that specific detailed planning is not worthwhile? In the Commission's judgment, that distance is about 10 miles for the considerations stated in this discussion.

Issue 6. Extend the EPZ from 10 Miles to 20 Miles Because at TMI a 20-Mile Evacuation Was Considered

The Citizens Task Force petition and commenters gave the 20-mile evacuation consideration during the Three Mile Island accident as a reason to expand the EPZ to 20 miles. The Task Force quoted a FEMA report as follows:

Emergency management agencies entered the crisis with contingency plans to evacuate a 5-mile circle around TMI. . . . Two days into the accident, the same scientific authorities (now faced with a novel and unexpected situation) suddenly recommended a 10-mile, then a 20-mile contingency evacuation plan. Under emergency conditions, local and State officials were forced to scrap a relatively undemanding 5-mile evacuation and plan for a large, complex population movement on short notice. (p. vi, reference 9.)

The Seacoast Anti-Pollution League noted that the Kemeny Commission Report said, "the NRC itself was considering evacuation distances as far as 20 miles, even though the accident was far less serious than those postulated during siting."⁷ The Community Energy Action Network quoted the Rogovin Report's⁸ conclusion that a 10-mile EPZ is inadequate:

However, we believe the NRC's proposed 10-mile planning zone, is, by itself, inadequate as an arbitrary cutoff point. Wider evacuation may clearly be necessary in some unlikely accident situations. And, as Three Mile Island demonstrated, an ordered evacuation out of 10 miles would undoubtedly have effects to 20 miles and more. Therefore, at the very least, significant centers of population beyond 10 miles from the plant must be considered in the planning as well.

Rogovin Report, Vol. 1, at 33.

Commenters opposed to the petition said that emergency preparedness had increased greatly since the Three Mile Island accident. For example, Barry G. Wahlig, a nuclear engineer, wrote:

⁷ John G. Kemeny, Chairman, Report of the President's Commission on the Accident at Three Mile Island (generally called the "Kemeny Commission Report") (October 1979) at 16.

⁸ NUREG/CR-1250, "Three Mile Island — A Report to the Commissioners and to the Public" (generally called the "Rogovin Report") (January 1980).

The vacillation over evacuation at TMI is in no way representative of the post-TMI world. At that time, utility and regulatory personnel had scarcely thought about how to think about evacuation. The tenor of emergency exercises over the last three years assures that responsible people have given considerable thought to how to arrive at defensible evacuation recommendations. To the extent reasonably possible, emergency exercise experience shows that plant personnel could make such recommendations in an orderly, timely way.

Commission Response to Issue 6

The Commission believes that if protective actions were warranted beyond 10 miles, those actions, whether evacuations, sheltering, or relocation, would certainly be recommended to the state officials. Nonetheless, due to the additional time that is available for the taking of protective actions out to greater distances from the reactor, the implementation of these additional protective actions would not require detailed plans.

Issue 7. Extend the EPZ from 10 Miles to 20 Miles Because of the Lessons Learned from the Chernobyl Accident

A few commenters suggested that the NRC should modify its regulations because of the evacuation that took place as a result of the Chernobyl accident.

Commission Response to Issue 7

A number of facts⁹ about the Chernobyl accident bear on emergency planning and preparedness around U.S. commercial nuclear power plants. The implications of the Chernobyl accident and the Soviet response will now be discussed in relation to three aspects of U.S. emergency planning, namely: (1) size of the emergency planning zone, (2) ingestion pathway measures, and (3) decontamination and relocation.

In drawing a nexus between the Soviet response to the Chernobyl accident and emergency planning implications for U.S. plants, contrasts and differences should be noted. First, there is a substantial difference in the emergency planning base. After the accident at Three Mile Island, large resources were expended to improve emergency planning and response capabilities around U.S. plants. In contrast, although some prior planning appears to have existed in the Soviet Union, perhaps for civil defense, there is little indication that the Soviets have comparable site-specific emergency plans for the general public around their nuclear power plants. Despite this, the Soviets mounted a large and generally effective ad hoc response.

⁹ NUREG-1251, Vol. I, "Implication of the Accident at Chernobyl for Safety Regulation."

Second, the specifics of the Chernobyl release are unique to the RBMK design. The amounts of radioactive material released from U.S. plants could be as severe but for many accident sequences would be considerably less because, among other things, U.S. plants have substantial containments. In addition, although low-probability, fast-moving accident sequences may be possible, severe accidents at U.S. plants would, in general, progress more slowly resulting in longer warning times before release.

Third, some aspects of the Chernobyl evacuation defy comparison with similar aspects at U.S. plants because of economic and societal differences. For example, the Soviets had to assemble 4000 buses and trucks for the Chernobyl evacuation, whereas, in the United States most people have access to private transportation, and necessary alternative transportation is preplanned around U.S. nuclear power plants.

Size of the EPZs

The Chernobyl accident has focused attention on the adequacy of the size of emergency planning zones around U.S. commercial nuclear power plants. The Soviets evacuated a total of about 135,000 people as well as considerable farm livestock from Pripyat, Chernobyl, and other towns and villages within 30 kilometers (18 miles) of the Chernobyl nuclear power plant. This evacuation appears to have taken place in several stages, beginning for the approximately 45,000 residents of Pripyat about 36 hours after the initial release and extending over several days to a week. The whole-body radiation dose to the majority of individuals did not exceed 25 rem, although about 24,000 persons in the most severely contaminated areas are estimated to have been exposed to whole-body doses in the range of 35-55 rem. The population of Pripyat was initially sheltered as a protective measure and then evacuated when radiation readings increased. In addition to radiation considerations, logistics and contamination control influenced the timing of the evacuation. Despite an apparent lack of site-specific planning, the Soviets mounted a large and generally effective ad hoc response making use of some aspects of civil defense planning. The high initial plume height contributed to relatively low initial dose rates in the immediate vicinity (by cloud seeding other areas) and the spraying of a chemical polymer on evacuation routes to minimize resuspension of deposited activity were also beneficial. The Soviets took ingestion pathway protective measures within the 30-kilometer zone and well beyond. Ingestion pathway protective measures were also taken in several Soviet bloc countries, in Scandinavia, and in Eastern and Western Europe.

Assessment

One difficulty in assessing the implications of emergency actions taken at Chernobyl for U.S. commercial nuclear power plants is the vast difference in the emergency planning base between the United States and the Soviet Union. After the accident at Three Mile Island, large resources were expended in the United States to improve site-specific and generic emergency planning capabilities. Utility, state, local, and federal emergency plans were developed, reviewed, and exercised. Alert and notification systems have been designed, installed, and tested within the plume exposure pathway EPZs (10-mile radius) for almost all U.S. plants. The populations within the plume exposure pathway for U.S. plants are annually provided with informational materials that are to be used in the event of an emergency. These materials contain protective actions that will be taken and include telephone numbers for public inquiries.

In contrast, there is little indication that the Soviets have comparable site-specific emergency plans for the general public around their nuclear power plants. While some prior planning existed, perhaps for civil defense, Soviet authorities indicated that many of the protective actions taken were ad hoc measures. Although a severe accident in the United States could require some ad hoc measures to be taken, a detailed planning base exists to facilitate implementation of the necessary protective actions.

With regard to the issue of EPZ size, the Soviets evacuated the population out to 18 miles, or roughly twice the distance for which an evacuation capability is required to be demonstrated in the United States. Similarly, measures were taken to prevent ingestion of foodstuffs, milk, and water at distances considerably greater than the 50-mile ingestion exposure pathway in the United States. This might imply that the U.S. EPZs are too small. However, examination of the background leading to the U.S. requirements leads to a different conclusion.

The sizes of the EPZs were derived from accident considerations, including the severe accidents studied in the Reactor Safety Study (WASH-1400). The more severe and most unlikely accidents studied in WASH-1400 involve releases of radioactivity that are comparable to or in some instances larger in magnitude than that which was actually released at Chernobyl. The 10-mile and 50-mile EPZs were chosen as a planning basis to demonstrate a capability and to provide emergency plans with the flexibility of dealing with a broad range of accident releases, rather than being based solely on a single highly unlikely event, such as the worst case. It was recognized that protective actions might need to be taken beyond these planning zone distances for the most severe releases. NUREG-0654 clearly notes:

The choice of the size of the Emergency Planning Zones represents a judgement on the extent of detailed planning which must be performed to assure an adequate response base. In a particular emergency, protective actions might well be restricted to a small part of the

planning zones. On the other hand, for worst possible accidents, protection actions would need to be taken outside the planning zones.

Consequently, a release magnitude similar to the one associated with Chernobyl and the possibility that ad hoc actions beyond the planning zone boundaries might be needed for very unlikely events were considered and have been factored into the development of U.S. requirements, including the sizes of the EPZs.

In conclusion, the Chernobyl accident and the Soviet response do not reveal any apparent deficiency in U.S. plans and preparedness, including the 10-mile plume exposure pathway EPZ size and the 50-mile ingestion exposure pathway EPZ size. These zones provide an adequate basis to plan and carry out the full range of protective actions for the populations within these zones, as well as beyond them, if the highly improbable need should arise.¹⁰

Issue 8: Extend the EPZ from 10 Miles to 20 Miles Because the Most Current Methodologies Were Not Used in NUREG-0396 and Because of New Source Term Research Information

The petition submitted by Mr. Sexton as well as a few comment letters suggested that the EPZ size should be based on the most current research information and because the methodologies used in NUREG-0396 are outdated.

Commission Response to Issue 8

Draft NUREG-1150 (February 1987) provides substantial new information concerning our ability to predict severe-accident progression and the range of outcomes. Based on this information, it appears that the risks and potential consequences associated with severe reactor accidents are no higher than those predicted in the Reactor Safety Study and may, in fact, be substantially lower. However, there are large uncertainties associated with the ability to predict precisely the release amounts once the core-melt accident is under way and the magnitude of the source term associated with a particular outcome. Draft NUREG-1150 (February 1987) provides insights concerning (1) the way offsite doses would be expected to vary with distance for the plants analyzed and (2) the relative effectiveness of different offsite protective actions¹¹ at various distances.

A very important question is the nature and magnitude of the radioactive release to the atmosphere. The magnitude of the potential release substantially influences the potential offsite consequences. The source terms and principal

¹⁰ *Ibid.*

¹¹ This analysis addresses only those emergency actions that would have to be taken in the vicinity of the plant to provide protection from the immediate effects of the plume exposure pathways.

assumptions for the analyses in this section are given in Tables M.1 and M.2 of draft NUREG-1150 (February 1987). Release of radioactive material to the environment during most severe accidents (particularly those resulting in early containment failure) is modeled as occurring in two distinct phases although, for most accidents, these phases would be expected to overlap.¹² The first release would be of short duration, usually occurring before there is significant core-concrete interaction, and would consist of the more volatile radionuclide species (i.e., all the noble gases together with significant fractions of the more volatile species such as Cs, I, and Te). The second major release would occur after the core materials have melted through the reactor pressure vessel and are interacting with the concrete cavity. This second release could usually take place over a period of several hours or longer.

The nature of the expected offsite consequences for the plants analyzed, assuming no early offsite protective action is taken, is shown in draft NUREG-1150 (February 1987), Tables M.3 and M.4¹³ for early and late containment failure. As can be seen, there could be a significant probability of exceeding a 50-rem¹⁴ whole-body dose within a few miles of three of the plants analyzed, even for late containment failure if no protective action is taken. However, this probability diminishes rapidly with distance from the reactor for both early and late containment failure. Probabilities of exceeding 200-rem whole-body dose calculated for the Surry plant were compared with those obtained using Reactor Safety Study data.

Although the probabilities calculated for draft NUREG-1150 (February 1987) are substantially lower at large distances (due primarily to the assumption of earlier relocation time), the probabilities within a few miles of the plant are comparable.

We have used information from the plants analyzed to calculate how offsite consequences would be expected to vary with distance from each of the plants if different protective actions were taken. The results of these calculations are summarized in draft NUREG-1150, Tables M.5 and M.6.

An examination of Tables M.5 and M.6 in draft NUREG-1150 (February 1987) provides several preliminary insights. First, either basement sheltering or evacuation will substantially lower the probability of exceeding a whole-body dose expected to produce early health effects, although evacuation is clearly much more effective within the first few miles. However, the effectiveness of evacuation diminishes substantially if it is delayed until after containment

¹² All Zion releases were modeled as single-phase releases, but this will be revised for the final version of NUREG-1150.

¹³ Unless otherwise specified in the table, the source terms and principal assumptions for Tables M.3 through M.6 are those listed in Tables M.1 and M.2.

¹⁴ Whole-body doses of 200 rem and 50 rem were used to allow comparisons with earlier studies [e.g., NUREG-0396] because they serve as surrogates for the early fatality and injury thresholds, respectively.

failure and release of radioactive material to the environment. Sheltering in large buildings appears to be very effective outside the first few miles. Although large-building sheltering is not usually available for the general population in the environs of a site, it may be a prudent and valuable option for special population groups (e.g., hospital patients, prisoners).

New technical information from the plants analyzed in draft NUREG-1150 (February 1987) shows that for these plants the probability of a core damage accident is small (in the neighborhood of 1 in 10,000 to 1 in 100,000 reactor years of operation) and that the risks and potential consequences associated with such accidents are no higher than those predicted in the Reactor Safety Study and may be substantially lower. However, there is still uncertainty associated with these estimates.

Some insights obtained from this analysis are summarized below:

1. Time of containment failure significantly affects the magnitude of the release and resulting consequences. The consequences of an early containment failure at a given distance are significantly higher than those for a late containment failure.
2. While there are calculated dose differences among the plants, these appear to be secondary compared to the differences seen between early and late containment failure.
3. For late containment failure and no offsite protective action: (a) persons beyond about 1 to 2 miles have a low probability of receiving a dose in excess of 200 rems, and (b) persons beyond about 5 miles have a low probability of receiving a dose in excess of 50 rems.

While thus far the effectiveness of protective actions has been completely investigated only for the Surry plant and no generic conclusions for other plants can be drawn, some preliminary insights that can be gleaned from draft NUREG-1150 (February 1987) are:

1. With regard to protective actions, the principal dose savings benefits are obtained from evacuation first followed by sheltering within the first few miles of the plant.
2. Within the first few miles, evacuation appears to be more effective than sheltering in achieving dose savings. At distances beyond about 5 miles, these differences are less notable.
3. For late containment failure accidents, any of the protective actions analyzed would result in essentially zero probability of a person being exposed to doses in excess of 200 rems at distances beyond 1 mile and to doses in excess of 50 rems at distances beyond 2 miles.

In conclusion, the Commission agrees that the size of the 10-mile EPZ was determined using the methodologies available in 1980 and that today there exist more sophisticated techniques and computer models to estimate radiation releases and doses to the public. Nonetheless, the most sophisticated and up-to-

date methodologies were used in the development of NUREG-1150 (February 1987) which, as mentioned above, does not provide evidence that the size of the plume exposure pathway EPZ should now be increased.

Issue 9: Extend the EPZ from 10 Miles to 20 Miles Because Any Radiation Can Be Harmful; Therefore the Public Should Be Able to Take Protective Actions to Assure That They Receive No Radiation in the Event of an Accident

Citizens Task Force of Chapel Hill petition and some commenters in support of this change, gave the reason that any amount of radiation can be harmful. They stated:

It is agreed that a radiation dose low enough to produce no effect has not been identified. In other words, all levels of radiation may produce some effects on cell. . . .

Some experts state, however, that one could sit on the fence of a normally operating nuclear power plant for a year and absorb no more radiation than that released by a chest x-ray. This group stresses the fact that people have lived with varying levels of background radiation with no demonstrable negative results. . . .

Others, also well informed, argue that our scientific understanding of the long-range effects of low-level radiation continuously emitted into our environment is inadequate at this time to measure the dangers with any degree of certainty. They are concerned that the various effects we get from radiation, pollution, chemical carcinogens, and so forth may lead to a yet undocumented multiplier effect. They see the precipitous rise of cancer rates during the last couple of decades as strong support for this conclusion. They further argue that some radioactive elements released into the air or dumped into the water — even if not immediately dangerous in small amounts — can in some form enter the food chain. Through a process termed “biological amplification,” these radioactive elements may be concentrated through the chain of lesser plants and animals until they reach human beings through the food they eat. By this time the radioactive materials may be heavily concentrated. They cite the well documented rise of radiation levels in milk in the United States after weapons testing in China as evidence of this process. . . . And although the level of harm which may result is not agreed upon, it is certain that our bodies take up radioactive elements and use them in the matrix of the bones and in tissue; that these elements emit radiation for periods ranging from a few days to half a century; that fetuses and children under ten are much more vulnerable to radiation effects; and that cell damage from whatever cause is a medical concern of great importance.

Commission Response to Issue 9

The statements above representing the Petitioner’s interpretation of various views of the hazards of radiation need clarification. The statement that “a radiation dose low enough to produce no effect has not been identified” demonstrates an overestimation of what scientific experiments can accomplish. Experiments on the effects of toxic substances generally do not allow experimenters to draw

a conclusion of no effect. If no effect is observed, the experimenter cannot conclude that there was no effect because there may have been an effect that was too small to be observed. There are a number of experiments on low doses of radiation that show no observable effect. From such experiments one can never conclude that there is no effect. Only an upper limit of the size of the effect can be estimated. That has been done for radiation, and there is general agreement among scientists on the approximate upper limit.

Likewise, the statement that "others, also well informed, argue that our scientific understanding of the long-range effects of low-level radiation continuously emitted into our environment is inadequate at this time to measure the damages with any degree of certainty," misrepresents prevailing scientific viewpoints. Scientists are in general agreement that the effects of doses of a few rems are too small to be measured.

The Petitioner's statement that the precipitous rise in cancer rates during the last couple of decades is support for the possible existence of "a yet undocumented multiplier effect" between environmental pollutants seems to be based on an incorrect premise. According to the American Cancer Society, the death rate from all cancers except lung cancers has dropped slightly for males and dropped sharply for females during the last couple of decades (shown, for example, in Figure 19, page 38 of NUREG/BR-0024¹⁵). The lung cancer death rates have climbed sharply for males and females, but this is attributed almost entirely to cigarette smoking.

The Petitioner's statements that some radioactive elements "can in some form enter the food chain and may be concentrated through the chain" is a long-known and well-documented fact. The concentration effect was predictable from knowledge of biology and was first observed almost 40 years ago before "weapons testing in China." Since this effect was known long before the start of large-scale nuclear electric generation, the radioactivity in the environment and foods near nuclear power plants is and has always been carefully measured both before and during nuclear power plant operation. Radioactivity in foods and water due to nuclear power plants is and has always been kept at low levels.

The Petitioner's statement that "cell damage from whatever cause is a medical concern of great important" is misleading. Scientifically, the importance will depend on how many cells are damaged, the nature of the damage, the type of cell damaged, and the probability of the damage to that cell leading to any further consequences. For example, if a large group of people are exposed to a radiation dose of 1 rem each, the EPA's lower protective action guide, about 5 out of 10,000 people would be expected to get cancer as a result. And, because not all cancer is fatal, about 2 out of 10,000 would be expected to die from this

¹⁵NUREG/BR-0024, "Working Safely in Gamma Radiography" (September 1982).

radiation-induced cancer. (About 2,000 out of 10,000 people will eventually die of cancer, but those cancers are mainly unrelated to radiation exposure.) Of the 9,995 out of 10,000 who did not get cancer caused by the 1-rem radiation dose, based on current knowledge, their health would be unaffected by their radiation exposure. On the basis of the epidemiological evidence, they would live as long and be as healthy as if they had not received the radiation dose.

Issue 10: Extend the EPZ from 10 Miles to 20 Miles Because of the Evacuation Shadow Phenomenon

Commenters in favor of the recommended changes gave as a reason the belief that if an accident occurred many people outside the 10-mile EPZ would evacuate even though they were not advised to do so. They said, in this "evacuation shadow," masses of people would be fleeing in panic, would congest roads making evacuation of those within the EPZ slower or even impossible. As a way to plan for this effect these commenters suggested extending the EPZ zone radius from 10 to 20 miles.

Commenters opposing the petition said this was not a problem, because evaluation of nonradiological incidents that have required mass evacuation has also demonstrated that, even without advance planning, an orderly, safe, and prompt evacuation can be undertaken.

Commission Response to Issue 10

In Shoreham, CLI-87-12, supra, the Commission noted that:

we think it is entirely reasonable and appropriate for the Commission to hold that arguments for "adjusting" a 10-mile EPZ to improve safety, especially arguments that entail complex analysis and lengthy litigation are an impermissible challenge to the rule. . . .

Accordingly, we think the better interpretation is that the rule precludes adjustments on safety grounds to the size of an EPZ that is "about 10 miles in radius" and that Contentions 22.B and 22.C [whether the EPZ should be expanded by a few miles to minimize the occurrence and effects of spontaneous evacuation from outside the EPZ] should on this ground be deemed impermissible challenges to the rule. In our view, the proper interpretation of the rule would call for adjustment to the exact size of the EPZ only on the basis of such straightforward administrative considerations as avoiding EPZ boundaries that run through the middle of schools or hospitals, or that arbitrarily carve out small portions of governmental jurisdictions. The goal is merely planning simplicity and avoidance of ambiguity as to the location of the boundaries. With such clarity, plans can be implemented with an understanding as to who is being directed to take particular protective actions.

26 NRC at 395. As noted above, the Commission determined, based on information available at the time that it promulgated the emergency planning regulations, that a plume exposure pathway emergency planning zone (plume

EPZ) of about 10 miles in radius was the proper and appropriate area for detailed planning for protective actions in the event of a radiological emergency. At that time, the Commission specifically recognized that detailed planning in that zone would more readily permit the development and implementation of ad hoc actions beyond the 10-mile plume EPZ should the need arise. See NUREG-0386, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants" (December 1978); NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980), at 12; *Shoreham*, CLI-87-12, *supra*, 26 NRC at 392-93; *Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 NRC 1163, 1171-73 (1982). In effect, the Commission accounted for the possibility of spontaneous evacuation outside the plume EPZ when it established the size of that EPZ in the first instance. The petitions provide no justification for expansion of the plume EPZ to further account for the possibility of spontaneous evacuations.

Issue 11: Extend the EPZ to Include Any Towns Bordering on or Partially Within the EPZ

The Citizens Task Force of Chapel Hill petition requested the NRC to amend its regulations to state that any towns bordering on or partially within the EPZ be included within the EPZ in their entirety.

Commenters in favor of this request said that if, for example, some suburbs of a city were included in the emergency planning, but the city was not, then fragmented authority would result.

Commission Response to Issue 11

As discussed in the Commission response to Issue 1, NUREG-0396 provides that "judgement . . . will be used in determining the precise size and shape of the EPZs considering local conditions such as . . . local jurisdictional boundaries"

Thus, Commission practice already allows for adjustment of the EPZ to accommodate jurisdictional boundaries where appropriate to enhance the planning basis.

Issue 12: That a Utility Fund and Install Independent Monitoring Equipment to Be Used by Local Communities Around Nuclear Power Plants

The Citizens Task Force of Chapel Hill petition requested that the communities within the EPZ should be provided with utility funding to purchase, install, and operate their own radiological monitoring equipment. The Petitioner said such independent monitoring will permit detection of radioactive materials such as iodine-131 in a short enough time to be useful in making decisions on emergency actions.

As a reason for requiring independent monitoring, the Petitioner claimed that there is a lack in both quality and quantity of radiation monitoring equipment around nuclear power plants. Since the Petitioner believes the utilities do not have adequate equipment, the Petitioner believes local communities should provide it for themselves. The Petitioner cited as evidence a March 30, 1979 General Accounting Office report, "Areas Around Nuclear Facilities Should Be Better Prepared for Radiological Emergencies." The section of the report quoted by the Petitioner referred to "deficiencies in . . . preparedness." The Petitioner also cited a June 1980 FEMA report, "State Radiological Emergency Planning and Preparedness in Support of Nuclear Power Plants." FEMA wrote:

the preparedness of state and local governments with respect to . . . monitoring instruments . . . is generally inadequate to meet the requirements of the new [post-TMI] evaluation criteria.

Commenters opposing the petition said that adequate monitoring equipment is now available, that the evidence cited by the Petitioners is outdated and no longer valid, and that such equipment would be too difficult for local communities to use properly. For example, Barry G. Whalig, nuclear engineer, wrote:

Petitioners show a lack of appreciation for the difficulty of making accurate estimates of airborne and groundplane contamination in the post-accident environment. This is especially difficult using the sort of survey meters which the Petitioners seem to want supplied in the tens or hundreds to individuals in the nearby communities. Examples of the problems are: a) prevention of instrument contamination during the event; b) ensuring uniformity of instrument calibration and of measurement protocol; c) differentiation of plume and groundplane contributions without sampling; and d) precise reporting of the location where measurements are made. Experience show that even technically competent people are subject to these errors.

The Citizens Task Force petition also said that there is a need for independent monitoring because there is a credibility gap between what the utility and NRC would say during the course of an accident and what the public would believe. The Petitioner quoted a May 12, 1979 statement by Dayne H. Broun, Director

of Radiation Protection Section of the North Carolina Department of Human Resources, and an April 29, 1979 statement by North Carolina Governor James B. Hunt, Jr., as evidence of lack of credibility. The Petitioner wrote:

The largely spontaneous and unorganized evacuation of several hundred thousand people from the area around the Three Mile Island (TMI) accident reflects a serious problem: the lack of public confidence in the utilities' commitment and ability to provide timely and accurate warnings regarding leakages of radioactivity and/or reactor problems. The resultant uncertainty contributed to very real psychological stress experience by citizens living in communities around the reactor.

The Sorghum Alliance wrote:

Independent radiation monitoring is necessary because of the history of utilities' and the NRC's reluctance to let the public know of danger and also because of problems in utility-managed monitoring equipment.

The NRC officials played down the gravity of the accident at Three Mile Island, as they were more concerned with the public relations impact of their statements than with technical accuracy.

Commenters opposing the Citizens Task Force petition saw little evidence of a problem with a credibility gap. The law firm of Shaw, Pittman, Potts, and Trowbridge wrote:

Aside from two newspaper accounts of statements made more than three years ago by the North Carolina Governor and the State Director for Radiation Protection, petitioner offers no support for its broad-based claim of a "credibility gap."

Barry G. Wahlig, a nuclear engineer, wrote:

Whether or not they suffer a "credibility gap" as alleged by the petitioners, the existing monitoring organizations are answerable to responsible bodies. The diffuse group of independent monitors suggested by petitioners would be answerable to no one but themselves for the accuracy of their measurements, the method of their reporting, or the consequences of poor values. This lack of responsibility would make their measurements less reliable, not more so.

Commission Response to Issue 12

The Commission agrees that as of March 30, 1979, there was a need to be better prepared for emergencies around nuclear power plants. This need prompted the Commission to publish in the *Federal Register* (45 Fed. Reg. 55,402 (Aug. 19, 1980)) an upgraded emergency preparedness regulation. The regulation required, among other things, the establishment of emergency planning zones, the development of emergency action levels, the installation of

prompt public warning systems, and adequate offsite monitoring capabilities. Implementation of these upgraded regulations has been completed.

Equipment capability is continually checked by NRC and FEMA. The Commission does not believe that there is a lack of monitoring equipment and therefore does not see lack of equipment as a reason to amend its regulations to require that monitoring equipment be given to and operated by local communities.

The Commission also finds no basis to assume that there is a credibility gap that would cause a danger to public health and safety. There is no evidence that the majority of the public would not respond to protective actions ordered by responsible government authorities. At Three Mile Island, although people evacuated to a far greater extent than officially recommended and without a written plan, the evacuation was quite orderly.

The Commission also finds no basis for the claim that "NRC officials played down the gravity of the accident at Three Mile Island." In fact, quite the contrary occurred. Admittedly, there were confusing and contradictory statements which alarmed the public. But, if anything, the actual danger may have been exaggerated rather than downplayed.

Furthermore, the proliferation of independent radiation monitoring could result in conflicting and confusing information during the course of an accident. Confusion can be minimized if information from all sources flows to a single operations center where it can be analyzed by experts. Expert opinion could then be presented to the state and local governments charged with the responsibility to order protective actions.

Moreover, even if the reason advanced by the Petitioner and commenters were valid, independent monitoring would not be a solution. Offsite monitoring is not intended and cannot be used properly by itself to make initial decisions on protective actions. Elevated radiation levels off site are among the very last indicators of a serious accident and tend to occur at a time when protective action decisions should already have been made. The earliest indication of a serious accident would be seen in the nuclear power plant control room. Numerous indicators and alarms would tell the operators that there is a problem and should enable them to assess the problem. By NRC regulation, each plant has a set of emergency action levels based on specific plant conditions that can be used to project potential offsite doses. Projected dose information allows protective actions to be taken or at least considered prior to the arrival of the radioactive plume. For example, if a core melt were to occur causing a large release of radioactivity, there would necessarily be some time between the start of the accident and the release of the radioactivity from the fuel to the containment because it takes time for the heat being generated to evaporate the available water and heat the fuel to its melting point. During this time, projected doses can be calculated and protective actions can be decided upon, recommended to

the state and local governments, and ordered before any appreciable amount of radioactivity has been released to the environment.

During the Three Mile Island accident, the radioactivity actually released came from auxiliary plant systems. The amount of radioactivity in these systems was relatively small, and no protective actions would have been indicated based on those releases because the radiation dose, actual or projected, was small. The main threat perceived by the NRC Staff was the potential threat from a hydrogen gas explosion in the reactor that could conceivably result in added core damage and in turn present added threat to the containment integrity. While the fears over an explosion of the hydrogen gas were not technically well founded and, of course, the situation did not materialize, it was the central basis for the evacuation recommendation that was made. The recommendation was not based on elevated radiation readings off site because none of the offsite readings were high enough to justify ordering evacuation as a protective action.

Issue 13: Current Planning Is Inadequate

The Citizens Task Force of Chapel Hill petition, as a reason for the recommended rule change, stated that “[e]mergency planning and preparedness in support of nuclear power plants is presently inadequate and incapable of providing an acceptable level of radiological emergency preparedness.” Since utilities are seen as not providing adequate emergency preparedness, communities are seen as having to provide it for themselves. The Petitioner believes that this situation requires them to have their own monitoring equipment to detect radioactive materials in a short enough time to allow them to make their own decisions on emergency actions.

The Citizens Task Force petition quoted a FEMA report which said that, for some of the twelve nuclear power plant sites with the highest population density within the 10-mile EPZ, “the current alert and notification systems are judged to be totally inadequate” (FEMA, Dynamic Evacuation Analyses at 5, February 1981).

A number of commenters expressed little confidence in current emergency plans, saying they should be more site-specific, taking into account the population density, large population centers just outside the 10-mile EPZ, a lack of sufficient roads or the presence of bottlenecks on the roads, geography, and meteorology of each specific site.

Commenters opposing the petition said that present emergency preparedness is adequate, that the Petitioner based its conclusions on outdated information, and that the upgrade in emergency preparedness by utilities since the Three Mile Island accident should be recognized and given credit. For example, KMC, Inc., wrote:

Beginning in early 1981, each operating nuclear facility's emergency plan was appraised by the NRC using NUREG-0654 as the basis of the appraisal and each facility exercised their plan in conjunction with the State and local governments with both NRC and FEMA as judges as to the adequacy of the exercise. Utilities were given 120 days to correct deficiencies which could have an adverse impact on the ability of the utility to promptly and effectively respond to an emergency. Further, nuclear facilities are required to annually have an independent audit of their program and to have an exercise in conjunction with State and local jurisdictions. In addition, the NRC will perform an annual appraisal of each utility's emergency plan to assure that the utility's emergency capability does not degrade. It is inappropriate to compare performance of emergency planning capability and implementation in 1979 with what has been required and demonstrated in 1981 and 1982 by the utilities.

Commission Response to Issue 13

The Commission does not agree with the Petitioner's claim that emergency preparedness is presently inadequate. Emergency preparedness has been considerably increased since the Three Mile Island accident. The FEMA report cited was written to evaluate the alerting system existing at that time against draft criteria that had just been issued for comment and interim use. Since the FEMA report was written, final criteria have been published and systems have since been improved to meet the criteria. FEMA and NRC now periodically evaluate the emergency preparedness at nuclear power plants and have generally found the preparedness adequate. Where improvements were thought necessary, they have been ordered.

The Commission does agree that site-specific factors, such as those mentioned by some commenters, should be taken into account in emergency plans. In fact, NRC regulations [10 C.F.R. § 50.47(c)(2)] already require emergency plans to consider site-specific factors.

Issue 14: Utility Funding of Emergency Preparedness

Another change recommended by the Citizens Task Force of Chapel Hill petition is that utilities be required to finance the emergency planning and preparedness efforts of the municipalities around nuclear power plants. The Citizens Task Force wrote:

Lack of funding is the single largest impediment to the establishment of an adequate level of emergency preparedness around nuclear reactors. . . .

Many states clearly have been unable to achieve effective legal steps to insure that utilities finance adequate emergency preparedness around nuclear plants.

The role of the federal government in regard to emergency preparations should be to insure that the communities in those states which have not, or will not soon, enact preparedness-financing legislation do receive adequate funding.

Commenters in support of the recommended change to require utility funding said that utilities should pay the full cost of choosing to build a nuclear plant instead of some other type of generating plant. They said this should be considered part of the cost of doing business and that in some cases funding of emergency preparedness is a real hardship for the municipalities or counties involved. They said it is unfair to expect local governments to finance these plans since some of the areas under obligation to plan for nuclear power plant accidents do not receive any tax revenues from the plant. One commenter said:

considering the unique and deadly dangers of radiation, it is insane to reduce the already inadequate methods of protection and regulations. The utilities and the government owe it to us to pay for our safety. They are putting our lives in jeopardy, not the other way around.

Commenters opposing the petition generally stated that there was no need for such a funding requirement. They said that FEMA has not found state and local plans inadequate due to lack of funding and that voluntary utility assistance together with state and local programs to assess costs for radiological emergency preparedness have been successful. All seven of the state and local emergency preparedness agencies that commented on the petition say there is no need for such a funding requirement. Commenters said that states should have jurisdiction over this area of utility funding and that the federal government does not have the expertise or the legal right to mandate utility rate structure changes.

Some commenters thought utilities should not be forced to fund all local emergency preparedness efforts because many of the emergency preparedness improvements also improve governmental abilities to cope with natural disasters and other types of man-made emergencies. The utilities should not have to bear the full costs of these improvements in plans and facilities that overlap with other functions normally required of the governments.

Some commenters said utilities had a strong incentive to fund local preparedness efforts. The State of Iowa Office of Disaster Services said that Iowa already receives funding assistance from four nuclear facilities and added:

Obviously the utilities do not, by law, have to provide this funding, but practically speaking, it is being done. The onus of FEMA critique and NRC censure with operating license ramifications serves as a pragmatic inducement for all utilities to provide the radiological emergency response planning and exercise funding. To include this in a petition for rulemaking and potential legalization may do no more than to create an intensely acrimonious relationship between state government and utilities. Why legalize what I know to already be the case in Iowa and other surrounding states, on a cooperative basis.

Several law firms said NRC did not have authority to require such funding. The law firm of Shaw, Pittman, Potts, and Trowbridge wrote:

The simple answer to this request is that Commission lacks the legal authority to impose such a tax. . . . This is because the provision pursuant to which the Commission collects fees from Utilities, 31 U.S.C § 483 a (1976), has been authoritatively construed by the United States Supreme Court to authorize the imposition of fees only to cover services rendered by a federal agency and then only if those services confer a special benefit on the fee-paying entity and not a general benefit on the public at-large. . . . This clearly would exclude the tax suggested by petitioner which would cover costs not incurred by the Commission and would result in general public benefits rather than specifically identified benefits of the utilities.

Some commenters pointed out that utilities already pay considerable taxes and deserve some services in return. They said, typically, that nuclear power plants tend to be the largest single tax-paying organization in their political subdivision and, as a result, the residents of an area generally benefit from higher-than-average tax revenues, even though the tax burden on the individual is usually lower than average. Thus, municipalities around nuclear power plants already derive sufficient funds from the operation of the plant to finance their emergency planning efforts.

Commission Response to Issue 14

Funding arrangements are essentially a matter of state and local government interest; therefore, the Commission finds no factual basis to conclude that the proposed funding is necessary to enable state or local governments to establish adequate emergency preparedness plans. Accordingly, we do not reach the question of our legal authority to require licensee funding in the manner requested by the Petitioner.

Issue 15: That Emergency Preparedness Requirements Be Established for Low-Power Operations

The State of Maine petition requested that the NRC require that offsite emergency preparedness findings be made before any fuel loading and/or low-power operations are permitted.

Commission Response to Issue 15

In a final rule published in the *Federal Register* on September 23, 1988 (53 Fed. Reg. 36,955, 36,960), the Commission addressed this specific matter and for the reasons stated therein revised 10 C.F.R. § 50.47(d) to read:

no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and capability to implement State and local

or utility offsite emergency plans are required prior to issuance of an operating license authorizing only fuel loading or low power testing and training (up to 5 percent of the rated power). Insofar as emergency planning and preparedness requirements are concerned, a license authorizing fuel loading and/or low power testing and training may be issued after a finding is made by the NRC that the state of onsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base this finding on its assessment of the applicant's onsite emergency plans against the pertinent standards in paragraph (b) of this section and Appendix E. Review of applicant's emergency plans will include the following standards with offsite aspects:

(1) Arrangements for requesting and effectively using offsite assistance on site have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned onsite response have been identified.

(2) Procedures have been established for licensee communications with State and local response organizations, including initial notification of the declaration of emergency and periodic provision of plant and response status reports.

(3) Provisions exist for prompt communications among principal response organizations to offsite emergency personnel who would be responding onsite.

(4) Adequate emergency facilities and equipment to support the emergency response onsite are provided and maintained.

(5) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use onsite.

(6) Arrangements are made for medical services for contaminated and injured onsite individuals.

(7) Radiological emergency response training has been made available to those offsite who may be called to assist in an emergency onsite.

Issue 16: Emergency Plans Should Be Completed and Approved by the Governor of the Affected State as a Precondition to Construction

The State of Maine petition requested that the Commission amend 10 C.F.R. § 50.47 to require that emergency planning be done before any construction of a nuclear facility is permitted and that the Governor or Governors of any affected State approve the emergency plans as a precondition to construction.

Commission Response to Issue 16

The intent of the State of Maine's petition was granted in part in a final rule published in the *Federal Register* on April 18, 1989 (54 Fed. Reg. 15,372, 15,393) where the Commission added new regulations to provide for issuance of early site permits, standard design certifications, and combined construction permits and operating licenses for nuclear power reactors. The aim of this rulemaking was to provide procedures for the standardization of nuclear power plants and the early resolution of safety and environmental issues in licensing

proceedings. The new rule requires in 10 C.F.R. § 52.79(d) that applications for a combined construction permit and operating license

must contain emergency plans which provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the site.

(1) If the application references an early site permit, the application may incorporate by reference emergency plans, or major features of emergency plans, approved in connection with the issuance of the permit.

(2) If the application does not reference an early site permit, or if no emergency plans were approved in connection with the issuance of the permit, the applicant shall make good faith efforts to obtain certifications from the local and State governmental agencies with emergency planning responsibilities (i) that the proposed emergency plans are practicable, (ii) that these agencies are committed to participating in any further development of the plans, including any required field demonstrations and (iii) that these agencies are committed to executing their responsibilities under the plans in the event of an emergency. The application must contain any certifications that have been obtained. If these certifications cannot be obtained, the application must contain information, including a utility plan, sufficient to show that the proposed plans nonetheless provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the site.

These provisions provide that to the maximum feasible extent emergency plans will be approved by the NRC before it issues the construction permit for a new nuclear power plant.

IV. THE PETITION(S) ARE DENIED

In conclusion, the Commission finds that an insufficient basis exists for amending its regulations on emergency preparedness in any of the ways recommended by the Petitioners. The petitions of the Citizens Task Force of Chapel Hill, North Carolina, Mr. K. Sexton, and the Attorney General of the State of Maine are hereby denied.

**FOR THE NUCLEAR
REGULATORY COMMISSION**

JOHN C. HOYLE
Assistant Secretary to the
Commission

Dated at Rockville, Maryland,
this 13th day of February 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF THE EXECUTIVE DIRECTOR FOR OPERATIONS

James M. Taylor, Executive Director

In the Matter of

Docket No. PRM 40-23

SIERRA CLUB

June 8, 1990

The Nuclear Regulatory Commission (NRC) is denying a petition for rule-making (PRM 40-23) submitted by the Sierra Club. The Petitioner submitted an amendment to their petition which is also being denied. The original petition requested that the NRC amend its regulations pertaining to uranium mill tailings sites to require an NRC license for the possession of material being cleaned up under Title I of the Uranium Mill Tailings Radiation Control Act (UMTRCA). The NRC believes that Petitioner's proposal is inconsistent with both the intent and the specific requirements of Title I of UMTRCA. In an amendment to its original petition, the Petitioner requested that if its original petition is denied, that NRC ensure that the management of the material at, or derived from, inactive sites be conducted in a manner that protects the public health and safety and the environment. Prior to Department of Energy (DOE) cleanup at these sites, NRC is not authorized by either UMTRCA or the Atomic Energy Act (AEA) to perform such management oversight. UMTRCA has two very distinct parts: Title I for inactive sites to be cleaned up by DOE with NRC concurrence, and Title II which covers sites licensed by the NRC, AEC, or Agreement States as of January 1, 1978, and all new sites. The Petitioner's proposal would, in essence, require that the NRC regulate Title I sites in a similar manner as Title II sites. UMTRCA, however, clearly distinguishes the authorities and responsibilities of federal agencies in regulating Title I and Title II sites.

UMTRCA: TITLE I

UMTRCA: TITLE II

UMTRCA has two very distinct parts: Title I for inactive sites to be cleaned up by DOE and Title II which covers sites licensed as of January 1, 1978, and all new sites. Even though the material under the Title I program may be chemically and physically similar to material under the Title II program, UMTRCA makes a very clear distinction in how this material is to be controlled and regulated.

UMTRCA: TITLE I

Title I of UMTRCA provides the NRC only a review and concurrence role in remedial actions. Management of the residual radioactive material prior to and during remedial actions is the responsibility of DOE. Licensing and concomitant regulation by the NRC occurs only after completion of the remedial action.

UMTRCA: TITLE I

Under Title I of UMTRCA, "vicinity properties" are to be remediated by DOE under the Title I program. As with the disposal sites, NRC's role has been clearly defined in UMTRCA as one of concurrence and consultation.

UMTRCA: TITLE I

By means of clearly stipulated responsibilities, UMTRCA Title I established mechanisms in the performance of the remedial work, construction and performance monitoring, and perpetual custody and surveillance under NRC license, which all contribute to the main goal of protection of the public health, safety, and the environment. The added regulatory mechanism of direct licensing prior to final cleanup would not enhance this main goal; rather it would delay the completion of remedial action, because of the added administrative burden associated with the formal licensing process.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 40)

UMTRCA: TITLE I

The exclusion of Title I sites in 10 C.F.R. Part 40 was specifically added to comply with UMTRCA during the active remedial-action phase.

REGULATIONS: INTERPRETATION (10 C.F.R. PART 40)

UMTRCA: TITLE I

Title I sites are not covered by these regulations for the following reasons: (1) Unless specifically authorized by the Congress, DOE is not subject to NRC regulation; (2) Title I specifically requires an NRC license after completion of remedial actions to cover the long-term care of these sites; (3) Congress specifically gave NRC only a review and concurrence role for DOE sites specified in Title I (inactive sites) during the remedial-action phase of the program.

UMTRCA: COMPLIANCE WITH EPA REGULATIONS

NRC exercises oversight through its concurrence role in DOE's remedial program. NRC must concur with DOE's completion determination that the remedial action at any site complies with EPA standards for inactive milling sites.

DENIAL OF PETITION FOR RULEMAKING

I. THE PETITION

On February 25, 1981 (46 Fed. Reg. 14,021) and May 2, 1983 (48 Fed. Reg. 19,722), the Nuclear Regulatory Commission published notice of receipt of a petition and subsequent amendment to the original petition for rulemaking filed by the Sierra Club. The petition and amendment requested that the NRC amend its regulations or practices regarding licensing or management of the possession of uranium mill tailings at inactive sites (Title I of the Uranium Mill Tailings Radiation Control Act).

The Petitioner proposed that the NRC take the following regulatory actions to ensure that public health and safety and the environment are adequately protected from the hazards associated with byproduct material:

1. Repeal the licensing exemption for inactive mill tailings sites subject to the Department of Energy's remedial program.
2. Require a license for the possession of byproduct material on any other property in the vicinity of an inactive mill tailings site if the byproduct materials are derived from the inactive mill tailings site.
3. Or alternatively, conduct a rulemaking to determine whether a licensing exemption of these sites or the byproduct material derived from the sites constitutes an unreasonable risk to public health and safety.

In the 1983 amendment, the Petitioner requested that, in the event that NRC denied the Petitioner's earlier request that NRC repeal the licensing exemption for inactive sites or conduct the requested rulemaking, the NRC take further action. Specifically, the Petitioner requested that the NRC ensure that the management of byproduct material located on or derived from inactive uranium processing sites is conducted in a manner that protects the public health and safety and the environment from the radiological and nonradiological hazards associated with uranium mill tailings.

Whether the original petition is granted or not, the Petitioner also requested that the NRC establish requirements to govern the management of byproduct material not subject to licensing under section 81 of the Atomic Energy Act (42 U.S.C. § 2111), comparable to the requirements applicable to similar materials under the Solid Waste Disposal Act, as amended (42 U.S.C. § 6901 *et seq.*). In the alternative, the Petitioner suggested that NRC extend the coverage of the requirements in 10 C.F.R. Part 40, Appendix A, which are now applicable only to licensed byproduct material, to byproduct material not subject to licensing. In addition, the Petitioner requested that NRC issue regulations that would require a person exempt from licensing to conduct monitoring activities, perform remedial work, or take any other action necessary to protect health and safety and the environment.

II. BASIS FOR REQUEST

As a basis for the requested action, the Petitioner stated that it is a national conservation organization with hundreds of thousands of members. Substantial numbers of Sierra Club members live, work, and travel in proximity to the inactive uranium mill tailings sites, as well as properties in the vicinity of the sites that have been contaminated with radioactive materials derived from them. The Petitioner states that the presence of such hazardous materials at these locations constitutes an unreasonable risk to the health and safety of these members. These health hazards may also impair the value of the homes and properties of these local members. In addition, these members make substantial use of nearby lands and waters for hiking, climbing, fishing, boating, camping, photography, nature study, and other forms of physical and spiritual recreation. Their use of these lands and waters is adversely affected by the environmental degradation that results from the continued, unregulated presence of radioactive materials.

The Sierra Club's interest is the protection of present and future Sierra Club members, their progeny, and the public from increased risks of cancer and genetic mutations that may occur as the result of their exposure to unregulated radioactive materials at inactive uranium mill tailings sites and at other properties

contaminated by this radioactive material. By the petition, the Sierra Club sought to ensure that public exposure to the radioactive material at such sites and locations is minimized and that offsite migration of radioactivity is prevented.

The Petitioner also states that for more than 80 years it has sought to create public-governmental cooperation in the preservation and enhancement of the natural environment and its resources of air, water, land, and wildlife. The Sierra Club has also endeavored to provide the public and government with information relevant to environmental issues and to stimulate informed public discussion of them.

The organizational objectives of the Sierra Club are fostered by its activities and its members, including their representation by counsel before legislative bodies, courts, and public agencies. In pursuit of its objectives, the Sierra Club has been involved in many proceedings before the Atomic Energy Commission, and now the Nuclear Regulatory Commission, to safeguard its members and the public at large from uses of radioactive materials that pose undue risks to public health and safety and the environment.

III. PUBLIC COMMENTS ON THE PETITION

The notices of filing of petition and amendment for rulemaking in the *Federal Register* invited interested persons to submit written comments concerning the petition. The NRC received three comments in response to the original petition and none in response to the amendment. All three were from industry or their representatives, and opposed the petition.

IV. STAFF ACTION ON THE PETITION

The response to the petition for rulemaking was delayed because of other rulemaking actions related to uranium mill tailings sites. Because of a number of issues related to uranium mill tailings regulations at the time the petition and its amendment were received, including potential court actions, changing legislative requirements, and another petition, the NRC needed to reassess its entire uranium mill tailings regulatory program. Congressional actions imposed mandated changes to uranium mill tailings regulations. These required changes were not completed until the end of 1987. Another modification to Part 40 regulations was required to allow for the licensing and long-term care of mill tailings sites in response to a rapidly approaching program end date (congressional action has since provided additional time). This action was started in 1987. An Advance Notice of Proposed Rulemaking and a Proposed Rule have since been issued in

the *Federal Register* (53 Fed. Reg. 32,396 (Aug. 25, 1988) and 55 Fed. Reg. 3970 (Feb. 6, 1990), respectively).

Although the NRC was considering the Petitioner's proposals during this reassessment period, none of the specific regulatory changes eventually made were directly related to the petition. Once the required regulatory changes were made or proposed, the NRC directed its attention to fully respond to Petitioner's request.

V. REASONS FOR DENIAL

The Petitioner's first proposal requests that the exemption for inactive mill tailings sites subject to the DOE Remedial Action Program should be repealed. The Petitioner states that the Atomic Energy Act, as amended, requires the Commission to license the possession of byproduct materials at these sites, unless it makes an express finding that public health and safety will not be imperiled by a licensing exemption. The petition also states that no licensing exemption for DOE-designated inactive sites can be implied from the legislative history of the Uranium Mill Tailings Radiation Control Act. Finally, Petitioner states that NRC should determine that licenses are required for the DOE inactive sites.

The NRC believes that the Petitioner has misinterpreted both the intent and the specific requirements of UMTRCA. UMTRCA has two very distinct parts: Title I for inactive sites to be cleaned up by DOE and Title II which covers sites licensed as of January 1, 1978, and all new sites. The exclusion of Title I sites in 10 C.F.R. Part 40 was specifically added to comply with UMTRCA during the active remedial-action phase.

NRC's regulations that Petitioner is requesting be amended deal exclusively with the regulation of Title II sites. Title I sites are not covered by these regulations for the following reasons:

1. Unless specifically authorized by the Congress, DOE is not subject to NRC regulation.
2. Title I specifically requires an NRC license only after completion of remedial actions to cover the long-term care of these sites.
3. Congress specifically gave NRC only a review and concurrence role for DOE sites specified in Title I (inactive sites) during the remedial-action phase of the program.

Petitioner appears to assume that since the residual radioactive material is uranium mill tailings it should legally be considered equally subject to NRC jurisdiction as Title II material. However, even though the material under the Title I program may be chemically and physically similar to material under the

Title II program, UMTRCA makes a very clear distinction in how this material is to be controlled and regulated.

The NRC concludes that the UMTRCA statutory basis for the DOE program under Title I does not provide a sufficient basis for NRC to bring DOE within NRC licensing jurisdiction during the active remedial-action phase.

The Petitioner's second proposal requests that the NRC should also require licensing of the tailings used for construction or other purposes off site where public health and safety is imperiled thereby. Under Title I of UMTRCA these are called vicinity properties and are to be remediated by DOE under the Title I program. As with the disposal sites, NRC's role has been clearly defined in UMTRCA as one of concurrence and consultation. Use of residual radioactive material for construction and other purposes occurred prior to establishment of federal authority, as stipulated in UMTRCA Title I. Prior to that time, residual radioactive material and its use were not controlled. With the establishment of UMTRCA Title I authority, EPA promulgated standards by which DOE has been reclaiming the abandoned sites and remedying vicinity properties where residual radioactive material had been used for construction and for backfill and grading purposes.

Cleanup of these properties is conducted as part of the two general DOE remedial-action programs — The Uranium Mill Tailings Remedial Action Program (established in 1978) and the Grand Junction Remedial Action Program (established in 1970). After the processing activities terminated at the Title I sites, windblown tailings and tailings hauled off for construction resulted in contamination of offsite locations. This material was not considered, legally, to be a controlled radioactive material until passage of UMTRCA in 1978. When the Environmental Protection Agency established regulations for conducting cleanup at processing sites, it also established criteria for cleanup of vicinity properties.

The number of offsite areas around each inactive site varies from a few, up to thousands (mostly around Grand Junction, Colorado). DOE has been cleaning up these areas and transporting the residual radioactive material to the corresponding site for disposal. In some cases, the DOE with NRC concurrence has stabilized the materials in place. These locations were judged to pose little risk to the public, and cleanup would have involved detrimental impacts far outweighing the benefits. The vicinity property cleanups have had to be done in coordination with the processing site cleanup, since this is where the contaminated material is disposed of.

Alternatively, the Petitioner requests that the NRC should conduct a rule-making to determine whether a licensing exemption of such sites or classes of byproduct material will constitute an unreasonable risk to the health and safety of the public.

The NRC does not believe that a rulemaking is necessary because these sites are not exempted from inclusion in the remedial-action program. They are being controlled and regulated under the provisions of Title I of UMTRCA. As discussed previously, Title I provides NRC a concurrence and consultation role during remedial actions and provides for long-term-care licensing after remedial actions are completed. The NRC has and will continue to consult and concur with DOE actions to clean up the inactive sites.

The NRC is completing a rulemaking providing criteria and procedures for the long-term (perpetual) care of these sites. Proposed amendments to 10 C.F.R. Part 40 were issued in the *Federal Register* on February 6, 1990 (55 Fed. Reg. 3970). The final rule is scheduled to be completed by the end of 1990. The inactive sites will be licensed under this new rule after completion of remedial actions as specified and required by Title I of UMTRCA.

In the Petitioner's amendment to their original petition they requested that, in the event that the NRC denies the Petitioner's earlier request that NRC repeal the licensing exemption for inactive sites or conduct the requested rulemaking, the NRC take further action. Specifically, the Petitioner requested that the NRC ensure that the management of byproduct material located on or derived from inactive uranium processing sites is conducted in a manner that protects the public health and safety and the environment from the radiological and nonradiological hazards associated with uranium mill tailings.

The Petitioner also requested, whether the original petition is granted or not, that the NRC establish requirements to govern the management of byproduct material, not subject to licensing under section 81 of the Atomic Energy Act, comparable to the requirements applicable to similar materials under the Solid Waste Disposal Act, as amended. In the alternative, the Petitioner suggested that NRC extend the coverage of the requirements in 10 C.F.R. Part 40, Appendix A, which are now applicable only to licensed byproduct material, to byproduct material not subject to licensing. In addition, the Petitioner requested that the NRC issue regulations that would require a person exempt from licensing to conduct monitoring activities, perform remedial work, or take any other action necessary to protect health and safety and the environment.

The NRC is denying this amendment for essentially the same reasons as the original petition. Title I of UMTRCA provides the NRC only a review and concurrence role in remedial actions. Management of the residual radioactive material prior to and during remedial actions is the responsibility of the Department of Energy. Licensing and concomitant regulation by the NRC occurs only after completion of the remedial action.

While it is true that the sites are not licensed by the NRC prior to completion of remedial action, the sites are managed by DOE under a comprehensive environmental, health, and safety program similar to the types of programs required by the NRC under 10 C.F.R. Part 20. This program includes the types

of activities requested by Petitioner, including monitoring and other actions necessary to provide adequate protection of public health and safety and the environment. In addition, the remedial-action program operates under a series of state laws and regulatory programs intended to protect human health and the environment. Although the Commission does not have the authority to approve DOE's environmental, health, and safety program for these sites, the NRC has reviewed and commented on the adequacy of the program, and DOE has considered these comments in the design and implementation of its program. Furthermore, NRC exercises oversight through its concurrence role in DOE's remedial program. NRC must concur with DOE's completion determination that the remedial action at any site complies with EPA standards for inactive milling sites. These standards require longevity of isolation from the unrestricted environment, reduction of radon exhalation from the disposal impoundment, geotechnical stability of the disposal structure, and groundwater protection. Vicinity property cleanup must also be performed to reduce risks to specific unrestricted-use levels. By means of these clearly stipulated responsibilities, UMTRCA Title I established mechanisms in the performance of the remedial work, construction and performance monitoring, and perpetual custody and surveillance under NRC license, which all contribute to the main goal of protection of the public health, safety, and the environment. The added regulatory mechanism of direct licensing prior to final cleanup would not enhance this main goal; rather it would delay the completion of remedial action, because of the added administrative burden associated with the formal licensing process.

The DOE has essentially completed cleanup at eight sites. At seven sites, DOE is actively proceeding toward final cleanup. Initial planning has been completed for the remaining nine sites although significant construction has not yet started. Construction activities at all the inactive sites are scheduled to be completed by the end of 1994.

FOR THE NUCLEAR
REGULATORY COMMISSION

James M. Taylor
Executive Director for
Operations

Dated at Rockville, Maryland,
this 8th day of June 1990.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF THE EXECUTIVE DIRECTOR FOR OPERATIONS

James M. Taylor, Executive Director

In the Matter of

Docket No. PRM 50-52

MARVIN LEWIS

July 17, 1990

The Nuclear Regulatory Commission (NRC) is denying a petition for rule-making (PRM 50-52) from Mr. Marvin I. Lewis. The petition requests that the Commission amend its regulations in 10 C.F.R. Parts 2 and 50 to reinstate financial qualifications as a consideration in the operating license hearings for electric utilities. The petition is being denied because it raises no issues that were not previously considered in the rulemaking process that resulted in the Commission's adoption on September 12, 1984 (49 Fed. Reg. 35,747) of a final rule entitled "Elimination of Review of Financial Qualifications of Electric Utilities in Operating License Review and Hearings for Nuclear Power Plants," and because no new circumstances have arisen to warrant a change in the current regulation.

RULEMAKING: APPROPRIATENESS

Rulemaking is an inappropriate process for dealing with alleged financial and other problems of individual licensees.

DENIAL OF PETITION FOR RULEMAKING

I. BACKGROUND

By letter dated June 6, 1988, Mr. Marvin I. Lewis of Philadelphia, Pennsylvania, filed with the NRC a petition for rulemaking. The Petitioner requested

that the NRC rescind the rule that has eliminated financial qualifications from consideration at the operating license stage for electric utilities.

II. BASIS FOR REQUEST

Mr. Lewis states that long-standing operating problems at Limerick 1 and 2 and at the Peach Bottom plants have placed a financial burden on the Philadelphia Electric Company (PECo). Mr. Lewis asserts that PECo has admitted being under financial pressure and that the cost of Limerick 1 and 2 has left PECo billions of dollars in debt. Mr. Lewis also asserts that despite the shaky financial condition of the parent utility, Long Island Lighting Company (LILCO), Shoreham was granted a license to operate. He claims that LILCO had admitted that it lacked sufficient monies to pay for decommissioning of the nuclear power plant, and he is concerned that the financial problems facing PECo will lead to a situation at Limerick 2 similar to the Shoreham situation (i.e., the shutdown of a nuclear power plant after it reached criticality and its components had become contaminated with radioactivity).

III. GENERAL SOLUTION TO THE PROBLEM

The Petitioner generally requests that the NRC reinstate financial qualifications reviews of electric utilities as a part of the operating license review and hearings for nuclear power plants. In addition, the Petitioner specifically requests that the NRC suspend the licensing proceedings for Limerick 2 until the parent utility, PECo, can demonstrate to the satisfaction of the NRC that it is financially qualified to proceed safely with Limerick 2 and its other nuclear operations.

IV. SUMMARY OF PETITION

Mr. Lewis believes that Limerick 2 will be issued a license to operate at full power, and then because of PECo's financial problems and the excess generating capacity in the service area resulting from the plant's operation, PECo will decide to decommission Limerick 2. The Petitioner asserts that such action by PECo will expose him and other members of the public to radiation without any corresponding benefit. Mr. Lewis states that even if the plant stays open, the shipment of radioactive waste will expose him to radiation without any corresponding benefit, and he claims this is a violation of the Atomic Energy Act. Mr. Lewis cites the Atomic Energy Act as the basis for his assertion that the federal government is required by law to "protect the health and safety of

the public” and that the Nuclear Regulatory Commission has been charged with enforcing this mandate.

V. PETITIONER'S PROPOSAL

The Petitioner requests that the NRC amend its regulations in 10 C.F.R. Parts 2 and 50 to reinstate financial qualifications as a consideration in the operating license hearings for electric utilities. To achieve this goal, the NRC would have to revoke the provisions of the final rule entitled “Elimination of Review of Financial Qualifications of Electric Utilities in Operating License Review and Hearings for Nuclear Power Plants,” adopted on September 12, 1984 (49 Fed. Reg. 35,747) and also revoke the provisions of the final rule entitled “Elimination of Review of Financial Qualifications of Electric Utilities in Licensing Hearings for Nuclear Power Plants,” adopted March 31, 1982 (47 Fed. Reg. 13,750). Part 2 would be amended by revising 10 C.F.R. § 2.104(c)(4) and ¶ VIII(b)(4) of Appendix A to reinstate the language of those provisions that existed before issuance of the final rule published March 31, 1982 (47 Fed. Reg. 13,750). Part 50 would be amended by revising §§ 50.33(f), 50.40(b), and 50.57(a)(4) to reinstate the language of those provisions that existed before issuance of the final rule published March 31, 1982 (47 Fed. Reg. 13,750). Finally, the definition of “electric utility” in §§ 2.4 and 50.2 would be revoked because it would be unnecessary.

VI. PUBLIC COMMENTS ON THE PETITION

A notice of filing of petition for rulemaking was published in the *Federal Register* on August 29, 1988 (53 Fed. Reg. 32,913). Interested persons were invited to submit written comments or suggestions concerning the petition by October 28, 1988. The NRC received twenty-one comments (one was double counted) in response to the notice: four from citizens organizations (one of which was sent by the Petitioner); and seventeen from industry, industry representative organizations, and industrial associations (two comments were received from one organization).

All of the citizens' organizations supported the petition, and all of the industry respondents opposed the petition.

The main reasons given for supporting the petition were:

1. A utility under financial duress might take short cuts in operation and procedures which could result in accidental releases of radiation.
2. The NRC would be under pressure to allow many questionable

safety practices under fear that the utility would crash without these questionable approvals.

3. Unplanned expenses associated with the outages at the Peach Bottom units have greatly weakened PECO's financial stability.
4. PECO's long history of incompetence and irresponsibility should have been a factor considered by the NRC in licensing Limerick 1 and 2.
5. In adopting the financial qualifications regulations, the NRC found that state regulatory commissions would always guarantee utilities an adequate rate of return. That this finding is not correct has been demonstrated in the past by some of these commissions which have denied rate increases requested by nuclear utilities.

The main reasons given for opposing the petition were:

1. In adopting the present rule, the NRC found that the regulated nature of its licensees, electric utilities, assured adequate funding for safe power reactor operation through state and federal ratemaking processes. The NRC failed to find, at least for regulated electric utility owners of power reactors, any proven link between its financial qualifications review of such licensees and safety.
2. The petition does not demonstrate any rational relationship between the facts asserted (an increase in radiation exposure) and a need to amend the financial qualifications rule to require a review at the operating license stage.
3. The Petitioner had the opportunity to comment and did comment on the proposed rule. The petition appears to be an attempt to reopen consideration of a final rule of the Commission, and this rule has already been the subject of extensive rulemaking proceedings and judicial review. The petition in reality is an attempt to reopen an individual licensing proceeding.
4. The petition seeks to reopen a previously resolved matter. In general, the courts have held that, absent a showing that new circumstances have arisen to warrant a change, a regulation validly promulgated by an administrative agency is entitled to finality.
5. There has been no significant change in the ratemaking process or in fundamental economic regulation principles that would warrant the NRC's reconsideration of its 1984 decision.
6. The Petitioner appears to be challenging the finding made in adopting the rule, that is, that utility rate regulatory commissions would, without exception, allow prudently incurred costs of safely operating and decommissioning nuclear power plants. The D.C. Circuit Court of Appeals found no fault with the Commission's findings on this issue. The petition does not offer any reasons or supporting facts to show that these conclusions are now erroneous.

7. The NRC has the authority under section 182a of the Atomic Energy Act and under 10 C.F.R. § 50.54(f) to obtain any financial information necessary to determine whether a power reactor licensee's financial situation might affect the licensee's ability to continue to operate safely.
8. Most of the rulemaking petition is devoted to the problems of PECO and the licensing of Limerick 1 and 2. The licensing of Limerick 1 and 2 is not a generic industry problem. If there are problems at Limerick, there are other, more appropriate means of seeking Commission action.
9. The problems of PECO alleged by the Petitioner (such as an inadequate cooling water supply, an excess of generating capacity in the service area, and transfer of qualified operating personnel from one plant to another) do not justify a generic change in the financial qualifications rule.
10. Experience has shown that electric utilities have taken appropriate steps to ensure the availability of adequate financial resources, even during periods of financial stress, by providing for delay of nonnuclear expenses and by securing additional financing.
11. The financial qualifications rule is an inappropriate standard by which to judge the adequacy of a utility's decommissioning fund. The requirements regarding the adequacy of a utility's decommissioning fund for reactors are contained in other NRC regulations.
12. In adopting the present financial qualifications rule, 10 C.F.R. § 50.33(f), the Commission expressed its intent to use its inspection/investigation resources to ensure that licensees experiencing financial difficulties continue to comply with regulatory requirements necessary for the safe operation of their nuclear power plants.
13. The NRC's fully implemented and often extensive onsite licensee inspection program and its Systematic Assessment of Licensee Performance process provides direct information regarding the achievement of safe levels of operation at each facility, obviating any need for indirect methods of measurement such as the financial situation of licensees.
14. Reintroducing the case-by-case review of the financial qualifications of licensees would interfere with the NRC's move toward standardization.

VII. REASONS FOR DENIAL

The current financial qualifications regulation in 10 C.F.R. § 50.33(f) resulted from an extensive rulemaking process that included detailed studies by the Staff

and the National Association of Regulatory Utility Commissioners (NARUC). It was twice noticed as a proposed rule for comment in the *Federal Register* (Aug. 18, 1981 (46 Fed. Reg. 41,786) and April 2, 1984 (49 Fed. Reg. 13,044)), and each time, extensive comments were received. These comments were evaluated, and the final rules were modified accordingly. All of the concerns relating to financial qualifications expressed in the petition were considered in these earlier proceedings. The final rule was also reviewed by the U.S. Court of Appeals for the D.C. Circuit.¹ Situations such as those alleged to exist at PECO and LILCO were considered in the rulemaking and court review processes.

The portion of the preamble to the present rule entitled "Background" (49 Fed. Reg. 35,747 (Sept. 12, 1984)) provides the basis for the promulgation of the existing regulation. The NRC's findings as set forth in the preamble to the 1984 final rule were adjudged to adequately justify and support that rule.² No changes in rate regulatory law have taken place since then, nor is the NRC aware of any change in the practices or commitments of rate regulatory commissions. The Petitioner does not identify any changed circumstances; he only states, "We are presently faced with the very problems which I stated or predicted in my 5-28-84 comments on the rule." This argument is clearly an attack against the basis of the rule and does not arise from new or changed circumstances.

The petition alleges financial and other problems of two individual licensees, Philadelphia Electric Company and Long Island Lighting Company. Rulemaking is an inappropriate process for dealing with these problems of individual licensees.

Because the petition presents no information not previously considered and because there are no new circumstances, the NRC has denied this petition.

FOR THE NUCLEAR
REGULATORY COMMISSION

James M. Taylor
Executive Director for
Operations

Dated at Rockville, Maryland,
this 17th day of July 1990.

¹*New England Coalition on Nuclear Pollution v. NRC*, 727 F.2d 1127 (D.C. Cir. 1984); *Coalition for the Environment, St. Louis Region v. NRC*, 795 F.2d 168 (D.C. Cir. 1986).

²*Coalition for the Environment, supra*, 795 F.2d at 176.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Kenneth M. Carr, Chairman
Kenneth C. Rogers
James R. Curtliss
Forrest J. Remick

In the Matter of

Docket No. PR 90-1-MISC
(Amendment No. 1 to
Section 274 Agreement
Between NRC and Illinois)

STATE OF ILLINOIS

November 8, 1990

The Commission denies Kerr-McGee's petition for reconsideration of its October 17, 1990 Order (CLI-90-9, 32 NRC 210) which denied Kerr-McGee's request for an adjudicatory hearing prior to Commission approval of an amendment to the NRC/Illinois Agreement to allow Illinois to assume regulatory authority over section 11e(2) byproduct material. The Commission finds that Kerr-McGee has given no reason why the further hearing that must be held before Illinois can impose its differing standards must be held now, before Illinois has even formulated a disposal plan detailed enough for a Commission determination as to whether Illinois' standards would achieve a level of protection of public health and the environment equivalent to, or greater than, the level that would be achieved by Commission standards. The Commission also denies Kerr-McGee's request to stay any further action on the Amendment to the NRC/Illinois Agreement.

MEMORANDUM AND ORDER

On October 29, 1990, the Kerr-McGee Chemical Corporation filed a petition for reconsideration of the Commission's October 17, 1990 Memorandum and

Order denying Kerr-McGee's motion requesting the Commission to hold an adjudicatory hearing before deciding whether to approve a proposed Amendment to its Agreement with the State of Illinois. *In the Matter of State of Illinois*, CLI-90-9, 32 NRC 210 (1990). Illinois responded to Kerr-McGee's petition on November 5, 1990. The Amendment, which became effective November 1, 1990, approves the State's generic program for the regulation of "byproduct material" as defined in section 11e(2) of the Atomic Energy Act of 1954, as amended (AEA), and permits Illinois to assume regulatory authority over such material, in accordance with section 274 of the AEA. Some of the standards in the State's generic program differ from analogous standards established by the Commission.

In denying Kerr-McGee's motion for an adjudicatory hearing before approving the amendment, the Commission held that the Commission did nonetheless have

the very important obligation [under section 274o of the AEA] to ensure that a state's application of standards that differ from those established by the Commission also achieves . . . a level of protection of public health and the environment, equivalent to, to the extent practicable, or greater than, the level that would be achieved by the Commission's standards.

CLI-90-9, 32 NRC at 216. However, the Commission ruled that "this site-specific obligation will arise only later if and when Illinois . . . seeks to impose standards that differ from the Commission's own standards." *Id.* at 217.

Kerr-McGee's petition for reconsideration of the Commission's October 17, 1990 Memorandum and Order is denied. The petition presents no relevant argument not considered previously by the Commission. In particular, the Commission fully expected that its approval of the Amendment to Illinois' section 274 Agreement would lead one or more of the parties in the proceeding now pending before the Atomic Safety and Licensing Appeal Board (Docket No. 40-2061-ML) to move to terminate that proceeding and vacate the initial decision. As Kerr-McGee points out, such a motion has been filed with the Appeal Board, and the Commission expresses no opinion as to how that motion should be decided. Moreover, Kerr-McGee has given no reason why the further hearing that must be held before Illinois can impose its differing standards must be held now, before Illinois has even formulated a disposal plan detailed enough to permit the Commission to determine in a hearing whether the plan achieved a level of protection of public health and the environment equivalent to, or greater than, the level that would be achieved by the Commission's standards.

Kerr-McGee's motion for stay of further action on the Amendment to the section 274 Agreement is also denied. Again, no new argument is presented on the need for an adjudicatory hearing, and the motion fails to address the usual factors associated with grants of stay motions. *See* 10 C.F.R. § 2.788(e).

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

**Dated at Rockville, Maryland,
this 8th day of November 1990.**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

November 21, 1990

In examining intervenor appeals regarding contentions on the scope of a "full participation" exercise addressed by the Licensing Board in LBP-89-32, 30 NRC 375 (1989), and in an unpublished Memorandum and Order (Dec. 15, 1988), the Appeal Board affirms the Licensing Board's disposition of certain contentions, reverses a Board determination relating to participation by school officials in the exercise, and dismisses as moot the MassAG's appeal from the Board's disposition of a portion of a contention regarding utilization of a mobile alerting system during the exercise.

**RULES OF PRACTICE: CONTENTIONS (APPEALABILITY OF
DISMISSAL); FINALITY OF DECISIONS**

Under the Commission's Rules of Practice, an appellate challenge to the rejection of a contention in an interlocutory order must await the rendition

of a Licensing Board initial decision encompassing the subject matter of the contention. See 10 C.F.R. § 2.730(f); *Northern States Power Co.* (Tyrone Energy Park, Unit 1), ALAB-492, 8 NRC 251 (1978).

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

A “contention” should be a statement of the issue sought to be litigated while the “bases” accompanying the contention should be the factual allegations that provide some credible foundation for the contention. See 10 C.F.R. § 2.714(b).

OPERATING LICENSE(S): EMERGENCY PREPAREDNESS (EXERCISE)

Appendix E, § IV.F.1 of 10 C.F.R. requires a full participation emergency preparedness exercise within two years before the issuance of a full-power operating license.

RULES OF PRACTICE: CONTENTIONS (SCOPE OF EXERCISE)

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

Both the Commission’s regulations and the “fundamental flaw” criterion governing the admission of exercise-related contentions establish that a contention questioning the adequacy of the scope of a full participation exercise is appropriate as part of an adjudicatory challenge to the sufficiency of the exercise. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 285-93, *review declined*, CLI-88-11, 28 NRC 603 (1988).

OPERATING LICENSE(S): EMERGENCY PREPAREDNESS (EXERCISE)

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX E)

The scope of a full participation exercise is to encompass the “major observable portions” of both onsite and offsite emergency plans (including the mobilization of state, local, and applicant personnel and resources), in a manner sufficient to verify that, in the context of the accident scenario, emergency

response capability is adequate. *Shoreham*, ALAB-900, 28 NRC at 292-93 (citing 10 C.F.R. Part 50, App. E, § IV.F.1 n.4).

**OPERATING LICENSE(S): EMERGENCY PREPAREDNESS
(EXERCISE)**

The purpose behind allowing litigation relative to an exercise is to ascertain if there are any fundamental flaws in the emergency plan being tested.

**REGULATIONS: INTERPRETATION (10 C.F.R. PART 50,
APPENDIX E)**

**OPERATING LICENSE(S): EMERGENCY PREPAREDNESS
(EXERCISE)**

A facility's public alert and notification system is a "major observable portion" of an offsite emergency plan. See *Shoreham*, ALAB-900, 28 NRC at 294.

**OPERATING LICENSE(S): EMERGENCY PREPAREDNESS
(EXERCISE)**

EMERGENCY PLAN(S): NOTIFICATION REQUIREMENTS

The emergency broadcast system (EBS) portion is "an integral component of the public notification system," *Shoreham*, ALAB-900, 28 NRC at 294, as is the other major component — the siren alerting system. Each component must function adequately in order for the public notification system to be fully operational.

**EMERGENCY PLANNING: FEMA FINDINGS (NEED FOR FINAL
FINDINGS)**

**EMERGENCY PLAN(S): FEMA FINDINGS (NEED FOR FINAL
FINDINGS); NOTIFICATION REQUIREMENTS**

The final FEMA test or findings concerning the siren system *design* need not be completed prior to a Licensing Board finding concerning the adequacy of *planning* efforts regarding the system. *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-852, 24 NRC 532, 546 (1986).

**EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE
(DEFICIENCIES IN)**

The cure for an exercise scope deficiency is to provide for testing of the relevant component in a remedial exercise. *Shoreham*, CLI-88-11, 28 NRC at 604.

**REGULATIONS: INTERPRETATION (10 C.F.R. PART 50,
APPENDIX E)**

**OPERATING LICENSE(S): EMERGENCY PREPAREDNESS
(EXERCISE)**

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

The proviso of 10 C.F.R. Part 50, App. E, § IV.F.1 that an exercise must test as much of the emergency plan as is "reasonably achievable without mandatory public participation" does not generally exempt from participation in the exercise a private emergency relief organization like the American Red Cross (ARC) whose participation is contemplated by a particular emergency plan.

EMERGENCY PLAN(S): NOTIFICATION REQUIREMENTS

The timing of the EBS broadcast, as opposed to the sounding of the sirens, is irrelevant to compliance with the 15-minute initial notification requirement of 10 C.F.R. Part 50, App. E, § IV.D.3. See ALAB-935, 32 NRC 57, 68-69 (1990).

**REGULATIONS: INTERPRETATION (10 C.F.R. PART 50,
APPENDIX E)**

**OPERATING LICENSE(S): EMERGENCY PREPAREDNESS
(EXERCISE)**

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

While the "participation of state and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments refusing to participate," 10 C.F.R. Part 50, App. E, § IV.F.6, such exemption is not applicable to the ARC as a private organization.

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX E)

Appendix E, §IV.F.1 n.4 of 10 C.F.R. Part 50 declares that response personnel and resources are to be mobilized in "sufficient numbers to verify the capability to respond to the accident scenario." In the context of determining the appropriate scope of an exercise, ascertaining just what are "sufficient numbers" involves the application of reasoned judgment that takes account of both the intricacies of the emergency plan, as well as the general exercise objective of testing the adequacy of the plan.

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX E)

Activation of two of four planned reception centers, each of which was roughly representative of one of the unactivated reception centers, constitutes "sufficient numbers to verify the capability to respond to the accident scenario." 10 C.F.R. Part 50, App. E, §IV.F.1 n.4.

RULES OF PRACTICE: CONTENTIONS (EMERGENCY PLANS)

In alleging that emergency plan deficiencies, as revealed in an exercise, are sufficient to suggest a fundamental flaw in the emergency plan that requires correction, the contentions must be "well-focused" and "concrete" with "greater detail" than nonexercise contentions. *Shoreham*, ALAB-903, 28 NRC 499, 506 (1988).

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS; EMERGENCY PLANS)

A contention's reference to a FEMA report on an exercise, without even specifying what part of the report might provide a foundation for its allegations, is totally wanting under the standard which requires that emergency plan contentions be "well-focused." See *CLI-89-3*, 29 NRC 234, 240-41 (1989).

EMERGENCY PLANNING: EVACUATION (SPECIAL POPULATIONS)

EMERGENCY PLAN(S): CONTENT (EVACUATION)

“[T]he potential evacuation of schools within the emergency planning zone (EPZ) is a major element of offsite emergency planning.” *Shoreham, ALAB-900, 28 NRC at 297.*

EMERGENCY PLAN(S): CONTENT (EVACUATION); SCOPE OF INITIAL EXERCISE

“A sufficient number of school and related personnel must . . . participate in a full participation exercise so as to permit verification of their integrated capability to respond to the accident scenario.” *Shoreham, ALAB-900, 28 NRC at 297.*

EMERGENCY PLAN(S): SCOPE OF INITIAL EXERCISE

REGULATIONS: INTERPRETATION (10 C.F.R. PART 50, APPENDIX E)

An exercise that encompasses a reasonable representative sample for each school category — public, private, and nursery/day-care — enables the “verification of [the schools’] integrated capability to respond to the accident scenario.” *Shoreham, ALAB-900, 28 NRC at 297.*

EMERGENCY PLANNING: EVACUATION (SPECIAL POPULATIONS)

EMERGENCY PLAN(S): CONTENT (EVACUATION); SCOPE OF INITIAL EXERCISE

Concerning letters of agreement (LOAs) that bus companies have with applicants to assist in evacuating special needs populations, the possibility that some extraneous circumstance — such as, for example, a region-wide bus drivers’ strike — will preclude the fulfillment of the terms of the LOAs does not constitute a “fundamental flaw” in the emergency plan. *See Shoreham, ALAB-903, 28 NRC at 505.*

EMERGENCY PLAN(S): CONTENT (DEFICIENCIES IN); SCOPE OF INITIAL EXERCISE

In no circumstance can a lack of appropriate *scope in an exercise* per se establish a *fundamental flaw in the plan* that is the subject of that exercise. Rather, the result of an unduly limited exercise, in addition to noncompliance with the Commission's regulations requiring full participation, is an inability to determine whether the plan is, in fact, fundamentally flawed in some essential respect.

APPEARANCES

John Traficonte, Boston, Massachusetts (with whom **Alan R. Fierce**, **Leslie B. Greer**, **Matthew T. Brock**, and **Pamela Talbot**, Boston, Massachusetts, were on the brief), for the intervenor **James M. Shannon**, Attorney General of Massachusetts.

Paul McEachern, Portsmouth, New Hampshire (with whom **Diane Curran**, Washington, D.C., was on the joint brief), for the intervenors **Town of Hampton** and the **New England Coalition on Nuclear Pollution**, respectively.

Robert A. Backus, Manchester, New Hampshire, on the brief for the intervenor **Seacoast Anti-Pollution League**.

Thomas G. Dignan, Jr., Boston, Massachusetts (with whom **George H. Lewald**, **Kathryn A. Selleck**, **Jeffrey P. Trout**, **Jay Bradford Smith**, **Geoffrey C. Cook**, **William Parker**, and **Barbara Moulton**, Boston, Massachusetts, were on the brief), for the applicants **Public Service Company of New Hampshire**, *et al.*

Mitzi A. Young (with whom **Edwin J. Reis**, **Richard G. Bachmann**, **Elaine I. Chan**, **Sherwin E. Turk**, and **Lisa B. Clark** were on the brief) for the **Nuclear Regulatory Commission staff**.

DECISION

In June 1988, an assertedly "full participation" exercise of both the Seabrook Plan for Massachusetts Communities (SPMC)¹ and the New Hampshire Radiological Emergency Response Plan (NHRERP) for the New Hampshire segment of the EPZ was conducted. In conjunction with their appeals from the Licensing Board's disposition of various emergency planning issues in this operating license proceeding, intervenors Massachusetts Attorney General (MassAG), Seacoast Anti-Pollution League (SAPL), New England Coalition on Nuclear Pollution (NECNP), and the Town of Hampton, New Hampshire (TOH), have raised concerns about the scope of that exercise. It has come to our attention that another full participation exercise of both the SPMC and the NHRERP is scheduled for next month. Because the outcome of our examination of these intervenor attacks upon the scope of the previous exercise might influence the dimensions of the upcoming exercise, we address those particular concerns now.²

I.

Following the completion of the full participation exercise held on June 28-29, 1988, the Licensing Board provided the intervening parties with an opportunity to file contentions challenging the conduct of the exercise. In a memorandum and order dated December 15, 1988, the Licensing Board ruled on the admissibility of the various contentions.³ Before us, intervenors MassAG and SAPL each protest the Board's threshold dismissal of one of their contentions relating to the scope of the June 1988 exercise.⁴

¹ The SPMC is the emergency response plan for the Massachusetts segment of the Seabrook nuclear facility's plume exposure pathway emergency planning zone (EPZ). It was devised and is to be implemented by the applicants in lieu of a government-sponsored plan.

² Previously, in ALAB-937, 32 NRC 135 (1990), we addressed that portion of the MassAG's pending appeal questioning the threshold dismissal of one of his contentions regarding teacher participation in an evacuation of the Massachusetts EPZ schools. In subsequent issuances, we will address intervenor appeals concerning the Licensing Board's threshold rejection of other contentions challenging either the SPMC or the results of the June 1988 exercise, as well as the Board's numerous determinations on the merits regarding the SPMC and the exercise, which are contained in its November 1989 initial decision, LBP-89-32, 30 NRC 375 (1989).

³ Memorandum and Order (Dec. 15, 1988) (unpublished) [hereinafter Exercise Contentions Order].

⁴ Although the rejection of these contentions took place in an interlocutory order, under the Commission's Rules of Practice an appellate challenge had to await the rendition of a Licensing Board initial decision encompassing the June 1988 exercise. See 10 C.F.R. § 2.730(f); *Northern States Power Co.* (Tyronne Energy Park, Unit 1), ALAB-492, 8 NRC 251 (1978), and cases there cited. That decision, which covered both the SPMC and the exercise, having now been issued, see *supra* note 2, the Board's earlier determination rejecting those contentions is properly before us on intervenors' appeals taken from the decision.

A. The MassAG protests the Licensing Board's threshold rejection of his Contention EX-2, Bases A, B, C, F, and G.⁵ Basis A alleges that, contrary to the dictates of 10 C.F.R. Part 50, App. E, § IV.F.1 relative to exercise scope,⁶ neither the hardware involved in the Vehicular Alert Notification System (VANS) portion of the alert and notification system for the Massachusetts EPZ nor the capability of applicants' emergency response organization to utilize the VANS hardware in a timely and effective manner was tested during the June 1988 exercise. In Bases B and C, the MassAG challenges the adequacy of the scope of the exercise as it tested another aspect of the Massachusetts alert and notification system, the emergency broadcast system (EBS). Basis F focuses on the failure of the test to demonstrate the ability of the Massachusetts chapter of the American Red Cross (ARC) to establish and maintain congregate care and other planned mass shelter facilities, due to the ARC chapter's nonparticipation in emergency planning. Finally, in Basis G the MassAG alleges that the scope of the exercise was insufficient in light of purported inadequacies in the Federal Emergency Management Agency (FEMA) evaluators' assessments of the response preparedness of school, hospital, and other special facility administrators.

As we made clear in our decision in ALAB-900 in the *Shoreham* proceeding, both the Commission's regulations and its "fundamental flaw" criterion governing the admission of exercise-related contentions establish that a contention questioning the adequacy of the scope of a full participation exercise is appropriate as part of an adjudicatory challenge to the sufficiency of the exercise.⁷ We further determined there that the scope of a full participation exercise is to encompass the "major observable portions" of both onsite and offsite emergency plans (including the mobilization of state, local, and applicant personnel and resources), in a manner sufficient to verify that, in the context of the accident scenario, emergency response capability is adequate.⁸ As we pointed

⁵ As applicable here, a "contention" should be a statement of the *issue* sought to be litigated while the "bases" accompanying the contention should be the *factual allegations* that provide some credible foundation for the contention. See 10 C.F.R. § 2.714(b). Under this standard, many of the "bases" specified by intervenors in the proceeding might be considered "contentions" in and of themselves, so that the Licensing Board acted appropriately in reviewing and ruling upon the various intervenor "contentions" in terms of the specific "bases" presented.

⁶ In pertinent part, 10 C.F.R. Part 50, App. E, § IV.F.1 provides:

A full participation⁴ exercise which tests as much of the licensee, State and local emergency plans as is reasonably achievable without mandatory public participation shall be conducted for each site at which a power reactor is located . . . within two years before the issuance of the . . . operating license for full power

⁴ "Full participation" . . . includes testing the major observable portions of the onsite and offsite emergency plans and mobilization of State, local and licensee personnel and other resources in sufficient numbers to verify the capability to respond to the accident scenario.

⁷ *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 285-93, review declined, CLI-88-11, 28 NRC 603 (1988).

⁸ *Id.* at 292-93 (citing 10 C.F.R. Part 50, App. E, § IV.F.1 n.4).

out in ALAB-900, to preclude consideration of the sufficiency of the scope of the exercise would seriously undermine the purpose behind allowing litigation relative to the exercise, i.e., to ascertain if there are any fundamental flaws in the emergency plan being tested. Providing for challenges to the scope of the exercise ensures that the drill is not unduly limited to either strong or weak planning areas that would not reflect a fair measure of overall emergency response capability.⁹

1. In rejecting Bases A, B, and C of MassAG Contention EX-2, the Licensing Board declared that, in light of ALAB-900, the allegations therein about the scope of the exercise with regard to the VANS and the EBS were deficient because they failed to assert that major observable elements of the plan were not tested. More specifically, the Board held that these bases pointed only to "isolated portions" of the major observable element (i.e., the public notification system) that were not tested and found that "little information of significant independent utility would have been gained by testing these isolated portions of those elements."¹⁰ The Board also stated that these bases were deficient because the MassAG failed to make a "convincing showing why these isolated portions of the major observable element were critical to a full participation exercise. Any defects which might be revealed by testing them would appear to be minor, readily correctable problems, not fundamental flaws in the plan."¹¹

The MassAG asserts before us that the Licensing Board's attempt to categorize the VANS and the EBS as "isolated portions" of the public notification system fails to recognize that these two components are, in fact, the heart of that notification system, and that neither was sufficiently tested. He also disputes the Board's finding that little information of independent utility would be gained by fully testing these portions of the system, asserting that testing both the VANS and the EBS would reveal significant information about the public notification system's ability to comply with the fifteen-minute "initial notification" requirement of 10 C.F.R. Part 50, App. E, § IV.D.3.¹² Applicants and the NRC staff urge affirmation of the Licensing Board's determination for the reasons given by the Board.

ALAB-900 established that a facility's public alert and notification system, which is referred to as the Prompt Alert and Notification System (PANS) in the Massachusetts portion of the Seabrook EPZ, is a "major observable portion" of an offsite emergency plan.¹³ That decision also held that the EBS portion

⁹ *Id.* at 286.

¹⁰ Exercise Contentions Order at 18.

¹¹ *Ibid.*

¹² Recently, in ALAB-935, 32 NRC 57 (1990), we interpreted this regulatory requirement as it applies to the Seabrook alert and notification system. The Commission declined review of ALAB-935 on October 11, 1990.

¹³ See *Shoreham*, ALAB-900, 28 NRC at 294.

of the system is "an integral component of the public notification system."¹⁴ This holding applies with equal force to the system's other major component, siren alerting, which in the Massachusetts EPZ is provided by the VANS. Each of these elements constitutes a separate portion of the overall alert and notification system; each must function adequately, however, in order for the public notification system to be fully operational. To dismiss the MassAG's separately stated concerns about the scope of the test for either the VANS or the EBS component on the ground that one or the other was only an "isolated portion" of the notification system fails to account for the independent importance within the system of each part and the concomitant need to exercise each component in a full participation exercise.¹⁵ Nonetheless, the result reached by the Board with respect to the bases for the contention proffered by the MassAG was correct.

As we have described in some detail previously,¹⁶ the VANS system is a mobile siren alerting system utilized in the Massachusetts EPZ as a substitute for pole-mounted sirens. The FEMA report concerning the June 1988 exercise indicates that the VANS system was tested by deploying vehicles to the various predesignated acoustic locations and thereafter simulating siren activation.¹⁷ In Basis A of his Contention EX-2, the MassAG maintains that the scope of the exercise was not adequate because vehicles other than the actual VANS trucks were used, which resulted in differences in activation timing and an inability to test whether the drivers knew the proper procedures for deploying the sirens.¹⁸

By order dated October 24, 1990, we noted that an additional full participation exercise of the New Hampshire and Massachusetts emergency plans is scheduled for December 13, 1990, and requested that the parties address whether the scope of this exercise would address any of the alleged problems relating to the scope of the June 1988 exercise identified by the MassAG or other intervenors in their pending appeals. The response from applicants indicated that in the upcoming December 1990 exercise "[t]he actual VANS trucks will be driven to the acoustical locations during this exercise; in June 1988, other vehicles

¹⁴ *Ibid.*

¹⁵ Citing *Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant)*, ALAB-852, 24 NRC 532, 546 (1986), both applicants and the staff contend that there is no regulatory requirement that the siren system be included as part of an exercise. That case, in which we held that the final FEMA test or findings concerning the siren system *design* need not be completed prior to a Licensing Board finding concerning the adequacy of *planning efforts* regarding the system, does not speak to the need to include system testing when the plan is exercised.

¹⁶ See ALAB-935, 32 NRC at 61.

¹⁷ Applicants' Exh. 43F (FEMA Exercise Report (Sept. 1, 1988)) at 222.

¹⁸ In addition, the MassAG asserts that the failure to utilize the actual VANS vehicles meant that there was no showing establishing the suitability of each acoustic site for VANS deployment. This clearly is a challenge directed to the *design* basis of the VANS system, not the scope of the exercise, and should have been raised previously as part of the MassAG's attack upon that basis. See ALAB-935, 32 NRC at 62.

were used.”¹⁹ The MassAG responds that this “may” ultimately moot his Basis A concerns.²⁰ This equivocation notwithstanding, the crux of the MassAG’s concern about the exercise clearly is the failure to utilize and deploy the actual VANS vehicles.²¹ The circumstances of the upcoming test with respect to the VANS essentially encompass the relief to which intervenor would be entitled if the scope of the earlier exercise without the VANS vehicles was found deficient.²² Basis A of the MassAG’s Contention EX-2 thus has been rendered moot.²³

Also wanting, although for a somewhat different reason, are the MassAG’s allegations regarding inadequate exercise scope relative to the EBS portion of the public notification system. The MassAG asserts that ALAB-900, which also dealt with allegations relating to scope of EBS testing, compels a finding that the scope of the June 1988 exercise was deficient on this score. We do not agree.

In ALAB-900, the un rebutted assertion was that no attempt was made to implement any part of the EBS process with respect to the designated EBS station, including providing the appropriate EBS message to the station or having a message actually broadcast.²⁴ Here, however, the contention is that particular aspects of that process were not adequately exercised. Unlike the exercise at issue in ALAB-900, the EBS process for the Massachusetts EPZ was tested, first, by making a facsimile transmission of the appropriate emergency message to the EBS station and, then, by both a simulated and an actual broadcast of a test message.²⁵ The MassAG maintains that the message broadcast process

¹⁹ Licensees’ Response to Appeal Board Order of October 24, 1990 (Nov. 1, 1990) at 2 n.3 [hereinafter Licensees’ Response to Appeal Board Order].

²⁰ Response to the Appeal Board’s Order of October 24, 1990 (Nov. 13, 1990) at 3.

²¹ In its responsive filing, the staff notes that the VANS system was tested during the spring of this year and suggests that this provides grounds for declaring Basis A moot. Staff Letter to Appeal Board (Nov. 5, 1990) at 2 n.3. Our review of the referenced FEMA test report indicates, however, that the May 1990 testing was directed toward siren signal coverage, an issue distinct from the VANS hardware/deployment/activation concerns expressed by the MassAG in Basis A to his Contention EX-2.

²² See *Shoreham*, CLI-88-11, 28 NRC at 604 (cure for exercise scope deficiency is to provide for testing of component in a remedial exercise).

²³ Further, we note that the applicants have established a regular schedule for testing the hardware, deployment, and activation of each VANS vehicle, including biweekly, quarterly, and annual tests and inspections of various VANS vehicle siren components and functions. See Applicants’ Exh. 11-A (Seabrook Station Public Alert and Notification System FEMA REP-10 Design Report (Apr. 30, 1988)) at 2-22 to -24 (cited in ALAB-935, 32 NRC at 61 n.3 as admitted into evidence in that portion of Seabrook licensing proceeding concerning VANS design adequacy); Applicants’ Exh. 11-B (Seabrook Station Public Alert and Notification System FEMA-REP-10 Design Report (Addendum 1, Oct. 14, 1988)), Attach. E (same).

²⁴ *Shoreham*, ALAB-900, 28 NRC at 293.

²⁵ Applicants’ Exh. 43F, at 222. According to FEMA’s exercise report, the actual broadcast of the EBS test message came several minutes after the message broadcast was simulated as part of a prearrangement with the EBS station so as not to cause undue interruption of its regular programming. See *ibid.*

The MassAG asserts in Basis C that the scope deficiency in the exercise also is illustrated by the fact that a more comprehensive test would have revealed that the then-primary EBS station (WCGY) did not have the requisite equipment to link it with the applicants’ response organization. Brief of the [MassAG] in Support of His Appeal of LBP-89-32 (Jan. 24, 1990) at 41 [hereinafter MassAG Brief]. But our finding in another context that intervenor has failed to establish any safety significance in WCGY’s subsequent withdrawal and replacement by WLYT-FM

(Continued)

should have been tested further, i.e., there should have been a measure of how much time it takes to prepare an announcer to read the message and how well he or she will read it after that preparation. These actions, however, only entail an announcer performing his or her usual duty of preparing for and presenting a broadcast message. Thus, as an indicator of fundamental planning flaws in this major observable portion of the exercise, their role is hardly so central that it compels a finding that the absence of any assessment of these activities establishes a material deficiency in the scope of the exercise.²⁶

2. Following the lead of the Commonwealth, the Massachusetts chapter of the American Red Cross previously had announced its intention not to be involved in the Seabrook emergency planning process in that state.²⁷ Consistent with that position, the ARC did not participate in the June 1988 exercise. As a result, none of the more than two dozen congregate care centers due to be administered and staffed by the Massachusetts ARC was activated. With Basis F of Contention EX-2, the MassAG seeks to establish that this is a deficiency in the scope of the exercise that requires correction.

In rejecting this basis at the threshold, the Licensing Board noted the Commission's conclusion in the *Shoreham* proceeding that it can be assumed, based upon the ARC's historical practice, organizational policy, and congressional mandate, that the ARC will respond in the event of an emergency, including a radiological emergency.²⁸ Finding that this created a presumption that the ARC would respond,²⁹ the Licensing Board declared the Massachusetts chapter's refusal to do so in the context of an exercise rendered the testing of congregate care facilities "not reasonably achievable" within the meaning of 10 C.F.R. Part 50, App. E, § IV.F.1.³⁰ The MassAG now challenges this conclusion as based on the erroneous assumption that ARC nonparticipation precluded exercise of this element of the plan.

For the reasons set forth in ALAB-900 concerning the section IV.F.1 proviso that an exercise must test as much of the emergency plan as is "reasonably achievable without mandatory public participation,"³¹ we have a serious question whether the failure to activate the congregate care centers because of ARC

as a primary EBS station, ALAB-936, 32 NRC 75, 82-83 (1990), deprives the MassAG's scope allegation of any practical significance. Moreover, WLYT, not WCGY, was the station utilized for the EBS broadcast during the June 1988 exercise. See Applicants' Exh. 43F, at 222.

²⁶ In addition, although the MassAG asserts that the station's message-processing actions are necessary to establish the public notification system's compliance with the 15-minute initial notification requirement of 10 C.F.R. Part 50, App. E, § IV.D.3, we previously have held that the timing of the EBS broadcast, as opposed to the sounding of the sirens, is irrelevant to compliance with that particular standard. See ALAB-935, 32 NRC at 68-69.

²⁷ See LBP-89-32, 30 NRC at 584-85.

²⁸ See Exercise Contentions Order at 20 (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-5, 25 NRC 884, 887-88 (1987)).

²⁹ *Ibid.* See also LBP-89-32, 30 NRC at 586-87.

³⁰ Exercise Contentions Order at 20-21.

³¹ *Shoreham*, ALAB-900, 28 NRC at 295-96.

nonparticipation can be condoned as “not reasonably achievable” within the meaning of that section. We would not generally consider that provision’s exemption of the public from actual participation in exercises to extend to a private emergency relief organization like the ARC whose participation is contemplated by the emergency plan. Nor does it appear that by its terms the additional exemption for governmental nonparticipation in exercises found in section IV.F.6 of Appendix E is applicable to the ARC as a private organization.³²

In this instance, however, we conclude that the Licensing Board’s exclusion of Basis F was correct. The duties assigned by the plan to the ARC involve administering and staffing several “special population” and general evacuee shelter facilities located outside the EPZ. It is beyond challenge that providing shelter maintenance services is a traditional ARC emergency response role that the organization has performed in the face of all types of natural and technological disasters.³³ In light of the Commission’s recognition that it can be assumed that the ARC will answer a request for emergency assistance, in an instance such as this, in which the response role assigned to the ARC in an emergency plan conforms to one it traditionally has fulfilled, we see little use, in terms of identifying fundamental flaws in the emergency plan, in admitting a contention challenging the *scope* of an exercise founded solely upon the ARC declination to participate in an exercise. This is especially so in the absence of any specific information indicating that the organization lacks the ability to discharge its conventional and oft-fulfilled role.

3. In Basis G of his Contention EX-2, the MassAG asserts that FEMA evaluators improperly failed to include school, hospital, and other special facility administrators among those exercise participants that were quizzed concerning their knowledge and capability (and those of their staff) to implement the role assigned under the SPMC. In rejecting this basis, the Licensing Board referred to our expressed concern in ALAB-900 that a similar argument raised questions about “the fairness of penalizing a license applicant for the shortcomings in an exercise *evaluation* (as contrasted with the exercise itself) that are *solely* attributable to FEMA.”³⁴ On appeal, the MassAG asserts that the Licensing Board misread Basis G as a “critique of FEMA’s evaluation” and contends that

³² Part 50, App. E, § IV.F.6 of 10 C.F.R. provides:

The participation of state and local governments in an emergency exercise is not required to the extent that the applicant has identified those governments as refusing to participate further in emergency planning activities, pursuant to 10 CFR 50.47(c)(1). In such cases, an exercise shall be held with the applicant or licensee and such governmental entities as elect to participate in the emergency planning process.

³³ See LBP-89-32, 30 NRC at 589.

³⁴ *Shoreham*, ALAB-900, 28 NRC at 300 n.27 (emphases in original).

it in fact is a challenge to the scope of the exercise based upon the failure to obtain the participation of hospital, school, and other special facility personnel.³⁵

The MassAG's argument is little more than a belated attempt to recast this basis for his contention. This is easily seen by contrasting Basis G with TOH/NECNP Contention EX-1, discussed more fully *infra*, the clear gist of which is that, for New Hampshire EPZ schools, the exercise failed to test adequately a major observable portion of the plan and therefore was insufficient in scope. Just as plainly, the focus of Basis G is the failure by FEMA officials in the course of their *evaluation* of the exercise to question administrators of special facilities (including schools and hospitals) in order to assess their knowledge of emergency planning. Our observation in ALAB-900 about penalizing the applicant for alleged FEMA evaluation deficiencies applies with full force to this portion of MassAG Contention EX-2 and the Licensing Board properly dismissed it.

B. In its Contention EX-12, SAPL sought to challenge the adequacy of various aspects of the evacuee registration, radiological monitoring, and decontamination program for the New Hampshire EPZ as demonstrated in the June 1988 full participation exercise. Although the Board admitted for litigation the contention concerning the implementation difficulties alleged, it rejected other aspects of the basis for the contention. Before us SAPL challenges the Board's ruling that, because "[t]he exercise included one large and one small [reception] center out of two large and two small centers,"³⁶ it was sufficiently representative in scope with respect to the number of reception centers activated and staffed in the New Hampshire portion of the Seabrook EPZ. Both applicants and the staff urge affirmance of the Board's action.

As the Board indicated in its ruling regarding this scope aspect of the contention's basis, there is no regulatory requirement that a full participation exercise include the activation and staffing of all reception centers designated as part of the emergency planning process. In describing a full participation exercise, Appendix E to Part 50 declares that response personnel and resources are to be mobilized in "sufficient numbers to verify the capability to respond to the accident scenario."³⁷ In the context of determining the appropriate scope of an exercise, ascertaining just what are "sufficient numbers" involves the application of reasoned judgment that takes account of both the intricacies of the emergency plan, as well as the general exercise objective of testing the adequacy of the plan. In this instance, we have no hesitancy in concluding that the activation of two of the four planned New Hampshire EPZ reception centers, each of which was roughly representative of one of the unactivated reception centers,

³⁵ MassAG Brief at 42.

³⁶ Exercise Contentions Order at 61.

³⁷ 10 C.F.R. Part 50, App. E, § IV.F.1 n.4; see *Shoreham*, ALAB-900, 28 NRC at 297.

was a judicious exercise of such judgment so as to comply with the governing standard.³⁸

II.

In addition to rejecting the foregoing exercise scope contentions at the threshold,³⁹ the Licensing Board admitted and decided on the merits TOH/NECNP Contention EX-1, which concerns the scope of the June 1988 exercise as it pertained to the NHRERP.⁴⁰ Its assigned bases focus specifically upon aspects of the exercise directed to protective measures for school children; traffic movement and control during an evacuation; and available transportation resources to meet evacuation needs. These bases are said to support the overall claim that, in contravention of Commission regulations,⁴¹ the reach of the exercise was too limited either (1) to yield "valid or meaningful results regarding the capability to implement" the NHRERP; or (2) to permit a finding that the exercise "evaluated major portions of emergency response capabilities."⁴² We consider the various portions of the contention *seriatim*.

A. As initially presented, Bases (a) and (b) of the contention were directed to the absence of the participation in the exercise of any teachers employed in schools within the New Hampshire EPZ. Subsequently, however, the issue was

³⁸ In addition to protesting the Licensing Board's disposition of that portion of the basis of Contention EX-12 that concerned exercise scope, SAPL contests the Board's rejection of that part of the basis alleging that employees of the New Hampshire Department of Public Health Services (DPHS), who staffed the New Hampshire state emergency operations center and are intended to be a resource to the reception center personnel, nonetheless were unfamiliar with their responsibilities and duties. We agree with the Board that SAPL failed to provide sufficient information in support of its claim of inadequacies.

As we have indicated previously, in alleging that emergency plan deficiencies, as revealed in an exercise, are sufficient to suggest a fundamental flaw in the emergency plan that requires correction, the contentions must be "well-focused" and "concrete" with "greater detail" than nonexercise contentions. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499, 506 (1988). In contrast to the other, admitted portions of the basis of this contention, which alleged a number of specific incidents at specific times and places, the allegations about DPHS employees in the original contention contained no reference to particular incidents that occurred during the exercise or any other indication of the factual grounds supporting the SAPL allegation of inadequate training and preparation. Although SAPL purported to offer the Board some specifics concerning the DPHS in its reply to the objections of the applicants and the staff concerning this portion of its contention, its reference to a FEMA report on the exercise, without even specifying what part of the report might provide a foundation for its allegations, is totally wanting under this standard. See CLI-89-3, 29 NRC 234, 240-41 (1989). Thus, the Licensing Board properly dismissed this portion of the contention's basis as well.

³⁹ While the staff suggests that rejected TOH/NECNP Contention EX-2 (the dismissal of which those parties appeal) also is a scope contention, see NRC Staff Brief in Response to Intervenor Appeals from LBP-89-32 and LBP-89-17 (Mar. 21, 1990) at 63, we agree with the applicants that this is in fact an exercise "performance" contention, see Licensees' Response to Appeal Board Order at 2 n.2. Accordingly, we will address it in a subsequent issuance.

⁴⁰ LBP-89-32, 30 NRC at 630-33, 638-49.

⁴¹ The contention refers to 10 C.F.R. §§ 50.47(a)(1), (a)(2), and (b)(14), in addition to 10 C.F.R. Part 50, App. E, § IV.F.1.

⁴² [TOH/NECNP] Emergency Planning Contentions on the June 28-29, 1988 Exercise (Sept. 21, 1988) at 1-2.

broadened to include as well the asserted lack of participation on the part of school administrators.⁴³

1. The essential facts pertaining to this issue do not appear to be in dispute. As summarized in the TOH/NECNP Brief without contradiction, there are 113 schools and day-care facilities within the seventeen towns in the New Hampshire EPZ.⁴⁴ Each town has a separate emergency response plan and, in appendices to those plans, there are individual school plans for each school (public or private) and day-care facility in the particular town.⁴⁵

Although the plans assign to the administrator of each school specific emergency preparedness and response undertakings, none of those administrators participated to any significant extent in the June 1988 exercise. To the contrary, it appears that the participation of the schools in the exercise consisted solely of the receipt of telephone calls by two of the 113 institutions — one of which (the public Swasey Central School located in the Town of Brentwood) reported that it was not in session,⁴⁶ and the other (the private Country Kids nursery or day-care facility located in the Town of Stratham) provided a census of eight students. In addition, an “administrative representative” for each of the five New Hampshire School Administration Units (SAUs) with jurisdiction over the *public* schools in the EPZ received at least one telephone call from state emergency response personnel during the exercise. The intervenors tell us, however, that the applicants were unable to shed light upon the identity of the contacted individuals and, thus, could not say whether those persons had decisionmaking authority.

2. In ALAB-900 in the *Shoreham* proceeding, we took note of the fact that “the potential evacuation of schools within the emergency planning zone (EPZ) is a major element of offsite emergency planning.”⁴⁷ For this reason, we concluded, “[a] sufficient number of school and related personnel must . . . participate in a full participation exercise so as to permit verification of their integrated capability to respond to the accident scenario.”⁴⁸ In the exercise under review in ALAB-900, only one high school — out of a total of forty-eight public and private schools in the Shoreham EPZ — was a participant. Even the *Shoreham* applicant acknowledged that was not enough to satisfy the regulatory

⁴³ In their joint brief, TOH/NECNP explain how the broadening occurred. Town of Hampton and New England Coalition on Nuclear Pollution Brief on Appeal of LBP-89-32 (January 24, 1990) at 8 n.12 [hereinafter TOH/NECNP Brief]. That explanation has not been challenged and it is apparent that, in the November 1989 initial decision, the Licensing Board treated the issue as covering both teachers and administrators. See LBP-89-32, 30 NRC at 638.

⁴⁴ TOH/NECNP Brief at 9-10. Thirty-five of these institutions are public; the remaining 78 are private. See *ibid.*

⁴⁵ E.g., NHRERP (Town of Seabrook), Vol. 16, App. F (rev. 2, 1986). Unless otherwise indicated, henceforth the term “school” will be used to include nursery or day-care facilities.

⁴⁶ Because the exercise took place on June 28-29, the academic year had come to an end for schools (although presumably day-care facilities remained in operation).

⁴⁷ 28 NRC at 297.

⁴⁸ *Ibid.*

standard.⁴⁹ Moreover, for its part, FEMA determined that much broader school participation would be necessary before it could verify the ability of the schools generally to respond in the event of an emergency at Shoreham and, indeed, recommended that *all* schools within the EPZ be included in offsite exercises.⁵⁰ In these circumstances, we found wholly insubstantial the applicant's attack upon the Licensing Board's finding that there had been inadequate school participation in the exercise and that, consequently, the exercise was deficient.⁵¹

3. On the face of it, the situation at hand does not call for a disparate result. Contrary to the view of the Licensing Board,⁵² we are unable to discern a *material* difference between the extent to which EPZ schools were involved in the *Shoreham* exercise and what confronts us here. As we have seen, in no real sense were any of the 113 schools in the New Hampshire EPZ called upon to participate in the June 1988 exercise of the NHRERP. And the telephone calls to the SAUs scarcely cured that omission. Leaving aside the fact that the applicants apparently could not establish that those calls were received by persons in authority, the SAUs serve the thirty-five public schools alone and, thus, have no jurisdiction over the seventy-eight private educational institutions. Consequently, insofar as concerns the schools, the exercise fell far short of enabling an informed judgment on the existence of a "fundamental flaw" in the NHRERP. That plan is undergirded by seventeen individual town emergency response plans and 113 individual school plans, covering a wide variety of institutions (in both type and size). On the basis of the exercise at least, it is impossible to determine whether any of those plans, and thus the master NHRERP, will fulfill its intended objective of ensuring that adequate protective measures will be taken for school children within the EPZ in the event of a Seabrook radiological emergency.⁵³

This is not to say that the exercise required the direct involvement of classroom teachers, as distinguished from school administrators. For one thing, inasmuch as the schools were not in session at the time of the exercise, such involvement would not have been possible. That consideration to one side, we determined earlier this year that, should a Seabrook emergency occur, there will be no necessity for New Hampshire teachers to embark upon any

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ *Id.* at 296-97.

⁵² See LBP-89-32, 30 NRC at 639.

⁵³ With respect to schools, the Licensing Board viewed the purpose of the exercise to be to demonstrate that the State of New Hampshire and the [applicant's] offsite response organization had the capability to notify schools of the existence of an emergency, to communicate protective action recommendations or decisions, to ascertain whether the schools or day-care centers required transportation assistance for their children, and to deliver that assistance when requested.

Id. at 638. Assuming, without deciding, the sufficiency of that objective, it scarcely could have been fulfilled by the telephone calls to two schools and to unspecified individuals in the five SAUs.

undertaking not analogous to those that are part of their normal duties and responsibilities.⁵⁴ Because it is reasonable to assume that the teachers are fully capable of performing such functions as “accounting for and supervising the children and assuring their safe boarding of evacuation buses” — functions not dissimilar to the duties they routinely discharge⁵⁵ — their inclusion in the exercise hardly would have been necessary to ferret out any fundamental flaws in the NHRERP.

Nor do we suggest that it was obligatory that the administration of every New Hampshire EPZ school participate in the exercise. Although, as noted in ALAB-900, FEMA strongly recommended such all-inclusive participation in the case of the *Shoreham* EPZ schools,⁵⁶ we think it would have sufficed had the exercise encompassed a reasonable representative sample for each school category — public, private, and nursery/day-care.⁵⁷ Such a sample likely would have enabled, in the words of ALAB-900, the “verification of their integrated capability to respond to the accident scenario.”⁵⁸ Once again, without the real participation of a single school — and particularly not one of the seventy-eight private institutions outside of the domain of the SAUs — such verification simply was not possible.

Accordingly, the Licensing Board’s disposition of Bases (a) and (b), as litigated, cannot stand in full measure. Insofar as concerned the school administrators (but not the teachers), those bases were meritorious. As a consequence, in line with the Commission’s guidance concerning the correction of exercise scope deficiencies,⁵⁹ the failure to elicit sufficient school participation in the June 1988 exercise should be corrected in a subsequent exercise.

B. Basis (d) of TOH/NECNP Contention EX-1 raises questions respecting the scope of the exercise in the area of traffic control during an evacuation of the New Hampshire EPZ. In sum, this basis asserts the lack of sufficient New Hampshire State Police participation in the exercise, with particular reference to the staffing of traffic control posts (TCPs). Essentially for the reasons detailed by the Licensing Board, which require no rehearsal here,⁶⁰ we conclude that there is insufficient substance to that assertion.⁶¹

⁵⁴ See ALAB-932, 31 NRC 371, 398-408 (1990). The Commission declined review of ALAB-932 on July 12, 1990.

⁵⁵ See *id.* at 406.

⁵⁶ In the case of Seabrook, and for reasons that are not fully apparent, FEMA has not merely retreated from that recommendation, but now seemingly entertains no difficulty with the lack of significant participation of any schools.

⁵⁷ See *supra* pp. 351-52.

⁵⁸ 28 NRC at 297.

⁵⁹ See *supra* note 22.

⁶⁰ See LBP-89-32, 30 NRC at 630-33.

⁶¹ In their brief, intervenors allude specifically to the Hampton Beach TCPs. TOH/NECNP Brief at 21. We see no reason, however, why they should have been singled out during the exercise for State Police participation. It may well be that during the summer months an evacuation from the beach area would produce “bumper to bumper”

(Continued)

C. The remaining bases of the contention assert an inadequate participation in the exercise of transportation resources. According to Basis (f), only three of the eighteen bus companies relied upon by the NHRERP for the transportation of special facility populations, e.g., nursing home and school populations, were involved in the exercise. Moreover, the eighteen "regular" buses provided by those companies represented only four percent of the total number of such buses that would be needed in the event of an evacuation of the New Hampshire EPZ. Additionally, Basis (f) asserts that but one of forty-eight ambulances and two of seventy-one "special needs" buses took part in the exercise. Basis (g) takes issue with the purported failure to determine, during the exercise, the actual number of bus drivers available to carry out their assigned evacuation duties. On this score, the basis claims that the telephone calls to the bus companies had as their purpose merely a restatement of the number of drivers specified in each company's letter of agreement.

The principal difficulty with Bases (f) and (g) is that they rest explicitly on the erroneous premise that a purpose of the exercise was to demonstrate (in the words of Basis (g)) "the actual availability of necessary transportation resources." The NHRERP makes specific provision, in the form of the letters of agreement with the various bus and other transportation companies, for the transportation of those having a special need for such service in the event of an accident. Obviously, the assumption is that, in the event of an ordered evacuation, each company will be able to meet its contractual obligation. In aid of that assumption, as the Licensing Board noted, FEMA conducted its own survey of the transportation facilities for Seabrook.⁶² Nonetheless, the possibility always exists that, on the day of either an exercise or an actual emergency calling for an evacuation, some extraneous circumstance — such as, for example, a region-wide bus drivers' strike — will preclude the fulfillment of the terms of the letters of agreement. That possibility manifestly does *not* constitute a "fundamental flaw" in the plan,⁶³ but doubtless explains why, as part of the exercise, the State of New Hampshire placed an additional eighty-seven possible drivers under its jurisdiction on standby.⁶⁴

In short, no matter what the extent of bus or driver participation in it, an exercise cannot ascertain the actual availability at all times of the number of

traffic. But severe traffic congestion can also be expected in other portions of the EPZ in the event of an emergency dictating evacuation. Moreover, as intervenors themselves stressed in Basis (e) of this contention (whose threshold rejection, *see* Exercise Contentions Order at 67-68, they do not appeal), in nonemergency situations the State Police routinely encounter such congestion at Hampton Beach. That being so, the actual prior experience of the State Police and other traffic control authorities in dealing with beach congestion provides at least as good an indication of how such congestion might be confronted in an evacuation as would have been obtained in a simulation of accidents and other tie-ups during the exercise.

⁶² *See* LBP-89-32, 30 NRC at 648. *See also id.* at 644.

⁶³ *See* *Shoreham*, ALAB-903, 28 NRC at 505.

⁶⁴ *See* LBP-89-32, 30 NRC at 646-47.

drivers prescribed in the letters of agreement and, therefore, cannot have the assurance of such availability as an objective. (It is this factor that makes provision for backups a desirable part of an emergency response plan.) Rather, insofar as the transportation of special facilities populations is concerned, the aim of the June 1988 exercise was simply to test such elements of the NHRERP as the channels of communication and the sufficiency of the instructions that will be provided to the drivers. To this end, sixteen of the eighteen bus companies were contacted and the buses that participated in the exercise completed 207 out of the 224 evacuation routes established in the NHRERP for the transportation-dependent.⁶⁵

In light of these considerations, it cannot be said that, as is insisted in Bases (f) and (g), the lack of greater participation in the exercise on the part of transportation resources represented "a fundamental flaw in the NHRERP." Of course, in no circumstance can a lack of appropriate *scope in an exercise* per se establish a *fundamental flaw in the plan* that is the subject of that exercise. Rather, the result of an unduly limited exercise, in addition to noncompliance with the Commission's regulations requiring full participation, is an inability to determine whether the plan is, in fact, fundamentally flawed in some essential respect. Here, however, except with regard to the participation of certain school personnel (Bases (a) and (b)), the scope was satisfactory insofar as the testing of transportation resources is concerned.

For the foregoing reasons, the Licensing Board's determination in LBP-89-32, 30 NRC 375, regarding Bases (a) and (b) of TOH/NECNP Contention EX-1 is *reversed*. The Board's disposition in that initial decision of Bases (d), (f), and (g) of TOH/NECNP Contention EX-1 is *affirmed*. The Board's disposition, in an unpublished Memorandum and Order (Dec. 15, 1988), of MassAG Contention EX-2, Bases B, C, F, and G, and of SAPL Contention EX-12, concerning exercise scope and New Hampshire DPHS personnel adequacy, is *affirmed*. The MassAG's appeal from the Board's disposition of Basis A of his Contention EX-2 is *dismissed as moot*.

It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

⁶⁵ See *id.* at 646, 647. This was in sharp contrast to the situation with respect to the schools. As previously noted, only two of the 113 schools were even contacted, and none became significantly involved in the exercise.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(RE: TRUMP-S Project)
(Byproduct License No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

November 1, 1990

After receiving Licensee's response to his order granting a temporary stay, the Presiding Officer determines that many of the findings that the stay was based on are no longer valid. Hence, he issues favorable findings concerning the likelihood that Licensee will succeed on the following issues: (1) that the amount of ^{241}Pu that it possesses is less than 2 curies, (2) that its emergency plan is adequate to cover the TRUMP-S activities in the Alpha Laboratory and that the Columbia Fire Department would fight a fire at the laboratory, and (3) that the Licensee has not committed any errors that cast doubt on the competence of its personnel.

The Presiding Officer also rules that Licensee should have reported the amount of ^{241}Pu that it is licensed to possess as a substantial contaminant. He authorizes the Staff of the Commission to issue an amendment covering the amount of ^{241}Pu that Licensee may possess.

Since Licensee has not responded to all the elements that led to the granting of the temporary stay, the stay is left in effect.

RULES OF PRACTICE: TEMPORARY STAY OR STAY; NO RIGHT TO REPLY

The proponent of a temporary stay or stay may not reply to the opponent's response. 10 C.F.R. § 2.788(d) (applicable by inference to 10 C.F.R. § 2.788(i)).

SPECIAL NUCLEAR MATERIALS: SUBSTANTIAL CONTAMINANT

Section 70.22(a)(4) of 10 C.F.R. and Regulatory Guide 10.3 require that an applicant for a special nuclear materials license disclose the presence in its licensed amount of plutonium of 1.21 curies of ^{241}Pu , which is a beta emitter with about 1/50 the relative biological effectiveness of the same amount of curies generated by an alpha emitter.

SPECIAL NUCLEAR MATERIALS: EMERGENCY PLAN

It is appropriate for a fire department to have a procedure in which firefighters may cease fighting a fire when radiation levels reach dangerous levels. This is similar to procedures when great heat or smoke cause firefighters to cease fighting a fire from a threatened location.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: Relative Biological Effectiveness; ^{241}Pu as a contaminant in special nuclear materials; Emergency planning with respect to special nuclear materials.

MEMORANDUM AND ORDER

(Licensee's Partial Response Concerning Temporary Stay)

Memorandum

On October 20, 1990, I issued a temporary stay of the University of Missouri's (Licensee's) use of plutonium, neptunium, and americium in the TRUMP-S Project. The decision was issued, pursuant to 10 C.F.R. §§ 2.1263 and 2.788, before Licensee responded to the filings that prompted my action. The ground for issuing the temporary stay was that the criteria for a stay had been met, including the likelihood (based on the available filings) that the Missouri Coalition for the Environment, the Mid-Missouri Nuclear Weapons Freeze, Inc.,

the Physicians for Social Responsibility/Mid-Missouri and several individual intervenors (collectively, "Intervenors") would succeed on the merits of a variety of their allegations.¹

Now Licensee has responded in a thoughtful, well-documented way that causes me to reverse each of the determinations that they have addressed. Under the procedural regulations, Intervenors are prohibited from replying to Licensee's response. 10 C.F.R. § 2.788(d) (applicable by inference to 10 C.F.R. § 2.788(i)). They may, however, move for reconsideration of this decision within 10 days on the ground that I have acted erroneously on the information that is before me. They may not submit new evidence with respect to the temporary stay.

Although many of the grounds for the temporary stay have been eroded, the stay will remain in effect until I receive and evaluate Licensee's response to my findings concerning the likelihood of success on the merits concerning the use of improperly tested HEPA filters.

Licensee's thoughtful response to the two principal issues of concern to me relieves me of any serious concern, at this time, concerning its competence or the competence of its investigators.

I. CURIE CONTENT OF ²⁴¹Pu

In granting the temporary stay, I stated:²

Section 70.22(s)(4) of 10 C.F.R. requires that an application for a license include the name, amount, and specifications (including the chemical and physical form and; where applicable, isotopic content) of the special nuclear material. Regulatory Guide 10.3, which has suggestive force in this proceeding, requires in section 4.3:

the special nuclear material requested should be identified by isotope; chemical or physical form; activity in curies, *millicuries*, or *microcuries*; and mass in grams. Specification of isotopes should include principal isotope and significant contaminants. [Emphasis added.]

The Declaration of the Trump-S Review Panel persuades me that Intervenors are likely to succeed on the merits of the following arguments:

¹ The purpose of the stay was to protect the public safety from a possible risk during the time that Licensee is preparing its response. This seems to be the proper balance between apparent safety risks and an adverse impact on Licensee.

Obviously, in such a situation, there was no finding on the "merits" of the Intervenors' allegations. There could be no fair finding until Licensee had a reasonable chance to respond. However, these nuances of legal pleading are hard to convey accurately in press accounts and I am aware that, as a result, one effect of the issuance of the temporary stay was that the reputation of the University of Missouri suffered an undeserved adverse impact.

² Memorandum and Order (Grant of Temporary Stay), LBP-90-35, 32 NRC 259, 264-65 ("Temporary Stay Order").

- Licensee failed to disclose that there were other forms of plutonium present in its material other than just Pu-239 and Pu-240 and that those forms may contain *curie* amounts of other plutonium isotopes, not just millicuries or microcuries;
- the total curie content of plutonium possessed by Licensee, whether the source of the material be weapons grade plutonium or reactor grade plutonium, is substantially in excess of 2 curies;
- Licensee's personnel should have known that the curie content of its plutonium was far more than it disclosed and this casts doubt on their competence.³

I now find, based on the "Affidavit of Dr. J. Steven Morris Regarding Plutonium Content," October 29, 1990⁴ (Morris Affidavit), that these findings are no longer valid. The TRUMP-S Review Panel was relying on library research that led it to the apparently incorrect conclusion that Licensee had to be using either weapons-grade plutonium or reactor-grade plutonium and that the smallest amount of ²⁴¹Pu that could be present would be about 5 curies.⁵ By contrast, the Morris Affidavit provides a detailed analysis of the form of plutonium that Licensee possesses, including "New Brunswick Laboratory Certified Reference Materials Certificate of Analysis, CRM 127" (Attach. 1⁶), a similar analysis by the National Bureau of Standards of a predecessor form of this same material (Attach. 1B), a 1982 analysis of this same special nuclear material by the Los Alamos National Laboratory (Attach. 7) and a calculation deriving the amount of ²⁴¹Pu in September 1990 from the Los Alamos analysis (Attach. 6).

At the present time, it appears likely that Licensee can succeed on the merits of each of the following arguments:

- The plutonium that the Licensee has received is a single 5 gram lot of New Brunswick Laboratory (NBL) Certified Reference Material (CRM) 127.⁷
- A conservative estimate of the total curie content of the 10 gms of plutonium that Licensee is authorized to possess — including 1.21 curies of ²⁴¹Pu⁸ — is 1.992 curies.⁹

³Declaration of TRUMP-S Review Panel at 6-10.

⁴Attachment to a letter to me from Maurice Axelrad, October 30, 1990. I find that Mr. Morris is qualified as an expert witness with respect to his testimony by reason of his education and professional experience. Morris Affidavit at 1-2.

⁵I have no opinion concerning whether the TRUMP-S Review Panel should have known that other forms of plutonium were available. I have some sympathy for their plight because in this litigation they had no formal discovery rights — that is, no right to obtain answers to their questions from the Licensee. I have no reason to doubt their sincerity or their general expertise — although their specific knowledge concerning the availability of alternative isotopic compositions of plutonium does seem to be in some doubt at this time.

⁶All attachments are to the Morris Affidavit.

⁷Morris Affidavit at 3.

⁸The possession of ²⁴¹Pu is not expressly authorized in the license amendment.

⁹The amount is derived from the Los Alamos analysis (Attach. 7), adjusted according to Licensee's estimate (Attach. 6) and summarized in Morris Affidavit, Table 1, at 6 — adjusted by subtracting alpha activity attributed

(Continued)

- The biological effectiveness of 1.21 curies of ^{241}Pu is the same as .0242 curies, or 24.25 millicuries, of an equivalently effective alpha-emitter.¹⁰
- Although it would have been preferable to disclose this quantity of material as a significant contaminant under the regulations, since it is equivalent to a millicurie quantity of an alpha emitter, this omission is not fatal to the application.¹¹ I shall authorize the Staff of the Nuclear Regulatory Commission to amend SNM-247 to permit the possession of this material and shall consider the license application to be amended to contain this new information until Staff has had an opportunity to act.
- The failure of Licensee to disclose the presence of 1.21 curies of ^{241}Pu — the equivalent in biological effectiveness of alpha radiation equal to .0242 curies — in the licensed amount of plutonium does not cast doubt on its competence or on the competence of its personnel. Although I consider this to be a mistake, it is a mistake without any serious safety significance.

II. EMERGENCY PLANNING

In granting the temporary stay, I stated:¹²

Intervenors correctly point out that Licensee's possession of 25 curies of Americium requires them to conduct an evaluation or to have an applicable emergency plan. The Declaration of the Trump-S Review Panel at 17-22 persuades me that Intervenors are likely to succeed on the merits of the following arguments:

to Americium. (If the americium is included, the total curie content is 1.992, which is still less than 2. However, I find that it is not necessary to include the americium in computing the amount of plutonium.)

I note also that the Statement of Considerations to 10 C.F.R. Parts 30, 40, and 70, "Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees," April 7, 1989, 54 Fed. Reg. 14,051 at 14,052 states that the table of quantities in Part 30 "includes all alpha emitters listed on any license for which the quantity to theoretically deliver a 1-rem effective dose equivalent would be less than 2 curies." It therefore appears that the NRC did not intend to include ^{241}Pu , which is a beta emitter, in the 2 curies of plutonium listed in the regulations as the threshold for emergency planning.

¹⁰ Morris Affidavit, Finding 29, at 12 (citing 10 C.F.R. Part 71, Table A-2. The derivation of millicurie is my own.

¹¹ Regulatory Guide 10.3, "Guide for the Preparation of Applications for Special Nuclear Material Licenses of Less Than Critical Mass Quantities," section 4.3 provides:

the special nuclear material requested should be identified by isotope; chemical or physical form; activity in curies, millicuries, or microcuries; and mass in grams. Specification of isotopes should include principal isotope and significant contaminants. Major dose-contributing contaminants present or expected to build up are of particular interest." [Emphasis added.]

Note that the Nuclear Material Transaction Report through which Licensee received the special nuclear material from Rockwell International Corporation disclosed that it contained trace amounts of Pu-241 and Pu-240. Morris Affidavit, Attach. 3.

Note also that Intervenors have stated on several occasions that Licensee has permission to possess 0.7 curie of plutonium. That does not appear to be the case. Their permission is to possess 10 grams of "Plutonium-239/Plutonium-240" in accordance with its application and three specified letters. SNM-247, Amendment No. 12, Docket 070-00270 (Mar. 19, 1990). I find that they can also possess the associated ^{241}Pu .

¹² Temporary Stay Order, LBP-90-35, 32 NRC at 264.

- the only analysis of potential release fractions provided to me so far by Licensee is a "summary" of a study that does not exist and that does not provide adequate assurance of safety to the public;
- the assumptions in the "summary" are not conservative;
- emergency action is likely to be needed beyond 1 mile from the Alpha Laboratory;¹³
- the local fire department may respond to a fire but would not fight it.¹⁴

With respect to my finding concerning 25 curies of americium, Licensee now states that 10 C.F.R. § 30.32(i) was not applicable to Licensee's application because the license was granted before the effective date of the regulation, April 7, 1990.¹⁵ At this time, I am not prepared to accept the conclusion that the section is not applicable in this proceeding; this question seems to me to require briefing.¹⁶

It is clear that the application did not need to show compliance with this section prior to the time it was granted. However, this proceeding is now pending, and it is my responsibility to review the adequacy of the licensing application at this time. It is general practice at the NRC to permit applicant to amend its application papers to remedy defects that may be disclosed during the pendency of a proceeding, thus creating a dynamic licensing environment. During this period of adjudication, it seems to me that Licensee also ought to show compliance with new regulations effective during the pendency of the proceeding. However, this is a point on which I am not aware of precedent, so I will request Licensee to brief this point as part of its response to Intervenors' written filing. Intervenors may respond 10 business days after receiving Licensee's document.

Despite this difficulty concerning Licensee's legal position, I nevertheless have resolved my doubts concerning the adequacy of its emergency planning.¹⁷ To begin with, let me state that I am satisfied that the Columbia Fire Department will respond to a fire at the Alpha Laboratory and will take appropriate action.

The Affidavit of Henry Ottinger, which was the basis for this portion of my opinion granting a temporary stay, is a hearsay report of a conversation with

¹³ Declaration of TRUMP-S Review Panel, Table III, at 21b; attached ANSI/ANS15.16 (1982), "Emergency Classes."

¹⁴ Declaration of Henry Ottinger, Exh. 2.

¹⁵ 54 Fed. Reg. 14,051 (Apr. 7, 1989). Letter of October 30, 1990, at 3-4 n.1.

¹⁶ Although Licensee's letter of October 30, 1990, was not labeled as a response to any pleading, I consider it to be a response to my order and to the pleadings that prompted it. Hence, a reply is out of order and Mr. Green's letter of October 31, 1990, which is a reply, cannot be considered in this proceeding. He may resubmit some of the material, if appropriate, as a motion for reconsideration of this Order or as a specially permitted reply to Applicant's response to the written filing.

¹⁷ Because I am satisfied with the emergency planning at this stage of the proceeding, the evaluation of risk is not relevant. At this point, however, nothing has been submitted that would change my findings concerning the likelihood that Intervenors could succeed on the merits of their claim that Applicant's evaluation of risk is inadequate.

Erman L. Call, Battalion Chief for the Columbia Fire Department. Mr. Call now states, by Affidavit of October 24, 1990, that he disagrees with Mr. Ottinger's interpretation of his remarks. Regardless, Mr. Call's own affidavit is direct testimony and is entitled to greater weight.

Mr. Call states that "the Columbia Fire Department would perform fire duties in response to an alarm at the MURR [Missouri University Research Reactor]."¹⁸ He then states that:

Such firefighting would continue until such time as the crews encountered radiation levels that the Incident Commander determined might subject the crew to unacceptable radiation doses.

* * *

The current MURR Emergency Plan (page 12, 5.0.1 Protective Actions for All Classes) shows the acceptable radiation doses and whether anyone from the Columbia Fire Department would be subjected to that maximum would be at the judgment of the Incident Commander based on the conditions at the time.¹⁹

This affidavit therefore raises the possibility that conditions could exist in which a particular crew might avoid a radioactively "hot" area. In this sense, they might temporarily interrupt or redirect their firefighting activity. If their activity were interrupted, they would then resume their duties as soon as feasible — just as they might do in an ordinary fire when affected by smoke or great heat. To my mind, this shows careful planning with the lives of the firefighters as an important consideration. Nothing Intervenor's have said indicates that this is a defect in the emergency plan.

I also have received the "Affidavit of Walter A. Meyer, Jr. Regarding Emergency Planning," October 29, 1990 (Meyer Affidavit), and I have studied it with great care. I am convinced that he is qualified by reason of experience and education to testify concerning the adequacy of the emergency plan for the work on TRUMP-S in the Alpha Laboratory.

I am convinced by the Meyer Affidavit that Licensee is likely to succeed on the merits of each of the following allegations:

- The MURR Facility Emergency Plan has been approved by the NRC and applies to all activities within the MURR Facility, including the Alpha Laboratory in the basement of the MURR Facility.²⁰
- The Columbia Fire Department (CFD) would fight fires involving radioactive materials at the MURR facility, including the Alpha Laboratory. The CFD participates in biennial training of its personnel at the MURR Facility. Six firemen

¹⁸ Affidavit, Exh. A.

¹⁹ *Id.*

²⁰ Meyer Affidavit at 3.

from the two fire companies that would respond to the MURR Facility underwent an orientation tour of the Alpha Laboratory and associated facilities. The CFD also has participated in drills at MURR that involved radioactive materials as part of the drill scenario.²¹

- The emergency plan calls for extensive coordination during an incident between trained professionals working for the MURR Facility and the firefighters who might respond.²²
- Features of the Alpha Laboratory have been designed to minimize the effects of a fire.²³
- Fire detection and fighting equipment is contained in the Alpha Laboratory and nearby.²⁴
- The MURR Facility employs Control Room operators who work 24 hours a day and are prepared to respond, even at times that there are no personnel in the Alpha Laboratory, to alarms in the control room at MURR that indicate emergency conditions in the Alpha Laboratory.²⁵
- There are plans to deal with severe fires in the Alpha Laboratory.²⁶
- The CFD would use the same procedures at the Alpha Laboratory that they generally apply to fires involving hazardous, chemical, or other types of radioactive material. This is adequate.²⁷
- Generally, appropriate detection, fire fighting and decontamination procedures have been adopted.²⁸

III. EFFECT ON STAY MOTION AND ON WRITTEN PRESENTATION

The purpose of this Memorandum is to address issues related to the temporary stay that I granted. Because the procedures on the request for a stay and the written presentation are different, findings in this decision concerning "likelihood of success on the merits" are not conclusions that affect the determination of the issues raised by the Intervenor's written presentation.²⁹

²¹ *Id.* at 7.

²² *Id.* at 7-8.

²³ *Id.* at 8.

²⁴ *Id.* at 8-10.

²⁵ *Id.* at 14.

²⁶ *Id.* at 15.

²⁷ *Id.* at 16.

²⁸ *Id.*, *passim*.

²⁹ Since I am authorized to determine the outcome of this case based on the written filings, Intervenor's motion for Summary Disposition, October 25, 1990, seems irrelevant. The Motion for Other Relief, contained in the same document, merits a response.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 1st day of November 1990, ORDERED, that:

1. Findings in the accompanying Memorandum supersede those in LBP-90-35, 32 NRC 259 (1990) (Temporary Stay Order).

2. The Staff of the Nuclear Regulatory Commission is authorized to amend the license of the Curators of the University of Missouri so that they may possess up to 1.21 curies of ^{241}Pu as part of the 10 grams of plutonium that they are authorized to possess under SNM-247. Should the Staff decide that it is not appropriate to issue such an amendment, it may file a statement of its reasons within 15 business days of the date of issuance of this Order.

3. The temporary stay I issued on October 20, 1990, shall continue in effect.

4. Parties may file a request for reconsideration of this Memorandum and Order within 10 business days of the date of issuance of this Memorandum and Order.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

John H Frye, III, Chairman
Dr. Jerry R. Kline
Frederick J. Shon

In the Matter of

Docket No. 50-440-OLA-2
(ASLBP No. 90-605-02-OLA)

CLEVELAND ELECTRIC
ILLUMINATING COMPANY, *et al.*
(Perry Nuclear Power Plant,
Unit 1)

November 1, 1990

Staff issued a license amendment that permits Licensee, rather than Staff, to set cycle-specific parameter limits for the operation of the reactor, provided that Licensee employs Staff-approved methodology. As a result, no opportunity for a hearing on the cycle-specific parameter limits will be offered. Following a stipulation of fact agreed to by the parties which provided that the license amendment issued to Licensee does not permit the Licensee to exercise discretion, the Licensing Board concluded that the license amendment will not improperly deprive intervenor of hearing rights guaranteed by § 189a of the Atomic Energy Act.

INITIAL DECISION
(Approving License Amendment)

This proceeding results from a petition to intervene and request for a hearing filed on March 8, 1990, by Ohio Citizens for Responsible Energy, Inc.

(OCRE).¹ OCRE petitioned in response to a notice² that NRC was considering the issuance of a license amendment to the Cleveland Electric Illuminating Company (CEI).³ The license amendment in question removes cycle-specific core operating limits and other cycle-specific fuel information from the plant's Technical Specifications (TS) and replaces them with NRC-approved methodology for determining these limits. These limits provide the technical rules under which the reactor may be operated. OCRE wishes to litigate a single contention which states:

The Licensee's proposed amendment to remove cycle-specific parameter limits and other cycle-specific fuel information from the plant Technical Specifications to the Core Operating Limits Report violates Section 189a of the Atomic Energy Act (42 USC 2239a) in that it deprives members of the public of the right to notice and opportunity for hearing on any changes to the cycle-specific parameters and fuel information.

In its petition, OCRE agreed with CEI and Staff that the amendment involves purely an administrative matter that raises no significant hazards considerations as the latter term is defined in 10 C.F.R. § 50.92(c). It stated that its intent is to raise a legal issue, viz.: that the grant of the amendment will deprive OCRE members of the legal means to participate in the consideration of significant changes to the plant's cycle-specific operations.

In LBP-90-15, 31 NRC 501 (1990), and LBP-90-25, 32 NRC 21 (1990), we determined that OCRE had standing to intervene and had stated a valid contention under 10 C.F.R. § 2.714. We based our conclusion with regard to the contention on the following reasoning.

The contention asserts that § 189a prohibits the elimination of an opportunity for hearing on these changes. Section 189a requires a hearing on license amendments, and changes in Technical Specifications require such amendments. Thus OCRE's contention is correct if cycle-specific parameter limits and fuel information are of such a nature as to be required to be in the Technical Specifications. Clearly, the *Trojan* decision [*Portland General Electric Co. (Trojan Nuclear Plant)*, ALAB-531, 9 NRC 263, 271-74 (1979)] requires that some such limitations must be included in the Technical Specifications.

The amendment would both remove these limitations from the Technical Specifications and permit CEI to calculate them according to approved methodology. From this we assume that CEI would be permitted to implement the new cycle-specific parameter limits so calculated without prior Staff approval. Given the safety significance of the cycle-specific

¹ OCRE is a private, nonprofit corporation that specializes in research and advocacy on issues of nuclear reactor safety and promotes the application of the highest safety standards to such facilities. It was an intervenor in the Perry operating license proceeding. In this proceeding, it seeks to intervene on behalf of its member and representative, Susan L. Hiatt, who resides within 15 miles of the Perry plant. CEI and Staff do not question OCRE's representations in this regard.

² See 55 Fed. Reg. 4282 (Feb. 7, 1990).

³ CEI is lead applicant for itself and Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and the Toledo Edison Company, co-owners of the Perry Nuclear Power Plant.

parameter limits, this would only be proper if the methodology required to be applied does not permit substantial discretion on the part of CEL. In that circumstance, the Commission will exercise its statutory responsibilities through approval of the methodology, thereby removing the need to include cycle-specific parameter limits in the Technical Specifications.⁴

In LBP-90-25, we set a schedule for limited discovery and a 3-day hearing strictly confined to the factual issue posed by the contention, *viz.*, whether the amendment would vest excessive discretion to set cycle-specific parameter limits in CEI. Following the completion of discovery, the parties entered into a stipulation of fact which obviated the need for a hearing. That stipulation is attached to and made a part of this Initial Decision.

In their stipulation of fact, the parties agree that

[t]he GE Nuclear Energy methodology for setting cycle-specific core operating limits, which is approved by the NRC and specified in the PNPP Technical Specifications, does not permit substantial discretion on the part of Licensees (or GE Nuclear Energy acting as their design agent) and does not require substantial engineering judgment to derive the cycle-specific parameter limits included in the Core Operating Limits Report.

The stipulation also states that

OCRE, the NRC Staff, and Licensees agree that the facts stipulated and agreed to above demonstrate that substantial engineering judgment is not needed to derive the cycle-specific information included in the Core Operating Limits Report from the methodology specified in the PNPP Technical Specifications.⁵

Based upon the above stipulation and on the reasoning stated in LBP-90-15 and LBP-90-25, we conclude as a matter of law that the license amendment in question will not improperly deprive OCRE of hearing rights guaranteed to it by § 189a of the Atomic Energy Act.

In consideration of the foregoing, it is hereby ORDERED

1. That Staff's issuance of License Amendment 33 to Facility Operating License NPF-58 is approved;
2. Pursuant to 10 C.F.R. § 2.762, any party aggrieved by this Initial Decision may take an appeal by filing a notice of appeal with the Commission within 10 days after service of this Initial Decision; and

⁴LBP-90-25, 32 NRC at 26.

⁵Stipulation at 5 [p. 374, *infra*].

3. That pursuant to 10 C.F.R. § 2.760(a), this Initial Decision shall constitute the final action of the Nuclear Regulatory Commission 45 days after its date unless appealed.

**THE ATOMIC SAFETY AND
LICENSING BOARD**

**Frederick J. Shon
ADMINISTRATIVE JUDGE**

**Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE**

**John H Frye, III, Chairman
ADMINISTRATIVE JUDGE**

**Bethesda, Maryland
November 1, 1990**

ATTACHMENT

October 17, 1990

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of

Docket No. 50-440-OLA-2
(ASLBP No. 90-605-02-OLA)

**THE CLEVELAND ELECTRIC
ILLUMINATING COMPANY, *et al.*
(Perry Nuclear Power Plant, Unit 1)**

STIPULATION OF AGREED FACTS BETWEEN LICENSEES, NRC STAFF, AND OHIO CITIZENS FOR RESPONSIBLE ENERGY

The license amendment which is the subject of this hearing authorized licensees to replace the cycle-specific core operating limits in the Technical Specifications for the Perry Nuclear Power Plant Unit 1 ("PNPP") with a reference to the values in the PNPP Core Operating Limits Report. Furthermore, the license amendment amended the Technical Specifications to require that cycle-specific core operating limits be established using the specified, NRC-approved methodology, as described in GESTAR (NEDE-24011-P-A, the approved revision at the time reload analyses are performed), and, before each reload cycle or remaining part of any reload cycle, that these limits be documented in a Core Operating Limits Report which is provided to the NRC upon issuance. The Technical Specifications also continue to require that Licensees operate the plant within the limits specified in the Core Operating Limits Report (referenced in the Technical Specifications) and require the exact same actions to be taken as before, if these limits were to be exceeded.

Ohio Citizens for Responsible Energy, Inc. ("OCRE") has sought to raise the single issue of whether the license amendment violates section 189a of the Atomic Energy Act by depriving members of the public of the right to notice

and opportunity for hearing on any changes to the cycle-specific parameters and fuel information.

By its Memoranda and Orders dated June 11, 1990 (LBP-90-15) and July 23, 1990 (LBP-90-25), the Atomic Safety and Licensing Board ("the Board") ordered that an evidentiary hearing be held in this matter to determine whether, "as a matter of fact, substantial engineering judgment is needed to derive" the cycle-specific parameter limits to be included in the Core Operating Limits Report. LBP-90-25, [32 NRC at 23], *quoting from LBP-90-15*.

Following the completion of discovery in this proceeding and the informal submission of additional information by Licensees to OCRE, the parties have agreed to stipulate to the following agreed statement of facts, including the parties' agreement that the approved methodology for setting cycle-specific parameter limits does not permit substantial discretion on the part of Licensees and does not require substantial engineering judgment to derive the cycle-specific parameter limits included in the Core Operating Limits Report. The parties agree that this stipulated statement of facts represents a fair and reasonable settlement of the factual issue designated by the Board for evidentiary hearing.

The agreed statement of facts is as follows:

1. The license amendment (a) authorized Licensees to relocate cycle-specific core operating limits from PNPP's Technical Specifications into a Core Operating Limits Report, (b) authorized Licensees to replace the specific values for the core operating limits within the Technical Specifications with a reference to the Core Operating Limits Report, (c) requires that the core operating limits be determined by using the NRC-approved methodology specified in the Technical Specifications and (d) requires that the plant be operated within the limits specified in the Core Operating Limits Report.

2. The methodology used to establish the core operating limits for PNPP, including the process for developing inputs, the various models and correlations used in the methodology, the treatment of the model and model input uncertainties, and the application of the methodology, may not be changed without prior NRC approval.

3. GE Nuclear Energy establishes the cycle-specific core operating limits for PNPP in accordance with the NRC-approved methodology described in GESTAR (NEDE-24011-P-A, the approved revision at the time reload analyses are performed) as specified in PNPP's Technical Specifications.

4. Input parameters to the methodology are based on the intended modes of operation, plant and fuel design and configuration described in the safety analysis report and the Technical Specifications, and are developed from controlled design documents and test and performance data.

5. The reload analyses performed by GE Nuclear Energy are fully verified in accordance with the GE Nuclear Energy Quality Assurance Program approved by the NRC.

6. The CEI fuel management organization independently reviews the activities of GE Nuclear Energy, and the PNPP Nuclear Assurance Department performs quality assurance audits of the GE reload program and the CEI design control program.

7. CEI reviews the results of GE's reload analyses through its engineering, licensing, and reactor engineering and fuel management units, and any changes to the Core Operating Limits Report are required by PNPP plant procedures to be reviewed by the Plant Operations Review Committee.

8. The GE Nuclear Energy methodology for setting cycle-specific core operating limits, which is approved by the NRC and specified in the PNPP Technical Specifications, does not permit substantial discretion on the part of Licensees (or GE Nuclear Energy acting as their design agent) and does not require substantial engineering judgment to derive the cycle-specific parameter limits included in the Core Operating Limits Report.

OCRE, the NRC Staff, and Licensees agree that the facts stipulated and agreed to above demonstrate that substantial engineering judgment is not needed to derive the cycle-specific information included in the Core Operating Limits Report from the methodology specified in the PNPP Technical Specifications. Therefore, the parties believe that the factual questions raised by the Board in its Memorandum and Order (Granting Petition to Intervene) dated June 11, 1990 (LBP-90-15) and in its Memorandum and Order (Denying Staff's and Licensee's Motions for Reconsideration) dated July 23, 1990 (LBP-90-25) have been answered.

By stipulating and agreeing to these facts, Licensees, the NRC Staff, and OCRE believe that the need for the factual hearing ordered by the Board has been obviated. Therefore, the parties respectfully submit that the Board accept

as true the facts stipulated and agreed to above and cancel the factual hearing scheduled for October 30, 1990.

Respectfully submitted,

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Ivan W. Smith, Chairman
Dr. Richard F. Cole
Dr. Kenneth A. McCollom

In the Matter of

Docket Nos. 50-443-OLR-3
50-444-OLR-3
(ASLBP No. 90-619-03-OLR-3)
(Offsite Emergency Planning)

PUBLIC SERVICE COMPANY
OF NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

November 7, 1990

MEMORANDUM AND ORDER
(Denying Licensee's Motion for Summary Disposition
of Issues Remanded in ALAB-937)

In ALAB-937, September 18, 1990, 32 NRC 135, the Appeal Board reversed the Licensing Board's rejection of Massachusetts Attorney General's Contention 47, Basis R, relating to the evacuation and care of children in schools and day-care centers within the Massachusetts portion of the Seabrook EPZ in the event of a radiological emergency. The proceeding was remanded to the Licensing Board to explore two related subissues: (1) Whether there is reasonable assurance that a sufficient number of teachers and day-care center personnel would be available to escort the children to the designated School Host Facility at Holy Cross College and remain with them until relieved of that assignment; and (2) if such reasonable assurance does not exist, have the applicants made satisfactory

alternative arrangements for the care and supervision of the children both on the bus trip to Holy Cross College (located in Worcester, Massachusetts) and during their stay at the college. *Id.* at 152. The Licensing Board is authorized to suspend the Seabrook operating license *pendente lite* should the Massachusetts Attorney General challenge Applicants' affidavits respecting alternative arrangements. We are directed to act upon such a challenge with "all possible expedition." *Id.* at 137, 152.

Licensees now move the Board for judgment on all issues remanded by ALAB-937 by seeking summary disposition of three material facts as to which, Licensees assert, there is no genuine issue to be heard.¹ Intervenors oppose the motion.² The NRC Staff is not participating in the resolution of the summary disposition motion.³

Licensees support their motion with the affidavits of Dr. Dennis S. Mileti and Anthony M. Callendrello. Each has been found by the Board to be qualified to speak to the subject matter of their affidavits. Similarly, the affiants supporting Intervenors, Dr. Steven Cole and Michael C. Sinclair, are qualified to address the matters set out in their affidavits.

First, supported by the affidavit of Dr. Mileti, Licensees assert, as a general proposition, that:

1. Persons in roles of responsibility for others before an emergency begins have role certainty about being responsible for their charges during an emergency independent of planning and training.

Motion at 4, *citing* Mileti Affidavit, ¶¶ 7-8.

Intervenors do not directly address Licensees' first statement of material fact, despite their clear obligation to do so. *See* 10 C.F.R. § 2.749(b). Rather, Intervenors refer to that portion of Dr. Cole's Affidavit which discusses role conflict. In effect, Dr. Cole challenges the inferences one might draw from Licensees' first statement.⁴ The Board passes over the first statement because

¹ Licensees' Motion for Summary Disposition of Issues Remanded in ALAB-937, October 22, 1990. The Board entertains the motion pursuant to the provisions of 10 C.F.R. § 2.749. Licensees' statement that the motion is brought pursuant to 10 C.F.R. § 2.734 is, we believe, a mistake.

² Intervenors' Opposition to Licensees' Motion for Summary Disposition of Issues Remanded in ALAB-937, November 2, 1990. *See also* Amendment to Intervenors' Opposition to Licensees' Motion for Summary Disposition of Issues Remanded in ALAB-937, November 5, 1990. In the latter pleading, Intervenors submitted a list of material facts correlative to Licensees' list. *Id.* at 3.

³ In a scheduling telephone call to Edwin J. Reis, Esq., Office of General Counsel, on November 5, 1990, the Licensing Board Chairman observed that ALAB-937 requires the Licensing Board to act with all possible expedition in the event of a challenge to Licensees' position on the remanded issues. Mr. Reis stated that, although the NRC Staff intends to consult with FEMA and to participate in the resolution of the remanded issues, the Staff does not object to the Board's ruling without delay on the pleadings submitted by the Licensees and Intervenors. He stated that the NRC Staff will present its position in connection with any further proceedings required by this order.

⁴ *See* Intervenors' Amendment at 3, *citing* Cole Affidavit, ¶¶ 12, 15-23.

we are denying the motion with respect to the second and third statements of material fact. Standing alone, unquantified and general as it is, the first statement leads nowhere. It is better that the first statement be examined against a relevant factual background if Licensees remain inclined to prove that assertion.

Licensees' second statement of material fact states:

2. There is reasonable assurance that sufficient school personnel will respond to care for and supervise school children and day-care center children being evacuated as a result of a radiological emergency at Seabrook Station.

Motion at 4, *citing* Mileti Affidavit, *passim*.

Intervenors' affiant, Dr. Cole, challenges the second statement directly and in detail. Cole Affidavit, *passim*. Since Intervenors need show only that a genuine issue of fact remains in dispute, the motion with respect to the second statement is denied.

The third statement addresses the second subissue remanded in ALAB-937. Licensees' state that:

3. There are sufficient ORO personnel assigned to care for the children at the School Host Facility, even if teachers should abandon their charges and refuse to accompany or care for them in a radiological emergency at Seabrook Station.

Motion at 4, *citing* Callendrello Affidavit, *passim*.

Intervenors counter the third statement with Mr. Sinclair's affidavit which clearly establishes a genuine issue of material fact.

Order

Accordingly, Licensees' motion for summary disposition and judgment is denied.

All eligible parties intending to participate in the resolution of the issues remanded in ALAB-937 are directed to attend a prehearing conference for the further identification and simplification of the subissues and to provide for a schedule for the disposition of the remanded matter.

The prehearing conference will be conducted at the NRC Hearing room, Fifth Floor, East West/West Towers Building, 4350 East West Highway, Bethesda, Maryland, beginning at 10:00 a.m., December 13, 1990.

Since the basic factual positions of the Licensees and Intervenors have been revealed by the affidavits supporting their respective pleadings, the Board believes that very little discovery will be required. However, the Board

authorizes any needed discovery to begin immediately in accordance with Part 2 discovery rules, 10 C.F.R. §§ 2.740-2.742.

**FOR THE ATOMIC SAFETY
AND LICENSING BOARD**

**Ivan W. Smith, Chairman
ADMINISTRATIVE LAW JUDGE**

**Bethesda, Maryland
November 7, 1990**

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(RE: TRUMP-S Project)
(Byproduct License No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

November 16, 1990

After reviewing the criteria for a temporary stay in light of Licensee's last responsive filing, the presiding officer decides that the criteria for the stay that had been granted are no longer met and that the stay should be lifted.

RULES OF PRACTICE: TEMPORARY STAY; SUBPART L

It is appropriate to grant a temporary stay on the application of a party that shows that the criteria for a temporary stay are met. After the licensee files a response that demonstrates that the temporary stay criteria are not met, it is then appropriate to lift the temporary stay.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: HEPA filtration; DOP testing of HEPA filters; Single-failure criterion, for glove boxes; Glove boxes; Preven-

tion of plutonium fire; Plutonium (unencapsulated), release fractions for; Release fraction, plutonium (unencapsulated).

MEMORANDUM AND ORDER (Dissolution of Stay)

Memorandum

This is the fourth memorandum in this case in which I have addressed issues related to the granting of a temporary stay. The other memoranda are:

- LBP-90-30 (Temporary Stay Request), 32 NRC 95 (1990);
- LBP-90-35 (Grant of Temporary Stay), 32 NRC 259 (1990); and
- LBP-90-38 (Licensee's Partial Response Granting Temporary Stay), 32 NRC 359 (1990).

In each of these decisions, I have addressed the information placed before me by the parties in light of the regulatory requirements concerning the granting of a temporary stay. In LBP-90-30, which was related primarily to the issue of HEPA filtration, Intervenor¹ allegations were addressed by thoughtful affidavits filed by Licensee²; and I denied the request for a temporary stay. Then Intervenor¹ filed lengthy affidavits by their experts, whom they called the TRUMP-S review panel, and I issued LBP-90-35 granting a temporary stay and providing for Licensee to address the grounds for the stay as rapidly as they were able. During the time that they have been assembling their response, a stay was put into effect and kept in effect — thus protecting the public because the information before me showed that the public would be exposed to an unacceptable risk, which I determined constituted irreparable injury.

LBP-90-38 was issued after Licensee made a partial response to the grounds for the temporary stay. The decision made findings favorable to the Licensee but continued the stay in effect until the final grounds for a temporary stay could be addressed by Licensee. Now that has occurred, and I conclude that the grounds for a stay are no longer present and that the stay should be dissolved.

While the Stay process is cumbersome and has produced the appearance of vacillation, it seems to me to be basically sound and even to be a tribute to the concern that the Nuclear Regulatory Commission shows for public safety. It is appropriate that activities should be suspended until evidence of irreparable injury can be properly rebutted. Until the rebuttal is submitted and found to be

¹The Missouri Coalition for the Environment, the Mid-Missouri Nuclear Weapons Freeze, Inc., the Physicians for Social Responsibility/Mid-Missouri Chapter, and ten individual intervenors.

²The Curators of the University of Missouri.

persuasive, there is no way to exclude the possibility that the activity itself is unduly dangerous.

In the process, there has been some injury to the efficiency and reputation of the Licensee. However, if the process is fully understood and the carefulness of Licensee's filings fully appreciated, the damage to its reputation should be mitigated.

I. ISSUES RELATED TO HEPA FILTERS

In granting a temporary stay in LBP-90-35, I said (32 NRC at 265):

The Declaration of the Trump-S Review Panel at 22-25 persuades me that Intervenor's are likely to succeed on the merits of the following arguments:

- Licensee has not installed two DOP tested HEPA filters as required by industry practice, supported by DOE Order 6430.1A, § 1300-3.6, which references ASME N510;
- it is not proper to take credit for HEPA filters that are not DOP tested in place;
- in the event of a fire or explosion, it is not proper to take credit for HEPA filters whether or not they are DOP tested;
- a serious fire or explosion could result in substantial release of contamination directly to the environment.

Licensee has now persuasively rebutted each of these grounds, which I shall discuss one at a time.

A. Licensee has not installed two DOP tested HEPA filters as required by industry practice, supported by DOE Order 6430.1A, § 1300-3.6, which references ASME N510

Licensee has submitted "Affidavit of Veryl G. Eschen Regarding Argon Glovebox Exhaust System," Licensee Exh. 7. Mr. Eschen has B.S. and M.S. degrees in Metallurgical Engineering and has worked for General Electric Company and Argonne National Laboratory, among others. He also has been associated with the utilization of DOE Order 6430.1A, "General Design Criteria" and in field investigations of glove-box systems, both at Rocky Flats plant. *Id.* at 1-2. He appears to be a qualified engineer.

Mr. Eschen's affidavit persuades me that Licensee is likely to succeed on the merits of its argument that the one HEPA filter in the Alpha Laboratory that cannot be DOP tested in place is an extra filter that is not required in order to meet the Department of Energy's single-failure criterion (and the general policy of this agency to require redundancy as a safeguard against accident).

The reason I accept at this time the argument that the single-failure criterion is met is that there appear to be two exhaust paths from the glove box and either exhaust path contains two HEPA filters (counting each of the final, two-stage filter system as a filter). This seems to be sufficient. *Id.* at 2. Additionally, I find persuasive the Affidavit of Dr. J. Steven Morris Regarding Steppen Suggestions and Comments, Licensee Exh. 8 at 3 (¶ 6) that it is common practice to have a HEPA filter in the exhaust outlet for a glove box and not to count that filter, which cannot be DOP tested, as a formal HEPA stage. Furthermore, I am assured by Dr. Morris's Affidavit, at 4-8, that serious consideration was given to recommendations of Mr. Steppen and that there was nothing hasty or arbitrary in disregarding his advice that there was a major design flaw in the Alpha Laboratory.

B. It is not proper to take credit for HEPA filters that are not DOP tested in place

This statement of Intervenors is correct. However, as I have just discussed above, Licensee has submitted evidence I am likely to accept on the merits that it is not counting on the HEPA filters that cannot be tested in place.

C. In the event of a fire or explosion, it is not proper to take credit for HEPA filters whether or not they are DOP tested

Dr. Leon Krueger, who is a Ph.D. chemist employed by MURR, with 20 years' experience as a research chemist, has submitted his Affidavit. Exh. 5 at 1. He appears to be well qualified. Dr. Krueger states, in the following numbered paragraphs:

10. Both the equipment in the Alpha Laboratory and the procedures for the TRUMP-S experiments were designed to reduce the possibility of a fire. The methods for minimizing fire hazards are based on avoiding the presence of (1) a fuel source, (2) an oxidizer, or (3) the minimal energy/ignition temperature that must be supplied to create a fire.

* * *

18. There are no explosives, gasoline, diesel fuel, kerosene, fuel oils, motor oils, alcohol, acetone or other flammable solvents or cleaning agents or natural gas piping systems housed inside the Alpha Laboratory.

In the remainder of his affidavit, Dr. Krueger discusses in detail the different items and tools that can be present in the Alpha Laboratory and presents his expert opinion concerning why each is not a credible source of fire.

Additionally, there is the Affidavit of Chester B. Edwards, Jr., Regarding the Adequacy of Alpha Laboratory Equipment, Fire-Related Features in the

Alpha Laboratory and General Basement Area, and the Storage and Transfer of Actinide and Archived Materials (Licensee Exh. 4). Mr. Edwards is a career-reactor operator who has been a licensed Senior Reactor Operator since 1968 and who was responsible for the design of the Alpha Laboratory. He states that the equipment in the Alpha Laboratory has been adequately inspected and tested. *Id.* at 3-5. He then states:

20. The Alpha Laboratory has been constructed so as to minimize combustibility of floor, walls and ceilings. . . .

* * *

31. As previously described the Alpha Laboratory was constructed to minimize the possibility of a fire spreading from within the Alpha Laboratory to the basement area. Even if this were to occur, the construction of the basement area is such that it would prevent the spread of a fire any further. The Alpha Laboratory is housed in the basement area outside containment. The reinforced poured concrete vault in which the Alpha Laboratory is housed has a 12 in. thick concrete floor, 8 in. thick concrete ceiling, and 16 in. thick concrete walls on the north, east, south and west. In effect, the Alpha Laboratory is entombed inside a concrete vault isolated from the rest of the facility.

These are important portions of Mr. Edwards affidavit. However, I have reviewed the entire affidavit and find it to be thoughtful and persuasive.

The key affidavit on this point, however, is that of Dr. J. Steven Morris (Licensee Exh. 3). My reading of this affidavit, which analyzes literature in detail and reaches thoughtful, well-reasoned conclusions, prevents me from concluding that the intervenors are likely to succeed on the merits of their allegation that Licensee cannot take credit for a HEPA filter in the event of a fire or explosion. This is because I am likely to accept Dr. Morris's conclusion, in ¶ 43, that:

fire, with a loss of containment/confinement, is not a credible accident relative to the storage of, transit of, or experimentation with, the actinide materials at MURR. Therefore, any release of actinides from a fire would be filtered through the stack.

D. A serious fire or explosion could result in substantial release of contamination directly to the environment

Because Licensee seems likely to prevail on the merits of its argument that fire with loss of containment is not a credible accident, I am likely to accept Dr. Morris's conclusion, in ¶ 52, that in the event of a hypothetical worst-case accident:

The doses at 100 meters resulting from a hypothetical worst-case accident at the MURR involving actinides are negligible. . . . Actual fractional release factors would be smaller

than 1×10^{-6} and no credit is taken for effective emergency response (i.e., extinguishing the fire before the entire working inventory is consumed).

In lay terms, Dr. Morris is testifying that in the event of a worst-case fire incident involving experimental materials, less than one-millionth of the materials involved could be expected to be released to the environment.

I am also completely unable to accept the suggestion of the TRUMP-S panel that the release fraction should be treated as 3%. That suggestion is born of the Chernobyl experience, which resulted from a runaway reactor and a graphite fire. Furthermore, Dr. Morris states that even in that event, which lasted for over 10 days, there was considerably less than 3% *respirable* release — since a significant part of the release was in nonrespirable fuel fragments. Licensee Exh. 3 at 9. Indeed, based on what I now know, the use of Chernobyl for comparison seems highly inappropriate here.

II. CONCLUSION

The criteria for a stay are no longer met.

As discussed above, Intervenor's are unlikely to succeed on the merits of any of their important arguments. I also find that Intervenor's have not persuaded me that either they or the public would be irreparably injured if a stay were not granted. There is the additional factor of cost and inconvenience to Licensee, which it has demonstrated in its filing, but in the absence of the other grounds for a stay, I need not discuss that factor.

I would point out that in dissolving the stay, I am not affecting the breadth of Licensee's licenses in any way. In particular, this opinion is silent on whether or not Licensee is properly licensed to possess the ^{241}Pu and the americium which it has said are present in the ^{239}Pu and ^{240}Pu material that it is authorized to possess and use.

Nor does this opinion affect the decision on the merits of the written filings. There will be a procedural scheduling conference by telephone in the near future to schedule further written filings. I will be able to make decisions about the possible need for oral argument or for an evidentiary hearing, as has been suggested by Intervenor's, only after I have analyzed all the written filings.³

³ 10 C.F.R. §§ 2.1233, 2.1235; *see also* 10 C.F.R. § 2.1209(k).

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 16th day of November 1990, ORDERED, that:

The temporary stay issued in this proceeding is vacated and is of no further effect. Motions for reconsideration of this Memorandum and Order may be filed within 10 business days of the date of issuance of this Memorandum and Order.

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Morton B. Margulies, Chairman
Dr. A. Dixon Callhan
Dr. Jerry R. Kilne

In the Matter of

Docket No. 30-12319-CivP
(ASLBP No. 90-618-03-CivP)
(Materials License No. 35-17178-01)
(EA 89-223)

TULSA GAMMA RAY, INC.

October 29, 1990

PREHEARING CONFERENCE
MEMORANDUM AND ORDER

On October 16, 1990, a telephonic prehearing conference was held in the captioned proceeding. Its purpose was to identify and simplify the issues; establish a schedule for further actions in the proceeding to include discovery, the identification of witnesses, and the setting of the time for hearing; and consider any other matters that may aid in the orderly disposition of the proceeding. NRC Staff counsel, Susan L. Uttal, and Peter C. Moss, president of licensee, Tulsa Gamma Ray, Inc. (TGR), represented the respective parties.

On the matter of identification of the issues, Staff's position was that the Licensee had admitted to the violations in its response to the Notice of Violation and that the only issue was whether the amount of the penalty imposed was appropriate. Staff would have the Board consider whether a monetary penalty should have been assessed and whether the amount of the penalty is proper considering mitigating circumstances. In determining whether a monetary penalty should have been assessed, a matter for review would include whether

it was correct to collectively classify the Severity Level IV and V violations as a single Severity Level III violation under the Commission's Enforcement Policy.

The "Order Imposing Civil Monetary Penalty," dated June 6, 1990 (55 Fed. Reg. 24,949-52 (June 19, 1990)), which granted Licensee the right to a hearing and defined the scope of the hearing, was predicated on Licensee having admitted nine violations of Severity Level IV or V. The Order stated "the issue to be considered at such hearing shall be whether, on the basis of the violations admitted by the licensee, consisting of the violations set forth in the Notice of Violation as modified by the withdrawal of Violation 3, this Order should be sustained."

In inquiring of Licensee on the issues in the proceeding, it was indicated to the Board that it had not admitted to the alleged violations.

The Board did not have available to it Licensee's February 22, 1990 Answer to the Notice of Violation where the admissions to violations were stated to be contained and upon which admissions the Order specifying the scope of this proceeding was premised.

We interrupted the prehearing conference to ascertain whether the Licensee's Answer contained the admission of violations the Order relied upon and if absent, to obtain the views of the parties on its effect on this proceeding.

The February 22, 1990 Answer has since been furnished to the Board. We have reviewed it and are satisfied that there is no reason to question that the violations were admitted as set forth in the Order defining the jurisdiction of this proceeding.

The Board has the limited jurisdiction defined by the Order dated June 6, 1990. There proved to be no sound reason for questioning the validity of that Order. The Order limits the scope of the proceeding to whether the amount of the penalty imposed was proper under the Commission's Enforcement Policy, i.e., whether it was correct to collectively classify the Severity Level IV and V violations as a Severity Level III violation and impose a monetary penalty, and whether the amount of the penalty was correctly arrived at taking into account the factors in the Enforcement Policy, including mitigating circumstances.

The proceeding does not extend to the issue of whether the Severity Level IV and V violations were committed. Should the Licensee now have second thoughts on whether the violations should have been admitted, any proposed withdrawal of those admissions is not a matter to be raised and considered in this proceeding because it is beyond its scope.

No further inquiry need be made of the parties prior to resuming the prehearing conference. The briefs referred to during the prehearing conference are no longer necessary. The resumed prehearing conference will be held by

telephone on November 7, 1990, at 10:00 a.m. eastern time and 9:00 a.m. central time.

It is so ORDERED.

FOR THE ATOMIC SAFETY
AND LICENSING BOARD

Morton B. Margulies, Chairman
ADMINISTRATIVE LAW JUDGE

Bethesda, Maryland
October 29, 1990

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Morton B. Margulles, Chairman
Dr. A. Dixon Callihan
Dr. Jerry R. Kline

In the Matter of

Docket No. 30-12319-CivP
(ASLBP No. 90-618-03-CivP)
(Materials License No. 35-17178-01)
(EA 89-223)

TULSA GAMMA RAY, INC.

November 15, 1990

MEMORANDUM AND ORDER
(Memorializing Prehearing Conference)

Pursuant to Board Order of October 4, 1990 (unpublished), a telephone prehearing conference was held on October 16, 1990, in the captioned proceeding for the purpose of identifying and simplifying the issues, setting a prehearing schedule and considering any other matters that may aid in the orderly disposition of the proceeding.

The October 16, 1990 prehearing conference was recessed to ascertain whether the Licensee admitted to the Severity Level IV and V violations as was stated in the "Order Imposing Civil Monetary Penalty," dated June 6, 1990 (unpublished), and, if the violations were not admitted, to obtain the views of the parties on the effect the absence of such admissions would have on the proceeding.

Following the furnishing of relevant information to the Board, we determined that there was no basis to question the validity of the June 6, 1990 Order insofar as it alleged that admissions were made of nine Severity Level IV and

V violations and that there was no need to obtain the views of the parties as was once considered.

In a "Prehearing Conference Memorandum and Order" of October 29, 1990 (LBP-90-42, 32 NRC 387), we memorialized what occurred during the interrupted prehearing conference of October 16, 1990. The Board defined the issue in the proceeding to be whether the amount of the penalty imposed was correct under the Commission's Enforcement Policy, 10 C.F.R. Part 2, Appendix C, i.e., whether it was correct to collectively classify the Severity Level IV and V violations as a Severity Level III violation and impose a monetary penalty, and whether the amount of the penalty was correctly arrived at, taking into account the factors in the Enforcement Policy, including mitigating circumstances. We also ordered that the prehearing conference be resumed to complete the original agenda. The final date for the continued telephonic prehearing conference was set in an Order of October 31, 1990 (unpublished).

The conference, by telephone, resumed on November 8, 1990. Participating with the Board in the conference were Susan L. Uttal, Esq., and Sherwin E. Turk, Esq., for NRC Staff and President John C. Moss and Peter Moss of Tulsa Gamma Ray, Inc.

The parties agreed that the issue in the proceeding was that as defined by the Board in its Order of October 16, 1990.

A discussion was held on the adequacy of the notice given to Licensee of the matters of fact and law relied upon by NRC Staff in regard to aggregating and collectively classifying the Severity Level IV and V violations as a Severity Level III violation for which a monetary penalty was imposed.

Section 554(b)(3) of 5 U.S.C. provides that persons entitled to an agency hearing shall be timely informed of the matters of fact and law asserted. The Board was unable to find in the record that the NRC adequately informed Licensee of the specific regulatory provisions it relied upon to consider the Severity IV and V violations collectively as a Severity Level III violation.

Tulsa Gamma Ray, Inc., had requested a hearing by letter dated July 3, 1990, following the publication of the *Federal Register* Notice of the "Order Imposing Civil Monetary Penalty" dated June 6, 1990. In response to that request, the Director, Office of Enforcement, in a letter dated July 31, 1990, advised the Licensee:

You raise one additional point concerning the fact that the violations in this case were considered in the aggregate as a Severity Level III problem. This aggregation is appropriate in accordance with Sections III and V.B and Supplements IV.C.12 and VI.C.8. of the Enforcement Policy. . . .

The Board concluded that this appraisal of the Licensee of the applicable provisions upon which NRC Staff was acting along with any additional information that was previously provided was inadequate to satisfy the notice requirements. For example, Supplement IV.C.12 of the Enforcement Policy provides:

Breakdown in the radiation safety program involving a number of violations that are related or, if isolated, that are recurring that collectively represent a potentially significant lack of attention or carelessness toward licensed responsibilities [emphasis supplied].

The Staff did not inform Licensee as to which of the disjunctive actions the Licensee is accused of committing. Due process requires that the Licensee be adequately apprised.

Notice was fully adequate in regard to the Severity Level IV and V violations alleged. NRC Staff was directed to notify Licensee of the specific provisions of the Enforcement Policy upon which it relied to impose the civil penalty on Tulsa Gamma Ray, Inc.

It was agreed to by the parties and with Board approval that the required notice shall be served by letter on the Licensee by November 20, 1990, and that discovery can commence on December 4, 1990.

It was further agreed to by the parties with Board approval that the schedule in the proceeding shall be as follows:

December 4, 1990	Interrogatories to be served.
January 4, 1991	Interrogatories to be answered.
January 18, 1991	Requests for admissions to be served.
February 1, 1991	Requests for admissions to be answered.
February 25, 1991	Depositions to be completed.
March 25, 1991	Dispositive motions to be filed.
April 15, 1991	Responses to dispositive motions to be filed.
May 15, 1991	Board ruling on motions.
June 5, 1991	Prefiled testimony to be filed.
June 25, 1991	Hearing begins.

Discovery can be conducted by either party in accordance with the above schedule. Discovery of NRC Staff is limited to the extent specified in the Commissions' Rules of Practice, i.e., 10 C.F.R. §§ 2.720(h)(2)(i), 2.720(h)(2)(ii), 2.740(f)(3), 2.740a(j), 2.741(e), 2.744, and 2.790.

During the course of the conference, the Board attempted to encourage both sides to compromise the civil penalty in accordance with Commission Policy. However, neither side would move from their initial position.

Objections to this Memorandum and Order may be filed by Tulsa Gamma Ray, Inc., within 5 days after service. NRC Staff may file objections within 10 days after service. The filing of objections shall not stay the provisions of this Memorandum and Order.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND
LICENSING BOARD

Morton B. Margulies, Chairman
ADMINISTRATIVE LAW JUDGE

Bethesda, Maryland
November 15, 1990

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

G. Paul Bollwerk, III, Chairman
Alan S. Rosenthal
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL
50-444-OL
(Offsite Emergency
Planning Issues)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

December 21, 1990

In examining the Licensing Board's rejection at the threshold of various intervenor contentions concerning (1) the emergency response plan for the Massachusetts portion of the Seabrook plume exposure pathway emergency planning zone (EPZ) and (2) the results of a full participation exercise of the plans for both the Massachusetts and New Hampshire portions of the EPZ, the Appeal Board reverses the Licensing Board's determination that it lacked jurisdiction to consider a contention concerning predetermined protective action recommendations; dismisses an intervenor's appeal relative to three contentions for want of adequate briefing; and affirms the Licensing Board's other threshold dispositions of contentions.

**RULES OF PRACTICE: LITIGABILITY OF ISSUES
(RELITIGATION IN SEPARATE PHASES OF SAME PROCEEDING)**

When one proceeding is divided into two phases, the Licensing Board is not required to allow an intervenor to relitigate in the second phase an issue adequately explored in the first phase if the issue does not take on a different complexion insofar as the second phase is concerned.

EMERGENCY PLAN(S): MONITORING CAPACITY

“[A]mong other things, the demographic and meteorological characteristics of a particular EPZ might have considerable influence upon the percentage of the persons within the EPZ that would, in the event of an accident, seek monitoring either on instruction or on their own initiative.” *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-905, 28 NRC 515, 526 (1988).

RULES OF PRACTICE: CROSS-EXAMINATION (BY INTERVENORS)

It is long-settled that an intervenor in an operating license proceeding is entitled to cross-examine on those portions of a witness's testimony that relate to issues placed into controversy by another party to the proceeding. *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-252, 8 AEC 1175, *aff'd*, CLI-75-1, 1 NRC 1 (1975). Under recent amendments to the Rules of Practice, however, an intervenor may not file proposed findings of fact and conclusions of law on, or appeal the disposition by the Licensing Board of, any issues not placed (or sought to be placed) in controversy by that intervenor. *See* 10 C.F.R. § 2.762(d)(1) (1990).

EMERGENCY PLAN(S): CONTENT (EVACUATION CONTINGENCY MEASURES)

EMERGENCY PLANNING: REGULATORY GUIDANCE (NUREG-0654)

Regulatory guidance provides that the emergency response plan include the “[i]dentification of and means for dealing with potential impediments (e.g., seasonal impassability of roads) to use of evacuation routes, and contingency measures.” Criterion II.J.10.k of NUREG-0654/FEMA-REP-1 (Rev. 1), “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants” [hereinafter NUREG-0654].

This plainly recognizes that there may be occasions when climatic conditions will render roads impassable. Sheltering is, of course, the generally acknowledged alternative to evacuation and, as such, qualifies as a "contingency measure" in the event there are impediments to the use of evacuation routes.

RULES OF PRACTICE: DISMISSAL OF APPEAL (FAILURE TO BRIEF ISSUES PROPERLY)

Allegations of Licensing Board error not accompanied by an explanation of why the Board was wrong will be dismissed without further consideration.

EMERGENCY PLAN(S): CONTENT (DEFICIENCIES IN)

"[A] fundamental flaw in an emergency plan, as revealed in an exercise, has two principal components." With respect to the first — the exercise "reflects a failure of an essential element of the plan [not m]inor or isolated problems on the day of the exercise" Respecting the second component — the flaw "can be remedied only through a significant revision of the plan" and "where the problem can be readily corrected, the flaw cannot reasonably be characterized as fundamental." *Shoreham*, ALAB-903, 28 NRC 499, 505, 506 (1988).

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

A contention that fails to provide even minimal support for its main conclusion lacks the necessary basis and specificity.

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

It is not the responsibility of the Licensing Board (or the Appeal Board) to supply the basis information necessary to sustain a contention. *See Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-804, 21 NRC 587, 592 n.6 (1985).

EMERGENCY PLAN(S): CONTENT (PROTECTIVE MEASURES)

The emergency planning requirement in 10 C.F.R. § 50.47(b)(10) and the guidance in NUREG-0654, Criterion II.J.10.m, indicate only that, in preparing an emergency plan, a "range of protective actions" should be considered and

that the bases for the choice of protective actions be set forth in the plan. See ALAB-924, 30 NRC 331, 367 n.164 (1989), *petitions for review pending*.

EMERGENCY PLAN(S): CONTENT (EVACUATION)

EMERGENCY PLANNING: REQUIREMENTS

There is no time limitation specified in the regulations within which an evacuation must be completed. See ALAB-932, 31 NRC 371, 408 & n.167 (1990).

RULES OF PRACTICE: MULTIPLE-BOARD PROCEEDINGS

In creating separate licensing boards to consider the various issues that may be presented within a single licensing proceeding, the authority of each board to act (at least in the absence of any Commission directive to the contrary) is governed by the "jurisdiction" allocated to that board by the Chief Administrative Judge of the Licensing Board Panel, usually by way of a board constitution notice. See *Shoreham*, ALAB-901, 28 NRC 302, 307-08 & n.6, *review declined*, CLI-88-11, 28 NRC 603 (1988); ALAB-916, 29 NRC 434 (1989).

RULES OF PRACTICE: MOTIONS FOR RECONSIDERATION

The Rules of Practice place no affirmative obligation on a party to request a Licensing Board to reconsider its ruling that is affected by a later Appeal Board decision.

RULES OF PRACTICE: MULTIPLE-BOARD PROCEEDINGS (PARTY'S RIGHTS)

The discretionary case management tool of the use of multiple licensing boards in a single proceeding cannot be used to the detriment of a party's rights. *Shoreham*, ALAB-902, 28 NRC 423, 430, *review declined*, CLI-88-11, 28 NRC 603 (1988).

RULES OF PRACTICE: DIRECTED CERTIFICATION

A party is not obliged by the Rules of Practice to seek directed certification, a discretionary form of review.

RULES OF PRACTICE: APPEAL BOARD DECISIONS (EFFECT ON LICENSE AUTHORIZATION)

If, in determining that a portion of a Licensing Board emergency planning determination must be reversed, an Appeal Board is unable to conclude that there are significant deficiencies in an emergency plan for which adequate compensating measures do not exist, it does not have grounds for the extreme measure of license suspension. *See* 10 C.F.R. § 50.47(c)(1).

EMERGENCY PLAN(S): NOTIFICATION REQUIREMENTS

EMERGENCY PLANNING: PUBLIC NOTIFICATION

For the purpose of determining the timeliness of the alerting and notification process, a decision to initiate the process cannot reasonably be said to be finalized until there has been not only a determination that the siren alerting system should be activated but also a decision about what Emergency Broadcasting System messages should be utilized.

EMERGENCY PLAN(S): NOTIFICATION REQUIREMENTS

EMERGENCY PLANNING: PUBLIC NOTIFICATION

In contrast to the time constraints delineated in 10 C.F.R. Part 50, App. E, § IV.D.3, within which state officials must be notified of the declaration of an emergency by a licensee and the time within which initial notification must be completed, there is no regulatory requirement establishing a specific time frame for a decision to begin notification following the declaration of a particular emergency classification.

EMERGENCY PLANNING: REGULATORY GUIDANCE (NUREG-0654); DECONTAMINATION; MONITORING

In contrast to its clear provisions for monitoring and decontamination for onsite personnel and offsite emergency workers, NUREG-0654 fails to make any mention of the need for decontamination for evacuees. *Compare* NUREG-0654 Criteria II.J.3-4, II.K.7 (monitoring and decontamination for onsite personnel) *and id.* (Rev. 1, Supp. 1) Criterion II.K.3, .5 (dosimeter distribution and decontamination for emergency workers) *with id.* Criterion II.J.12 (monitoring of evacuees).

EMERGENCY PLAN(S): CONTENT (DEFICIENCIES IN)

A deficiency that may be corrected by relatively minor, additional training, rather than a significant redesign of the plan, does not constitute a fundamental flaw.

EMERGENCY PLAN(S): CONTENT (DEFICIENCIES IN)

“[A] particular person’s failure to follow the requirements of the emergency plan itself” will not be considered a fundamental flaw unless the person is shown to perform a critical role and there is no backup structure that would mitigate the effects of the individual’s failure. *Shoreham*, ALAB-903, 28 NRC at 505-06.

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

One of the purposes of the specificity requirement is to put the other “parties on notice of what issues they will have to defend or oppose.” *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-845, 24 NRC 220, 230 (1986).

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

“Section 2.714 [of 10 C.F.R. does not permit] the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.” *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), *vacated in part on other grounds*, CLI-83-19, 17 NRC 1041 (1983); *see Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 192 (1973), *aff’d sub nom. Business and Professional People for the Public Interest v. AEC*, 502 F.2d 424 (D.C. 1974). By the same token, an intervenor should not be allowed to transfer the burden of fleshing out a vague contention through discovery by the applicants and staff.

RULES OF PRACTICE: CONTENTIONS (SPECIFICITY AND BASIS)

REGULATIONS: INTERPRETATION (10 C.F.R. § 2.714)

While 10 C.F.R. § 2.714 does not require that all material factual information supporting a contention be disclosed in providing a basis for the contention, in

putting forth a contention a party must make a showing sufficient to demonstrate to the Licensing Board "that there has been sufficient foundation assigned for it to warrant further exploration." *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (footnote omitted), *rev'd in part on other grounds*, CLI-74-32, 8 AEC 217 (1974).

APPEARANCES

John Traficonte, Boston, Massachusetts (with whom **Alan R. Fierce**, **Leslie B. Greer**, **Matthew T. Brock**, and **Pamela Talbot**, Boston, Massachusetts, were on the brief), for the intervenor **James M. Shannon**, Attorney General of Massachusetts.

Paul McEachern, Portsmouth, New Hampshire (with whom **Diane Curran**, Washington, D.C., was on the joint brief), for the intervenors **Town of Hampton** and **New England Coalition on Nuclear Pollution**, respectively.

Robert A. Backus, Manchester, New Hampshire, on the brief for the intervenor **Seacoast Anti-Pollution League**.

R. Scott Hill-Whilton, Newburyport, Massachusetts, on the brief for the intervenor **Town of Newbury**.

Barbara J. Saint Andre, Boston, Massachusetts, on the brief for the intervenors **Town of Salisbury** and **Town of Amesbury**.

Judith H. Mizner, Newburyport, Massachusetts, on the brief for the intervenor **Town of West Newbury**.

Thomas G. Dignan, Jr., Boston, Massachusetts (with whom **George H. Lewald**, **Kathryn A. Selleck**, **Jeffrey P. Trout**, **Jay Bradford Smith**, **Goffrey C. Cook**, **William Parker**, and **Barbara Moulton**, Boston, Massachusetts, were on the brief), for the applicants **Public Service Company of New Hampshire**, *et al.*

Mitzi A. Young (with whom **Edwin J. Reis**, **Richard G. Bachmann**, **Elaine I. Chan**, **Sherwin E. Turk**, and **Lisa B. Clark** were on the brief) for the **Nuclear Regulatory Commission** staff.

DECISION

In this opinion, we consider challenges to the Licensing Board's rejection at the threshold of certain contentions advanced by intervenors Massachusetts Attorney General (MassAG); Seacoast Anti-Pollution League (SAPL); New England Coalition on Nuclear Pollution (NECNP); the Town of Hampton, New Hampshire (TOH); and the Massachusetts Towns of Amesbury (TOA), Salisbury (TOS), Newbury (TON), and West Newbury (TOWN) in this operating license proceeding involving the Seabrook nuclear power facility on the New Hampshire seacoast. These contentions concern either (1) the portion of the proceeding addressed to the Seabrook Plan for Massachusetts Communities (SPMC), the emergency response plan for the Massachusetts segment of the plume exposure pathway emergency planning zone (EPZ);¹ or (2) the results of the June 1988 full participation exercise of both the SPMC and the New Hampshire Radiological Emergency Response Plan (NHRERP), the emergency response plan for that State's segment of the EPZ.²

I.

In his brief on appeal, the MassAG asserts that the rejection of several of his contentions was based on an erroneous common ground; namely, that the issues sought to be raised by those contentions had been previously litigated during the hearings held on the adequacy of the NHRERP.³ According to the MassAG, the Licensing Board was not empowered to foreclose the litigation of issues under the SPMC "simply because similar issues had been litigated under the NHRERP."⁴ This is said to be so because "the SPMC is a separate emergency plan with a separate response organization, separate and distinct procedures and separate resources."⁵

As will be seen in our discussion individually of each of the contentions the MassAG identifies as having been rejected because of this claimed "generic

¹The SPMC was devised and is to be implemented by the applicants, Public Service Company of New Hampshire, *et al.*, in lieu of a government-sponsored plan.

²See 10 C.F.R. Part 50, App. E, §IV.F.

In two prior decisions, and for the reasons set forth therein, we undertook for separate consideration and disposition the threshold rejection of certain other contentions addressed to either the SPMC or the June 1988 exercise. See ALAB-937, 32 NRC 135 (1990), *petition for review pending*; ALAB-941, 32 NRC 337 (1990), *petitions for review pending*.

³See Brief of the Massachusetts Attorney General in Support of his Appeal of LBP-89-32 (Jan. 24, 1990) at 25 [hereinafter MassAG Brief]. Those hearings will be referred to in this opinion as the "NHRERP phase" (as distinguished from the "SPMC phase") of the proceeding.

⁴*Ibid.*

⁵*Ibid.*

error,” we cannot accept the MassAG’s thesis as it is broadly stated. To be sure, the two emergency plans are separate and there are many distinctions between them. And, to the extent that those distinctions are material to the disposition of a particular issue, it is beyond dispute that the litigation of the issue in the context of the NHRERP cannot serve to prevent the issue from being explored anew within the framework of the SPMC. Our recent discussion in ALAB-937 illustrates that point. We there singled out for separate examination the Licensing Board’s refusal to consider, on the ground that a similar issue had been litigated in the NHRERP phase, the assertion in Basis R of MassAG Contention No. 47 that there was no reasonable assurance that school teachers would fulfill their assigned role under the SPMC.⁶ Determining, *inter alia*, that there were significant differences between the roles that the teachers were given under the two plans and that those differences might make teacher role abandonment more likely in the case of Massachusetts teachers,⁷ we reversed the threshold rejection of Basis R of Contention No. 47 and remanded the issue to the Licensing Board for consideration of that basis on the merits.⁸

In short, we agree with the MassAG that he could not properly be precluded by the Licensing Board in the SPMC phase from introducing evidence on “issues that pertained *uniquely* to the SPMC.”⁹ It scarcely follows, however, that the Board was required to allow him (or any other intervenor) to relitigate in the SPMC phase an issue adequately explored in the NHRERP phase in circumstances where the issue does not take on a different complexion insofar as the terms and implementation of the SPMC is concerned. The MassAG offers no good reason why he should be accorded the proverbial “second bite at the apple” and we can think of none. Assuredly, contrary to the MassAG’s apparent belief, the mere fact that the two emergency response plans for this single facility are separate and distinct provides insufficient cause for countenancing any such result.

With these thoughts in mind, we turn to the contentions (other than MassAG Contention No. 47 disposed of in ALAB-937) that are said to have been rejected as a consequence of the asserted “generic error.” In doing so, we take account of specific claims made by the MassAG with regard to the contention under examination.¹⁰

⁶This contention was among those listed in the MassAG’s appellate brief as having been improvidently rejected because of the asserted “generic error.” *See ibid.*

⁷*See* ALAB-937, 32 NRC at 140, 146-47.

⁸In the event that it concluded that reasonable assurance of a response by a sufficient number of teachers was lacking, the Board was then to decide whether the applicants had made adequate alternative arrangements. *See id.* at 152.

⁹MassAG Brief at 26 (emphasis supplied). The single example of such conclusion cited in the brief relates to the teacher role abandonment issue. *Id.* at 26-27.

¹⁰With the exception of Contention No. 18, Basis E, each of the contentions in question received individual, in addition to generic, attention in the MassAG Brief.

A. In his Contention EX-18, the MassAG maintains that the June 1988 exercise disclosed "fundamental flaws" in both the SPMC and the NHRERP in that neither the applicants' ORO (the offsite response organization responsible for the execution of the SPMC) nor the State of New Hampshire (responsible for carrying out the NHRERP) demonstrated the adequacy of its "procedures, facilities, equipment and personnel for the registration, radiological monitoring, and decontamination of evacuees." In support of this broad claim, Basis B of the contention asserted, *inter alia*, that,

in the event of the kind of radioactive release that occurred during the Exercise, resulting in a clock-wise sweeping plume that hit virtually every town in the EPZ, many more persons would have been reporting to the reception centers for monitoring than ORO and the State of New Hampshire had the staff and equipment to monitor within a 12-hour period, even assuming each team could monitor at a continuous rate of 55 evacuees per hour.¹¹

Treating this assertion as challenging the "overall capacity of reception centers, including facilities, personnel, equipment and everything, to monitor the expected population," the Licensing Board ruled from the bench on January 18, 1989, that it was barred by principles of *res judicata*.¹² This ruling was confirmed in the November 1989 initial decision on the SPMC.¹³ In addition to the MassAG, SAPL attacks this ruling as well. We agree with the applicants and the staff that, in the circumstances at hand, the Board below reached the right result on the matter.

1. The *res judicata* ruling below stemmed from a determination in the Licensing Board's decision addressed to the NHRERP, issued a year earlier.¹⁴ That determination related to SAPL contentions challenging the adequacy of the reception centers provided in the NHRERP for evacuees from the New Hampshire portion of the Seabrook EPZ in the event of a radiological emergency.¹⁵ Reject-

¹¹In November 1980, the NRC and the Federal Emergency Management Agency jointly issued NUREG-0654/FEMA-REP-1 (Rev. 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" [hereinafter NUREG-0654]. Included within the guidance contained in this document is the provision in Criterion IIJ.12 for radiological monitoring of EPZ evacuees:

Each organization shall describe the means for registering and monitoring of evacuees at relocation centers in host areas. The personnel and equipment available should be capable of monitoring within about a 12 hour period all residents and transients in the plume exposure EPZ arriving at relocation centers.

This guidance was reinforced in the September 1988 supplement to NUREG-0654 concerning utility-prepared offsite emergency response plans such as the SPMC. It is now stated that the personnel and equipment available shall be capable of monitoring within about a 12-hour period all residents and transients in the plume exposure pathway EPZ arriving at relocation centers. NUREG-0654 (Rev. 1, Supp. 1) at 20.

¹²Tr. 15,332-33.

¹³See LBP-89-32, 30 NRC 375, 562 (1989) (erroneously referring to the ruling as having been contained in an unpublished January 26, 1989 order).

¹⁴See LBP-88-32, 28 NRC 667, 714-15 (1988).

¹⁵Those contentions, SAPL revised Contention No. 7 and Contention No. 33, were admitted to the proceeding in the Licensing Board's Memorandum and Order (May 18, 1987) at 33-35, 44-45 (unpublished).

ing the claim in those contentions that the centers lacked sufficient monitoring capacity, the Board relied virtually exclusively upon an internal Federal Emergency Management Agency (FEMA) memorandum offered into evidence by the applicants in response to that claim. The memorandum was dated December 24, 1985, and signed by Richard W. Krimm, Assistant Associate Director for Natural and Technological Hazards in FEMA's Office of State and Local Programs and Support. Directed to certain regional FEMA officials, it stated at the outset that its purpose was to provide "interpretative guidance" with respect to Criterion II.J.12, the provision in NUREG-0654 specifying that the personnel and equipment available at reception centers "should be capable of monitoring within about a 12 hour period all residents and transients in the plume exposure EPZ arriving at relocation centers."¹⁶ After a brief discussion of the matter, the memorandum concluded that state and local radiological emergency preparedness plans should include trained personnel and equipment at relocation centers for the monitoring of a minimum of twenty percent of the population within the EPZ.

At the time of the *res judicata* ruling in January 1989, the propriety of the Licensing Board's reliance on the Krimm memorandum was before us on SAPL's appeal from the partial initial decision the prior month in the NHRERP phase of the proceeding.¹⁷ That appeal rested on the claim that the Licensing Board's reliance was foreclosed by our conclusion in ALAB-905, rendered at the end of November 1988 in the *Shoreham* operating license proceeding, that the analysis in the Krimm memorandum was flawed in several respects.¹⁸ A principal perceived flaw was the tacit assumption in the memorandum that a twenty percent planning basis will suffice in the formulation of monitoring arrangements for *all* facilities. In this connection, we noted in ALAB-905 our belief "that, among other things, the demographic and meteorological characteristics of a particular EPZ might have considerable influence upon the percentage of the persons within the EPZ that would, in the event of an accident, seek monitoring either on instruction or on their own initiative."¹⁹

In ALAB-924, issued a year ago with regard to the NHRERP phase of this proceeding, we addressed the SAPL appeal on the monitoring matter (along with other issues).²⁰ For the reasons there developed, we came to the conclusion that, unlike the *Shoreham* intervenors, SAPL had not sufficiently challenged the Krimm memorandum analysis in the course of the litigation of its contentions

¹⁶ See *supra* note 11.

¹⁷ See LBP-88-32, 28 NRC at 714-15.

¹⁸ See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-905, 28 NRC 515, 522-28 (1988).

¹⁹ *Id.* at 526.

²⁰ 30 NRC 331, 352-62 (1989), *petitions for review pending.*

respecting the monitoring capacity of the New Hampshire reception centers.²¹ That being so, we further decided, the Licensing Board had not erred in finding, on the strength of the Krimm memorandum and notwithstanding ALAB-905, that the twenty percent planning basis employed in the NHRERP was both reasonable and adequately supported in the record.²²

2. As thus seen, in the context of SAPL's challenge to the sufficiency of the monitoring capacity of the reception centers provided in the NHRERP, the Licensing Board had squarely before it the question of the acceptability of the twenty percent planning basis (even if the Krimm memorandum itself had not been directly challenged): In its decision on the plan, the Board explicitly upheld the resort to that basis for NHRERP purposes, and we affirmed that action in ALAB-924.

Thus, we think that, absent some showing (or at the very least a colorable assertion) that conditions within the Massachusetts portion of the EPZ *materially* differ from those within the New Hampshire portion, the intervenors must be deemed to be foreclosed from litigating anew the planning basis issue.²³ No matter which particular doctrine of repose might be invoked (whether by analogy or otherwise), in the circumstances there is plainly no reason to permit the intervenors simply to replot old ground. Each intervenor — not just SAPL — had the opportunity during the hearings on the NHRERP to establish that, in all of its possible applications, the twenty percent planning basis in the Krimm memorandum is fatally flawed and, therefore, there was an inadequate evidentiary foundation for the Licensing Board's acceptance of that basis for any purpose.²⁴ Not having taken advantage of that opportunity, the MassAG — no less than SAPL — cannot now be heard to insist that considerations of fairness dictate that he be given a second chance to demonstrate that the Krimm memorandum, and more particularly its twenty percent standard, should be universally disregarded.

²¹ *Id.* at 355-59.

²² *Id.* at 357-60.

²³ It is clear from the dialogue between MassAG counsel and the Licensing Board at the time of the rejection of Contention EX-18 that the Board correctly construed the contention as seeking to litigate that issue. *See* Tr. 15333-37. Moreover, the portion of the MassAG Brief that challenges the threshold rejection of the contention contains a similar acknowledgment that the planning basis issue was at the root of the contention. *See* MassAG Brief at 43-45. In a subsequent portion of that brief, *id.* at 74-86, the MassAG attacks the findings of the Licensing Board, LBP-89-32, 30 NRC at 561-82, that the two reception centers provided in the SPMC are capable of monitoring 20% of the Massachusetts EPZ population within approximately 12 hours. We will consider that claim in a subsequent decision devoted to substantive findings of the Board.

²⁴ It is long-settled that an intervenor in an operating license proceeding is entitled to cross-examine on those portions of a witness's testimony that relate to issues placed into controversy by another party to the proceeding. *Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-252, 8 AEC 1175, *aff'd*, CLI-75-1, 1 NRC 1 (1975). Under recent amendments to the Rules of Practice, however, an intervenor may not file proposed findings of fact and conclusions of law on, or appeal the disposition by the Licensing Board of, any issues not placed (or sought to be placed) in controversy by that intervenor. *See* 10 C.F.R. § 2.762(d)(1) (1990). These amendments apply only in proceedings that, unlike the one at bar, were initiated after September 10, 1989. *See* 54 Fed. Reg. 33,168, 33,179 (1989).

Our task therefore is to decide whether, in support of his Contention EX-18, the MassAG directed the Licensing Board's attention to special factors that might make the twenty percent planning basis inapplicable to the Massachusetts portion of the EPZ (as distinguished from the New Hampshire portion). Given an identification of such factors, there might have been room for a substantial claim that the resolution of the planning basis issue within the framework of the NHRERP would not carry over to the plan for Massachusetts. For, as previously noted, our criticism of the Krimm memorandum in ALAB-905 was founded in part upon the consideration that the demographic and meteorological characteristics of a particular EPZ could have a considerable bearing on the appropriate monitoring planning basis for that EPZ.

Contrary to the MassAG's insistence at oral argument,²⁵ we find nothing in Basis B of Contention EX-18 (or elsewhere in the contention) that might possibly be taken as claiming the existence of material differences between the two segments of the EPZ. Moreover, it seems unlikely that any such differences that might have existed would have come to light only through an exercise of the emergency response plan for the Massachusetts portion of the EPZ. Rather, it is reasonable to suppose that, independent (and well in advance) of the June 1988 exercise, the demographic characteristics of all areas within the EPZ would have been readily ascertainable through resort to available census and other data pertaining to population distribution. It is equally probable that available weather reports would have supplied all of the meteorological information necessary to determine the presence of any significant variations on that front.

In short, the intervenors gave the Licensing Board no warrant for allowing them a fresh opportunity to challenge the adequacy of monitoring capability through an attack upon the FEMA planning estimate embodied in the Krimm memorandum. We thus must endorse the Board's refusal to accord such an opportunity through the vehicle of MassAG's Contention EX-18.²⁶

B. We now turn to the other contentions that the MassAG maintains were improvidently rejected at the threshold on the strength of the litigation of the New Hampshire emergency response plan. We consider them *seriatim*.

1. MassAG Contention No. 29 asserts in substance that, because the residents of the Massachusetts EPZ communities lack confidence in, and are hostile

²⁵ App. Tr. 46 (Apr. 18, 1990).

²⁶ In the same section of his brief (at 43), the MassAG assails the Licensing Board's refusal to admit his Contention No. 65. See Memorandum and Order — Part I (July 22, 1988) at 91-92 (unpublished) [hereinafter SPMC Contentions Order — Part I], *reconsideration denied*, Memorandum and Order (Jan. 4, 1989) at 9 (unpublished). That contention alleged, *inter alia*, that sufficient "resources including personnel, facilities and equipment have not been secured to adequately respond to a radiological emergency at Seabrook." The MassAG does not state explicitly why he believes that Contention No. 65 should not have been rejected. Nonetheless, the lumping of that rejection with the rejection of Basis B of Contention EX-18 under the heading "20% Monitoring Planning Basis" carries with it the plain implication that, in the MassAG's opinion, Contention No. 65 should have been accepted in the wake of ALAB-905 in *Shoreham*. For the reasons already assigned with respect to Contention EX-18, there is no substance to that thesis.

to, the Seabrook owners and the NRC, there will be a “confused, disorderly, and uncontrolled public response” to any endeavor by the applicants’ ORO to carry out the SPMC provisions. Our examination of the four bases assigned for the contention has disclosed nothing that might provide a distinction between Massachusetts and New Hampshire EPZ residents in this respect. More specifically, none of those bases supplies any cause to believe that the response of the Massachusetts citizenry to information, instructions, or assistance offered in the event of an emergency might differ materially from the response of persons in New Hampshire. This being so, and there appearing to be no dispute that behavioral issues pertaining to public response were in fact considered in the NHRERP phase of the proceeding,²⁷ we agree with the Licensing Board’s determination that Contention No. 29 sought impermissibly to traverse territory already amply covered.²⁸

2. MassAG Contention Nos. 30 and 74 are addressed to the same subject: snow removal. In essence, the claim is that the SPMC makes no provision for the removal of snow from the highways and other roads in the communities within the Massachusetts EPZ. Although acknowledging that those communities generally rely on private contractors for snow removal, the basis assigned for Contention No. 30 raises the possibility that the contractors will default in the performance of that service in the event of a radiological emergency.

In rejecting the contentions, the Licensing Board observed that it could see “no basis for assuming that an evacuation would be ordered if unremoved snow makes that protective action impractical.”²⁹ We agree with that observation. In the event that a snowstorm makes sheltering preferable to evacuation due to resultant road conditions, the sheltering option presumably will be the adopted protective action. On this score, the MassAG does not allege that sheltering would be infeasible or unlikely to be ordered. Indeed, we are unaware of any suggestion in this proceeding that, except in the case of crowded beach areas, there are insufficient resources to shelter the EPZ population. And, needless to say, during the time of year that snowstorms occur, the beaches are essentially deserted.

Contention Nos. 30 and 74 would therefore have an acceptable foundation only if there were an ironclad regulatory requirement that an emergency response plan contain provisions assuring that, in any and all climatic conditions, evacuation is an available protective action. Although the MassAG maintains that the SPMC is deficient in failing to assure that snow removal crews will respond to light and moderate snowstorms,³⁰ in neither the bases offered for the contentions

²⁷ See LBP-88-32, 28 NRC at 742-47, 749-50.

²⁸ See SPMC Contentions Order — Part I, at 49-50.

²⁹ *Id.* at 51, 98.

³⁰ MassAG Brief at 28-29.

nor his brief is there an identification of the source of such a requirement. Our own review of the Commission's emergency planning regulations and guidance likewise was unavailing in this regard.³¹ Accordingly, Contention Nos. 30 and 74 were properly rejected irrespective of whether they sought to relitigate an issue previously laid to rest in the NHRERP phase.³²

3. In his Contention No. 34 and the single basis assigned for it, the MassAG alleges a lack of reasonable assurance that sufficient resources are available to furnish gasoline to the "hundreds" of vehicles that are likely to run out of gasoline during a summertime evacuation from crowded beach areas. In addition, he asserts the same absence of such assurance that ride-sharing will be available for use by those stranded without fuel.

Opposing the admission of Contention No. 34, the applicants and the staff both maintained below that there is no regulatory requirement that arrangements be made to provide fuel for evacuating vehicles. Moreover, the applicants urged that, to the extent it might be addressed to the blockage of evacuation routes by stranded vehicles, the contention sought to raise an issue fully litigated in the NHRERP phase of the proceeding.

The Licensing Board rejected the contention for want of "an adequate basis to support its admission."³³ The sole justification given for this conclusion was that the "MassAG alleges nothing regarding prior litigation of this matter, nor does he even discuss the possibility of mitigating measures that might minimize the impact of stranded vehicles."³⁴

We agree with the MassAG's insistence on appeal that, contrary to the Licensing Board's ruling, Contention No. 34 was supported by an adequate basis set forth with sufficient specificity. We further find entirely insubstantial the endeavor of the applicants and the staff to justify the result below by renewing their claim that, in the words of the applicants, emergency plans need not make provision for "fueling cars [that] run out of gas."³⁵ Although that may be true,

³¹For its part, NUREG-0654 provides in Criterion II.J.10.k that the emergency response plan include the "[i]dentification of and means for dealing with potential impediments (e.g., seasonal impassability of roads) to use of evacuation routes, and contingency measures." This plainly recognizes that there may be occasions when climatic conditions will render roads impassable. Sheltering is, of course, the generally acknowledged alternative to evacuation and, as such, qualifies as a "contingency measure" in the event there are impediments to the use of evacuation routes.

³²In a second order, the Licensing Board likewise rejected at the threshold similar contentions of certain of the intervenor Towns: TON No. 1, Basis b (SPMC deficient in failing to come to grips with the seasonal impassability of roads due to snow); TOS No. 21 (SPMC fails to provide adequate measures to protect the public in the event of a snowstorm emergency); and TOWN No. 4 (SPMC leaves snow removal responsibility to local authorities and TOWN does not have adequate resources to clear roadways in a timely fashion to accommodate an evacuation during or after a major snowstorm). See Memorandum and Order — Part II (July 29, 1988) at 31-32, 52, 56 (unpublished) [hereinafter SPMC Contentions Order — Part II]. Our reasons for affirming the rejection of MassAG Contention Nos. 30 and 74 apply equally to these claims.

³³SPMC Contentions Order — Part I, at 55.

³⁴*Ibid.*

³⁵Applicants' Brief (Mar. 5, 1990) at 31.

it is also quite beside the point. The issue at hand is not whether the applicants are under an obligation to ensure that gasoline will be at hand for refueling purposes. Rather, as the MassAG observes, Contention No. 34 seeks to put into question whether the SPMC satisfactorily addresses the likelihood that evacuating vehicles will run out of gasoline and the asserted fact that refueling will not be possible, to the end that there is reasonable assurance that stranded evacuees will be accommodated and a successful vehicular evacuation will take place. The failure of either the applicants or the staff even to attempt to explain before us why this is not a litigable question is enough to undergird our belief that no good explanation is possible.

In light of these considerations, we might well be justified in simply reversing the Licensing Board's rejection of Contention No. 34 as supported by neither the reason assigned by the Board nor the defense offered by the applicants and the staff. There is, however, another reason — hinted at by the Licensing Board but not mentioned by either the applicants or the staff in their appellate briefs — why the contention was properly rejected. Certainly the failure of the applicants or the staff to advocate this reason for dismissal of the contention does not stand in the way of our recognition of it.

In its decision in the NHRERP phase of the proceeding, the Board explicitly found, on the strength of the thesis of a "therapeutic community" advanced by applicants' witness Dr. Dennis S. Mileti, that "the public would share rides with other evacuees without transportation."³⁶ Although Dr. Mileti's focus appears to have been on persons lacking transportation at the inception of the evacuation,³⁷ his views on ride-sharing would seem to be no less applicable to persons who lose, during the course of the evacuation effort and for whatever reason, transportation that was initially available. Thus, the conclusion is compelled that the assumption necessarily at the root of Contention No. 34 — that there is not reasonable assurance that ride-sharing will be available to those stranded without fuel — was at issue in the NHRERP phase and, albeit subsequent to the rejection of that contention, was explicitly found to be unwarranted by the Board below.

In this circumstance, the contention was plainly barred unless the MassAG offered a reasonable explanation why motorists on evacuation routes in Massachusetts would be less inclined to indulge in ride-sharing than their counterparts in New Hampshire. No such explanation was forthcoming. This is not surprising. Dr. Mileti's thesis was not area-dependent, and we think it most unlikely that the MassAG would wish to convey the impression that the inhabi-

³⁶ LBP-88-32, 28 NRC at 744.

³⁷ See Applicants' Direct Testimony No. 7 (Evacuation Time Estimate and Human Behavior in Emergencies), fol. Tr. 5622, at 96-98, 105.

tants of Massachusetts are less disposed to extend a helping hand to their fellow citizens than are the residents of neighboring New Hampshire.

4. MassAG Contention No. 35 focuses upon the overheating and stalling of vehicles departing crowded beach areas as part of an evacuation on a hot summer day. To the extent that this contention asserts the lack of sufficient tow vehicles to respond adequately to this problem, the Licensing Board combined it with another admitted contention (No. 73).³⁸ We agree with the Licensing Board that, in its other respects, Contention No. 35 was foreclosed.³⁹ Once again, the MassAG supplied no good reason to relitigate in the SPMC phase of the proceeding whether, as Dr. Mileti testified and the Board found in the NHRERP phase, ride-sharing will be available to those who do not have (or have been deprived of) their own means of transportation.

5. MassAG Contention No. 48 is concerned with the implementation of adequate protective measures for those persons who either are patients in the two hospitals within the EPZ at the time of the radiological emergency or become injured during the course of the emergency. Basis C asserts that, absent pre-emergency planning for hospital personnel specifically, there is no reasonable assurance that sufficient staff will remain or report for duty at the hospital to perform emergency response functions. According to the basis, “[m]any staff members will experience severe role conflict and will leave the hospital.”

A similar theme is found in Basis A of MassAG Contention No. 49, which is directed to the measures for the protection of those “institutionalized persons (e.g., patients in medical facilities) who cannot be evacuated.” We are told in that basis that, especially in light of the absence in the SPMC of any provision “for informing or instructing hospital staff prior to an emergency of their expected emergency roles,” reasonable assurance does not exist that “sufficient hospital staff will be willing to remain behind in an emergency to care for patients, rather than seeing to the safety of their own families who may be evacuating.”

The Licensing Board accepted some of the bases for the two contentions, but rejected the role abandonment bases on the ground that they sought to raise anew previously litigated human behavior issues.⁴⁰ We concur.

There is no room for doubt that the issue of emergency worker role abandonment was explored at length in the NHRERP phase and resulted in ex-

³⁸ See SPMC Contentions Order — Part I, at 56.

³⁹ *Ibid.*

⁴⁰ Specifically, the Board referred in its first July 1988 order to its rejection on that ground of MassAG Contention No. 47, concerned with school teacher role abandonment. See *id.* at 76-77. As previously noted, see *supra* p. 403, in ALAB-937 we reversed the rejection of Contention No. 47 on our determination of, *inter alia*, significant factual differences between the role assigned to New Hampshire teachers under the NHRERP and that assigned to Massachusetts teachers under the SPMC.

tensive Licensing Board findings.⁴¹ Manifestly, for present purposes (i.e., the role abandonment issue), hospital staff personnel come within the ambit of that discussion.⁴² It thus was incumbent upon the MassAG to point to differences between the situations in New Hampshire and Massachusetts medical facilities that might have a material bearing upon the application to the latter of any evidence adduced, and findings made, in connection with role abandonment at the former. No such burden was assumed by the MassAG below and his brief to us is equally devoid of any cause to pursue further the matter of role abandonment by hospital personnel. In short, our reversal in ALAB-937 of the Licensing Board's disposition of the teacher role abandonment issue is of no assistance to the MassAG here.

6. In Contention No. 83, the MassAG insists that the SPMC fails to recognize certain "distinct and unique aspects of human behavior during a radiological emergency at Seabrook" that assertedly will "pervade" the response to such an emergency on the part of both the applicants' ORO and the public. Basis C hypothesizes a "severe fast-paced accident" on "a crowded summer beach day." Pointing to a purported acknowledgment by the applicants that the protective measures available to the beach population will not prevent "severe and in some cases immediate health effects," the basis goes on to assert that "a situation in which large numbers of individuals receiving doses of radiation are not able to shelter or evacuate will result in severe, aberrant, and irrational behavior."

The Licensing Board rejected Basis C because "similar" issues were litigated in the New Hampshire phase.⁴³ On appeal, the MassAG does not dispute that this is so,⁴⁴ but argues that "[t]he provisions of the SPMC for dealing with the problem posed in the contention basis could not have been litigated in a hearing on the NHRERP."⁴⁵ This consideration has no relevance, however, unless there is cause to believe that, in the hypothesized emergency, the conduct of persons on the Massachusetts beaches would differ materially from that of their

⁴¹ See LBP-88-32, 28 NRC at 735-42. In addition, at an earlier point in that decision, the Licensing Board specifically addressed claims of inadequate staffing of nursing homes to handle emergency evacuations. *Id.* at 698-99.

⁴² This is true whether or not the particular staff member is being called upon in the emergency to fulfill a role foreign to that customarily performed by him or her. The pivotal consideration is whether the emergency plan contemplates (as it does in the case of medical personnel) that the individual will remain on, or report for, duty in the event of the emergency and will have responsibilities for the well-being of individuals exposed to the emergency. If there is that contemplation, the possibility of role abandonment is present irrespective of whether the role at hand is a familiar or an unusual one. At the same time, as we have previously noted in the context of school teachers, abandonment is less likely to occur if the individual will be called upon in the emergency to undertake no more than his or her normal duties. See ALAB-932, 31 NRC 371, 404 (1990).

⁴³ See SPMC Contentions Order — Part I, at 107-08.

⁴⁴ On this score, the applicants refer us to the discussion in LBP-88-32, 28 NRC at 742-49, relating to human behavior in emergencies. In the course of the discussion, the Licensing Board specifically confronted a contention of the MassAG directed to the fact of a large transient beach population. *Id.* at 745.

⁴⁵ MassAG Brief at 35.

New Hampshire counterparts. There is an absence of even a hint of such a difference in the MassAG's attack upon the rejection of Basis C and we have no independent reason to think that one might exist.⁴⁶

7. As summarized by the Licensing Board, MassAG Contention EX-13 alleges the inability of the applicants' ORO to control evacuation traffic and access to evacuated and sheltered areas.⁴⁷ Bases A, B, and D, as described by the Board, claim that, during the June 1988 exercise, the ORO failed to dispatch and to deploy traffic guides in a timely manner following the beach closings in New Hampshire and Massachusetts (Basis A); issued an Emergency Broadcasting System (EBS) message recommending the evacuation of two towns without having obtained either the authority to implement traffic control measures itself or assurance that state and local authorities would implement ORO's traffic control plan (Basis B); and failed adequately to assess and to respond to a road impediment situation injected into the exercise (Basis D).⁴⁸

The applicants opposed the admission of the contention on the ground that it alleges only minor or readily correctable problems that do not demonstrate a fundamental flaw in the SPMC. In addition, the Licensing Board was told by the applicants that Bases A and B present human behavior and evacuation time estimate issues already litigated in the proceeding.

The Licensing Board accepted both of these claims.⁴⁹ It did not, however, illumine the footing for its conclusion that Bases A and B had already been litigated.

On his appeal, the MassAG maintains that the three bases do assert a failure of "an essential element" of the SPMC, "i.e., the ability to control evacuation traffic flow."⁵⁰ In addition, he insists that the matters covered by Bases A and B "have most definitely not been litigated previously."⁵¹

⁴⁶In his brief (at 45), the MassAG complains of the Licensing Board's exclusion of portions of Basis A of Contention No. 83, as well as Basis E of Contention No. 77. We are not told, however, why the reasons assigned by the Board for those exclusions are without merit. Accordingly, we need not and do not consider the complaint. See ALAB-937, 32 NRC at 153 n.59 (and case there cited). See also Appeal Board Memorandum and Order (Dec. 15, 1989) at 3-4 (unpublished) (advising appellants that allegations of Licensing Board error not accompanied by an explanation of why the Board was wrong will be dismissed without further consideration).

For the same reason, we need not examine further MassAG Contention No. 18, Basis E, which (although listed among the contentions said to have been erroneously rejected as raising a previously litigated issue) received no individual attention in the MassAG Brief. See *supra* note 10.

Still further, we have not been presented with any explanation why the Licensing Board's conclusion that aberrant behavior by drivers in the New Hampshire portion of the EPZ would not be a significant factor in an evacuation is inapplicable to drivers within the Massachusetts EPZ. See ALAB-932, 31 NRC at 391-98. Accordingly, we find no error in the Board's threshold dismissal of MassAG Contention No. 38 on the subject of aberrant behavior on the part of Massachusetts drivers.

⁴⁷See Memorandum and Order (Dec. 15, 1988) at 39 (unpublished) [hereinafter Exercise Contentions Order].

⁴⁸*Ibid.*

⁴⁹*Id.* at 40.

⁵⁰MassAG Brief at 39.

⁵¹*Id.* at 40.

We find it logically impossible to understand how a contention dealing with events during the course of a June 1988 exercise could possibly be deemed to have been litigated in hearings that took place prior to that time. Unfortunately, the Licensing Board made no attempt to unravel that mystery. Nor are the applicants of any assistance in that regard. Although supporting the Licensing Board's rejection of Bases A and B, and although it was their argument that the Board accepted, the applicants' brief is conspicuously silent on the relitigation matter. From that silence, we must assume that, having given the question additional thought, the applicants now have tacitly retreated from what appears to us to have been a wholly insubstantial claim.

The other assigned reason for the rejection of Bases A, B, and D of Contention EX-13 stands, however, on a much sounder footing. In a 1986 decision in the *Shoreham* proceeding, the Commission restricted hearings on the results of emergency planning exercises to those issues concerned with whether an exercise revealed "deficiencies which preclude a finding of reasonable assurance that protective measures can and will be taken, i.e., fundamental flaws in the plan."⁵² In the same proceeding, we had occasion subsequently to determine that "a fundamental flaw in an emergency plan, as revealed in an exercise, has two principal components."⁵³ With respect to the first — the exercise "reflects a failure of an essential element of the plan" — we observed that "[m]inor or isolated problems on the day of the exercise do not constitute fundamental flaws in the emergency plan."⁵⁴ Respecting the second component — the flaw "can be remedied only through a significant revision of the plan" — we pointed out that, "where the problem can be readily corrected, the flaw cannot reasonably be characterized as fundamental."⁵⁵

There is no room for a serious claim that Basis A, Basis B, or Basis D meets both of these standards. To the contrary, we think it manifest that, even if the cited exercise deficiencies might qualify as more than "minor or isolated problems" (a dubious proposition), they are readily correctable. Accordingly, we are satisfied that the Licensing Board did not err in declining to admit Contention EX-13 as supported by those bases.⁵⁶

II.

In addition to the challenges to the Board's rejection of several MassAG contentions on the basis of the prior litigation concerning the New Hampshire

⁵² *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-86-11, 23 NRC 577, 581 (1986).

⁵³ *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499, 505 (1988).

⁵⁴ *Ibid.*

⁵⁵ *Id.* at 505, 506.

⁵⁶ Although the contention had other assigned bases, we do not understand the MassAG's appeal to complain of their rejection.

plan, the MassAG and other intervenors have appealed the dismissal of various contentions on other grounds. With one exception, we find those assertions of error meritless.

A. In his Contention No. 28, the MassAG alleges that the protective action recommendation (PAR) decision criteria for the SPMC fail to meet the planning standards of 10 C.F.R. § 50.47(b)(10) and NUREG-0654, Criterion II.J.10.m, because they do not account for the purportedly significant number of Massachusetts EPZ residents who live in trailers. According to the MassAG, this deficiency is important because trailers provide shielding that is notably less than that afforded by a typical house in the Massachusetts EPZ. This, in turn, assertedly mandates that the mobile home population be evacuated or sheltered elsewhere in the event other residents are ordered to shelter. Concluding that it sought to litigate the validity of the existing PARs based upon a resident subset of “unspecified” size, the Licensing Board dismissed the contention as lacking an adequate foundation.⁵⁷

The MassAG now asserts that the Board “impermissibly rejected the contention on evidentiary grounds.”⁵⁸ Putting aside the fact that this otherwise unexplained assertion of error seemingly runs contrary to our directive that specific reasons must be assigned for intervenor allegations of error,⁵⁹ we find that the Board properly dismissed this contention. Even assuming that the regulations and guidance contemplate the need for a particular PAR based upon specific structure sheltering factors — which is not apparent — Contention No. 28 lacks the necessary basis and specificity. The contention fails to provide even minimal support for the conclusional allegation that the trailer population is so “significant” that it merits a separate PAR. Moreover, the contention fails to provide any support for the focal assertion that the sheltering factor for a trailer is less than the sheltering factor for a wood frame house without a basement, which is the conservative value utilized in establishing the sheltering PAR for the SPMC.⁶⁰ The Board thus properly dismissed this contention.

B. In his Contention No. 36, the MassAG declares that because of a variety of factors, including traffic congestion, frustrated drivers abandoning cars, driver sickness due to radiation effects, and driver disorderliness, the planned vehicular

⁵⁷ SPMC Contentions Order — Part I, at 48.

⁵⁸ MassAG Brief at 27.

⁵⁹ See *supra* note 46.

⁶⁰ See SPMC (Procedures) Implementing Procedure [(IP)] 2.5, at 18 n.* (Rev. 0, Amend. 4). The SPMC was admitted as Applicants' Exh. 42.

The cloud source reduction factor of 0.9 assigned to a wood frame house without a basement is a representative value relative to an unprotected outside position, which is considered to have a reduction factor of 1.0. Applicants' Exh. 34, at 34 (Table 10). The conservatism inherent in utilizing this reduction factor for PAR generation is apparent when it is compared with the reduction factors assigned to other types of structures, e.g., masonry house, no basement (0.6); basement of wood frame house (0.6); basement of masonry house (0.4); large office or industrial-type building away from windows or doors (0.2 or less). *Ibid.*

evacuation of the Massachusetts beaches is not feasible, so that the SPMC violates 10 C.F.R. § 50.47 and NUREG-0654. The Licensing Board rejected this contention, finding that previous litigation and logic established that the beach areas “are spontaneously nearly evacuated almost every day” and that the issue the MassAG was seeking to litigate, the propriety of the length of the evacuation time estimates (ETEs) for the beach population, was directly raised by other contentions.⁶¹

Before us, in an apparent attempt to ensure that his contention is not construed as one challenging the length of the ETEs, the MassAG reiterates that this contention was based upon the premise that evacuation “is *not feasible at all*.”⁶² This characterization, however, does not aid his cause. In the event of an emergency, there no doubt will be considerable delay in clearing the beach areas in the Massachusetts portion of the EPZ. Nonetheless, the potential for extended delay does not provide an adequate basis for an assertion that an evacuation is incapable of being carried out at all so as to be “infeasible.” In dismissing this contention, the Licensing Board properly relegated litigation over the MassAG’s various concerns to the issue of whether the ETEs for the SPMC properly reflect the various delay factors posited by the MassAG.

C. With respect to his Contention No. 39, which asserts that, for a variety of reasons, the ETEs for the Massachusetts EPZ are “too unrealistic to form the basis of adequate protective action decision-making,” the MassAG protests only the Licensing Board’s exclusion of Basis F. In this particular basis, the MassAG contends that the ETEs are too short because they do not take into account the evacuation delays that would occur as a result of evacuation vehicle drivers and passengers becoming ill from radiation sickness caused by radiation releases occurring in a wide range of accident sequences. The Licensing Board rejected the contention on the ground that it lacked foundation for its underpinning that “radiation sickness can reasonably be expected to cause traffic delays, even assuming the wide range of accident sequences alleged in the basis.”⁶³

Pointing to the Sholly/Beyea/Thompson/Leaning testimony discussed in ALAB-922,⁶⁴ before us the MassAG asserts that the Licensing Board “knew full well” that the MassAG had already prepared testimony that described the radiation doses that can be expected and the health consequences that would occur from those doses in the beach areas within the timeframe it would take

⁶¹ SPMC Contentions Order — Part I, at 59.

⁶² MassAG Brief at 32 (emphasis in original).

⁶³ SPMC Contentions Order — Part I, at 62.

⁶⁴ See 30 NRC 247, 252-53 (1989). In CLI-90-2, 31 NRC 197, 217 (1990), *petition for review pending sub nom. Massachusetts v. NRC*, No. 90-1132 (D.C. Cir. argued Sept. 18, 1990), the Commission declared that this testimony was not admissible for the proffered purpose of examining the radiological dose consequences that might arise under the NHRERP.

to evacuate.⁶⁵ Putting aside the fact that the MassAG provides us with no confirmation of what the Board allegedly knew in this regard, his assertion does not account for his failure, as the proponent of the contention, to reference this testimony as part of the supporting basis. It is not the responsibility of the Licensing Board (or this Board) to supply the basis information necessary to sustain a contention.⁶⁶ The MassAG having failed to provide some support for his central premise that radiation exposures can be expected within the time-frame established for an evacuation that will produce potentially debilitating effects — hardly a self-evident proposition — the Licensing Board properly found that Basis F lacked foundation.

D. In his Contention No. 41, the MassAG insists that the SPMC fails to provide the requisite reasonable assurance that the Massachusetts EPZ beach population will be protected in the event of a radiological emergency. On this score, he asserts that the ETEs are “simply too long” and that the plan fails to provide a sheltering option to protect the population “entrapped” because they are “unable to timely evacuate.” The Licensing Board rejected the contention on the ground that it was “another argument that the protective actions must accomplish minimum dose savings.”⁶⁷ The MassAG now asserts that the Licensing Board committed error because its rationale is based upon the notion that the effectiveness of the plan is irrelevant to its adequacy.⁶⁸ Applicants maintain, with the staff’s concurrence, that the contention is simply a restatement of his Contention No. 36, that the length of an evacuation from the beaches renders that protective action inadequate.

As we have noted previously, the emergency planning requirement in 10 C.F.R. § 50.47(b)(10) and the guidance in NUREG-0654, Criterion IIJ.10.m, indicate only that, in preparing an emergency plan, a “range of protective actions” should be considered and that the bases for the choice of protective actions be set forth in the plan.⁶⁹ Contention No. 41 does not assert that these directives have gone unfulfilled. Instead, despite our previous pronouncements that there is no time limitation specified in the regulations within which an evacuation must be completed,⁷⁰ this contention focuses on the length of the time it will take to carry out the chosen protective action of evacuation for the beach population and reiterates the assertion that it is “too long.” In the absence of more, the Licensing Board was correct in dismissing this contention and, as

⁶⁵ MassAG Brief at 33.

⁶⁶ See *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-804, 21 NRC 587, 592 n.6 (1985).

⁶⁷ SPMC Contentions Order — Part I, at 65.

⁶⁸ MassAG Brief at 33.

⁶⁹ See ALAB-924, 30 NRC at 367 n.164.

⁷⁰ See ALAB-932, 31 NRC at 408 & n.167.

in the case of MassAG Contention No. 36, essentially incorporating litigation over the timing of the beach evacuation within that concerning the validity of the ETE calculations.

E. MassAG Contention No. 56 alleges that “[t]he SPMC does not establish or describe coherent decision criteria to be used by emergency decision-makers in formulating an appropriate [PAR] and otherwise fails to provide guidelines for the choice of protective actions consistent with federal policy.” Of the six separate bases initially proffered in support of this contention, the Licensing Board rejected only Basis A. In that basis, the MassAG asserts that the SPMC’s provision for utilizing certain predetermined PARs, which are based in significant part upon containment-monitored radiation levels, is inadequate. As grounds for dismissing Basis A, the Licensing Board declared that, as the licensing board with jurisdiction over “offsite” emergency planning matters, it lacked the authority to rule on the assertedly “onsite” issue raised in this particular basis.

Before us, the MassAG maintains that the error in this ruling is clear from ALAB-916.⁷¹ In that decision, rendered in response to a properly filed directed certification motion, we held that the Licensing Board incorrectly rejected a previously admitted portion of a contention (MassAG EX-19, Basis D) concerning the validity of the computer model utilized to generate the PARs for the June 1988 full participation exercise on the ground that it lacked jurisdiction over the issue. In response to the MassAG’s allegation of error here, applicants maintain that Basis A of Contention No. 56 was an improper attack upon the emergency action levels (EALs) established in the onsite plan, which previously had been reviewed and sanctioned by the “onsite” Licensing Board.⁷² The staff, however, takes a somewhat different tack, arguing that the MassAG’s current reliance upon ALAB-916 makes his assignment of error “untimely,” in that he took no steps when ALAB-916 was issued to resubmit his rejected contention to the offsite Board for admission.⁷³

As ALAB-916 made clear, in creating separate licensing boards to consider the various issues that may be presented within a single licensing proceeding, the authority of each board to act (at least in the absence of any Commission directive to the contrary) is governed by the “jurisdiction” allocated to that board by the Chief Administrative Judge of the Licensing Board Panel, usually by way of a board constitution notice.⁷⁴ ALAB-916 also made apparent that, under the apportionment for this operating license proceeding, the “offsite” Board

⁷¹ 29 NRC 434 (1989).

⁷² Applicants’ Brief at 38 & n.112 (citing LBP-87-10, 25 NRC 177, 190-94 (1987)).

⁷³ NRC Staff Brief in Response to Intervenor Appeals from LBP-89-32 and LBP-89-17 (Mar. 21, 1990) at 68 [hereinafter NRC Staff Brief].

⁷⁴ See *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-901, 28 NRC 302, 307-08 & n.6, review declined, CLI-88-11, 28 NRC 603 (1988).

that rejected MassAG Contention No. 56, Basis A, is the board with “general” jurisdiction over the proceeding, with the separate “onsite” Board having within its precinct only those matters relating to “safety and onsite emergency planning issues.” Given this division of labor, as was the case with the contention under review in ALAB-916, the “offsite” Board here “correctly focused on the question of the scope of its jurisdiction *vis a vis* that of the so-called ‘onsite’ Board.”⁷⁵ Unfortunately, as was also the case with ALAB-916, “it came up with the wrong answer.”⁷⁶

In considering the admissibility of Contention No. 56, the Board declared that the proper focus was on the distinction, albeit “narrow, and perhaps somewhat arbitrary,” between EALs and PARs.⁷⁷ Observing that together EALs and PARs “span the [onsite/offsite] interface,” the Board nonetheless found that EALs “are immediately next to the onsite/offsite interface on the onsite side” and thus are “onsite” matters, while PARs “are immediately next to the interface on the offsite side” and so are “offsite” matters.⁷⁸ According to the Board, the regulatory assignment of primary responsibility for EAL classification to licensee personnel, along with the fact that classification is based in substantial measure upon plant conditions and factors affecting plant conditions, established the “onsite” nature of EALs. On the other hand, PARs would be considered “offsite” matters because regulations and NUREG-0654 guidance place the responsibility for choosing and implementing PARs upon state and local government response officials and, in an instance such as this when there is no governmental participation, upon the licensee’s offsite response organization.

With this dichotomy established, the Board found that, although portions of Basis A made reference to the offsite significance of the predetermined PARs and therefore seemed to be an offsite matter, the core of the allegation nonethe-

⁷⁵ ALAB-916, 29 NRC at 437.

⁷⁶ *Ibid.*

⁷⁷ SPMC Contentions Order — Part I, at 82. An EAL defines the level of an emergency situation based upon plant conditions and other relevant factors. 10 C.F.R. Part 50, App. E, § IV.C, establishes four classes of EALs (in ascending order of significance): Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency. See also NUREG-0654, at 1-3. The Notification and Alert classifications are intended to provide early and prompt notification of minor events that could lead to more serious consequences, while the Site Area and General Emergency classifications are intended to reflect conditions in which significant releases are likely or are occurring and could, in the latter instance, include core degradation with the potential for loss of containment. *Ibid.* Responsibility for establishing the EALs for a facility, including designation of the initiating conditions for each level based upon plant conditions, rests with the licensee. *Id.* Criterion I.D.1; see 10 C.F.R. § 50.47(b)(4). In contrast to the EAL, a PAR is a recommendation for protective action that should be taken in response to the emergency situation. The licensee is also responsible for having a mechanism in place, based on (among other things) the EALs for the facility, that provides a basis for making recommendations to appropriate state, local, or offsite response organization officials (in instances when state and local governments are not participating in emergency planning) on protective actions that might be taken to avoid projected doses. NUREG-0654, Criterion II.J.7. Offsite response authorities, however, bear the responsibility for assessing any licensee-recommended PAR and determining whether, taking into account local conditions existing at the time of the emergency, it is appropriate and should be implemented in the plume EPZ. See *id.* Criteria I.D.4, II.J.9, II.J.10.m.

⁷⁸ SPMC Contentions Order — Part I, at 82.

less was the supposed improper utilization of within-containment monitoring levels for the predetermined PARs. According to the Board, “[s]ince effluent parameters are a part of the plant status consideration within the dominion of the plant licensee in setting EALs [(emergency action levels)], . . . Basis A, at least, is fundamentally an onsite matter.”⁷⁹ The Board thus refused to consider this basis further because it was not within its jurisdiction.

We agree with the Board’s general analysis distinguishing between issues involving EALs or PARs as onsite or offsite matters, respectively. We do not agree, however, with its conclusion that the MassAG’s particular challenge to the sufficiency of the predetermined PARs set forth in the SPMC is an onsite matter. The Board found determinative the fact that the effluent parameter information that is incorporated into the predetermined PARs is the same type of onsite information used by the licensee in setting EALs, an onsite matter. Yet, as a review of the SPMC demonstrates, this type of information plays a role generally in establishing all PARs, predetermined or otherwise.⁸⁰ It thus renders poor service as a mark for plotting the line of jurisdictional demarcation if, as the Licensing Board correctly concluded, PARs are an offsite matter.

Instead, in line with the Board’s general holding concerning the status of EALs and PARs as onsite or offsite matters, we find that ascertaining the nature of the issue raised by Basis A to Contention No. 56 requires an inquiry into who is utilizing the information and why. For the EAL process, the primary responsibility for utilizing the onsite information rests with onsite personnel for the purpose of alerting onsite and offsite response personnel about an emergency situation at the facility.⁸¹ In contrast, for the PARs at issue here, the SPMC makes it clear that the primary responsibility for employing the effluent information rests squarely with offsite response personnel, i.e., the applicants’ offsite response organization, who (in consultation with Commonwealth officials) are to use it to reach a judgment about what the Board itself recognized is an offsite matter — establishing an appropriate PAR for the offsite population.⁸² We thus conclude that Contention No. 56, Basis A, raised an offsite issue and that the offsite Board had the authority to consider it along with the other bases provided in support of the contention.

This finding necessarily brings us to the additional issue posited by the staff: whether, in light of our ruling in ALAB-916, the MassAG’s failure to seek reconsideration from the Licensing Board of the dismissal of Contention No.

⁷⁹ *Id.* at 84.

⁸⁰ *See* SPMC (Procedures) IP 2.2, at 3, 15-17 (Rev. 0, Amends. 4 & 5); *id.* IP 2.5, at 16 (Rev. 0, Amend. 4).

⁸¹ *See* LBP-87-10, 25 NRC at 192-93.

⁸² *See* SPMC (Procedures) IP 2.5, at 5-11 (Rev. 0, Amends. 4 & 5).

56, Basis A, precludes him from raising the matter on appeal.⁸³ We share the staff's concern about the MassAG's seeming lack of genuine interest in the vigorous pursuit of Basis A when he had the opportunity to do so.⁸⁴ Nonetheless, as the staff implicitly concedes, the Commission's Rules of Practice place no affirmative obligation on the MassAG to have requested the Licensing Board to reconsider its ruling some ten months later when we handed down ALAB-916.⁸⁵ In the absence of such an obligation, he was entitled to await a final order and raise the matter by way of direct appeal, as he has, in fact, done.⁸⁶

Accordingly, we reverse the Licensing Board's determination that it lacked jurisdiction over the issue raised by MassAG Contention No. 56, Basis A, and remand the matter for further proceedings. This, of course, raises the question whether the full-power operating license for Seabrook may be allowed to continue in effect pending the outcome of the remand. In comparing the MassAG's allegations concerning the deficiencies in the predetermined PARs with the SPMC provisions concerning PAR generation, it appears to us that the principal factors he asserts should be part of the decisionmaking process as it relates to utilization of a predetermined PAR are, in fact, included as part of the overall process that is undertaken before any PAR is finally adopted.⁸⁷ We are, therefore, unable to conclude that there are significant deficiencies

⁸³ As the sole support for its assertion that the MassAG's attempt to invoke ALAB-916 should be rejected as untimely, the staff cites our decision in *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-583, 11 NRC 447, 449 (1980). In that case, we held that an "interested state" under 10 C.F.R. § 2.715(c) cannot participate as a matter of right on appeal to allege errors in a Licensing Board determination regarding seismic issues when it had not been involved in the litigation of those matters before the Licensing Board. Because the MassAG clearly was a full participant below concerning the predetermined PAR issue, that decision has no application in this instance.

⁸⁴ Indeed, the MassAG had at least two other opportunities to seek admission of Basis A of his Contention No. 56, even before ALAB-916 was issued. At the time of the offsite Licensing Board's initial ruling, he could have explicitly requested the presiding onsite Licensing Board to admit this portion of the contention, or he could have sought our interlocutory review of the Licensing Board's dismissal ruling via directed certification (as he later successfully did for the contention considered in ALAB-916). The staff does not rely upon these considerations to support its "timeliness" argument, however, and the applicants — addressing only the merits of the Licensing Board's onsite/offsite ruling — do not claim that there is any "timeliness" bar to the MassAG's argument on appeal.

⁸⁵ The Rules of Practice also impose no *explicit* obligation on the offsite Licensing Board to have referred the contention to the onsite Licensing Board, although such action is certainly within the scope of any board's "duty to conduct a fair and impartial hearing according to law, to take appropriate action to avoid delay, and to maintain order." 10 C.F.R. § 2.718. Further, as we have previously concluded with regard to the use of multiple licensing boards in a single proceeding, this discretionary case management tool cannot be used to the detriment of a party's rights. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-902, 28 NRC 423, 430, *review declined*, CLI-88-11, 28 NRC 603 (1988). Hence, the offsite Board's failure to refer the contention to its onsite brethren seemingly reflects its tacit concurrence in the MassAG's decision to "rest on his oars" until the time for a direct appeal.

⁸⁶ So too, the MassAG was not *obliged* by the Rules of Practice to seek either directed certification — a discretionary form of review in any event — or to refile his contention with the onsite Licensing Board. See *supra* note 84.

⁸⁷ See SPMC (Procedures) IP 2.5, at 5-10. In this regard, the MassAG's central premise — that the SPMC process for evaluating the use of the predetermined PAR does not take into account a variety of relevant factors — may well be mistaken and thus an appropriate subject for a motion for summary disposition.

in the SPMC relative to PAR generation for which adequate compensating measures do not exist and thus do not have grounds for the extreme measure of license suspension.⁸⁸ Nonetheless, as we indicated previously in a similar circumstance,⁸⁹ should the MassAG wish to challenge this determination in a motion before the Licensing Board seeking a suspension, the Board is to act upon the motion, following the receipt of responses, with all possible expedition.

F. In his Contention EX-12, Bases A, B, and D, the MassAG asserts that the June 1988 full participation exercise demonstrated that the applicants' emergency warning system failed to comply with the regulatory provisions concerning early notification and clear instruction of the general public found in 10 C.F.R. § 50.47(b)(5) and Part 50, App. E, § IV.D.3, as well as the guidance in NUREG-0654, App. 3, and the applicable exercise objective. In Basis A, the MassAG refers to three instances of what he contends are noncompliance with Exercise Objective 12, which contemplates a demonstration of the ability to alert the public and to begin the dissemination of an instructional message through the emergency broadcast system (EBS) within fifteen minutes of a decision by state officials to begin notification. He alleges that in these instances, eighteen, thirty, and fifteen minutes, respectively, elapsed between the time the person portraying a Massachusetts government representative made a general determination to begin siren sounding and EBS instructional messages and the time the siren sounding and the broadcast of EBS messages were actually initiated. He further contends that the delay was due in large part to discussions concerning EBS message content that took place between the person portraying a Commonwealth representative and applicants' emergency response officials, after the determination to issue a general alert was made but before authorization to begin the siren sounding and EBS processes was given. Basis B maintains that applicants' notification efforts in the exercise did not comply with the dictate of 10 C.F.R. Part 50, App. E, § IV.D.3, that "initial notification" must be essentially completed "within about 15 minutes" because in each instance the time to broadcast the initial EBS message, lasting between three and five minutes, would have to be added to the existing times in order to complete "initial notification." The MassAG claims that this would add significantly to the exercise times, clearly placing them beyond the applicable regulatory limit for initial notification. Finally, in Basis D the MassAG states that the exercise demonstrated that the total length of time from the declaration of an emergency condition to the completion of initial public notification is overly lengthy in that too many "physical and administrative steps" exist in the applicants' alert and notification system to provide timely completion of public notification.

⁸⁸ See 10 C.F.R. § 50.47(c)(1).

⁸⁹ See ALAB-937, 32 NRC at 152.

The Licensing Board rejected Bases A and B on the ground the MassAG had substantially and improperly lengthened the time periods involved in all three incidents through an interpretation of the applicable regulations and guidance in a manner that failed to recognize a notification decision is not complete, so as to start the fifteen-minute period running, “until the important aspects of the notification have also been decided.”⁹⁰ The Board also found those bases failed to meet the pleading requirement that any purported exercise deficiencies must be alleged to demonstrate a “fundamental flaw” in the SPMC. Finally, the Board declared that Basis D was insufficient because its essential components, Bases A and B, were without substance and because Basis D did not delineate, nor was the Board aware of, any standard setting forth how quickly the relevant notification decision must be made after the declaration of an emergency condition.

The Licensing Board was correct in rejecting Basis A as footed on an unreasonably narrow interpretation of when the alerting/notification “decision” has been made so as to start the clock for assessing the timeliness of the alerting/notification process. The close operational correlation between the siren alerting system and the EBS notification system is clear.⁹¹ As a consequence, for the purpose of determining the timeliness of the alerting and notification process, a decision to initiate the systems cannot reasonably be said to be finalized until there has been not only a determination that these systems should be activated but also a decision about what EBS messages should be broadcast. The time periods posited by the MassAG in support of Basis A are fatally flawed because they do not reflect the proper starting point for any assessment of timely system activation. With respect to Basis B, as our recent determination in ALAB-935 makes clear, in considering compliance with the requirement in Part 50, App. E, § IV.D.3, that initial notification be completed “within about fifteen minutes,” the amount of time needed to complete the EBS message is essentially irrelevant,⁹² thereby negating the MassAG’s argument that exercise compliance was impossible because of the message completion period. Finally, the Licensing Board was correct in its assessment that, in contrast to the time constraints delineated in 10 C.F.R. Part 50, App. E, § IV.D.3, within which state officials must be notified of the declaration of an emergency by a licensee and the time within which initial notification must be completed, there is no regulatory requirement establishing a specific time frame for a decision to begin notification following the declaration of a particular emergency classification. Basis D thus lacks a foundation as well.⁹³

⁹⁰ Exercise Contentions Order at 37.

⁹¹ See ALAB-935, 32 NRC 57, 61-62 (1990).

⁹² *Id.* at 68-69.

⁹³ In appealing the dismissal of this contention, the MassAG also asserts that the application of the fundamental flaw standard “in the manner applied here” sets an impermissibly high threshold for the admission of the contention. MassAG Brief at 38. We reject that argument, however, as lacking both sufficient explanation and merit.

G. As part of the basis for its Contention No. 3, intervenor SAPL seeks to challenge the adequacy of the decontamination showers in the trailers provided for radiation monitoring of Massachusetts EPZ evacuees. Pointing to the NUREG-0654 guidance that there "shall" be the capacity to provide monitoring for evacuees "within about a 12-hour period,"⁹⁴ SAPL asserts that the same standard should be applicable for completing any decontamination of evacuees who might need such protection. Noting that compliance with the twelve-hour guidance requires that the trailers have ten or more monitoring stations, each processing evacuees at a rate of slightly more than one per minute, SAPL claims that the provision of only two showers in each trailer for decontamination would leave the applicants unable to meet the same twelve-hour guideline. This is so, SAPL contends, because applicants' planning basis provides for ten minutes per decontamination shower. In a bench ruling supplementing its June 1988 order rejecting this portion of the basis for the contention, the Board barred further litigation on the ground that, in contrast to the standards for monitoring capacity, there is no regulatory requirement or guidance that specifies a period for the completion of evacuee decontamination.⁹⁵

Before us, SAPL asserts that the Commission's guidance on monitoring logically compels the conclusion that the standard for carrying out decontamination activities should be completed within the same time period and that SPMC planning clearly is deficient because it cannot meet that guideline. This line of argument implicitly acknowledges that, as the Licensing Board recognized, there is no guideline or regulatory requirement relating to decontamination activities that parallels the NUREG-0654 "twelve hour" timing guideline for monitoring EPZ evacuees.⁹⁶ The thesis necessarily rests, therefore, on the unspoken premise that a substantial portion of those individuals who will be monitored also will require decontamination at the monitoring station. SAPL having failed to provide any support for the premise, this portion of the basis of SAPL's contention is without substance and was properly dismissed.⁹⁷

⁹⁴NUREG-0654 (Rev. 1, Supp. 1) Criterion II.J.12; *see supra* note 11.

⁹⁵Tr. 15,644-46, 15,649-52.

⁹⁶As the staff points out, in its earlier determination relating to the NHRERP the Licensing Board rejected this same argument concerning applicability of the twelve-hour monitoring guideline to decontamination activities. LBP-88-32, 28 NRC at 722. SAPL did not appeal that determination as part of its challenge to the Board's partial initial decision on the NHRERP nor has it made any attempt to demonstrate that the situation in Massachusetts would be any different than that in New Hampshire with regard to this ruling.

Further with respect to SAPL's argument that a time limit applies to decontamination activities for members of the public who are EPZ evacuees, we note that, in contrast to its clear provisions for monitoring and decontamination for *onsite personnel and offsite emergency workers*, NUREG-0654 fails to make any mention of the need for decontamination for *evacuees*. Compare NUREG-0654 Criteria II.J.3 -4, II.K.7 (monitoring and decontamination for onsite personnel) and *id.* (Rev. 1, Supp. 1) Criterion II.K.3, 5 (dosimeter distribution and decontamination for emergency workers) with *id.* Criterion II.J.12 (monitoring of evacuees).

⁹⁷Before us, SAPL also argues that, even if there is no regulatory standard governing the timing for decontamination activities, the adequacy of decontamination facilities should be considered as relevant to the general issue

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H. In their Contention EX-2, intervenors TOH and NECNP contend that the June 1988 exercise demonstrated that there is no reasonable assurance that school children will be protected in the event of a radiological emergency at Seabrook. As bases for this contention, they set forth allegations regarding inaccurate and confusing instructions to the public concerning the care of school children, bus drivers unable to complete their evacuation route assignments without assistance, slow or late protective action decisions regarding school children, and failure by the State of New Hampshire to follow through on protective actions for school children. Initially, the Licensing Board admitted the contention, finding that the allegations in basis paragraph seven concerning a "profusion of ordered protective actions" were adequate to show a "pattern" of repeated or related failures associated with an essential element of the plan, thereby satisfying the threshold showing required by ALAB-903 for admission of a contention alleging that exercise deficiencies reflect a "fundamental flaw" in the emergency plan.⁹⁸ Subsequently, however, applicants filed a motion to dismiss the contention, asserting that the intervenors' prefiled testimony on the contention failed to establish the requisite pattern. The Licensing Board thereafter dismissed the contention.⁹⁹ Before us, intervenors challenge this action, asserting that the testimony in question, which allegedly would have proved that New Hampshire response officials failed to provide follow-up PARs for students in five of seventeen towns previously ordered to shelter,¹⁰⁰ established a "gross breach of public safety" so pervasive in its negative implications for protective action decisionmakers that it manifests a fundamental flaw in the plan.¹⁰¹

Even if we accept as true the claims set forth in the prefiled testimony with regard to the failure of New Hampshire response officials to provide a follow-up protective action for the sheltered school children,¹⁰² under the standards set forth in ALAB-903 that testimony is inadequate to establish the existence of a

of whether the planned facilities provide "reasonable assurance" under 10 C.F.R. § 50.47(a)(1). Putting aside the question of whether this general standard provides any basis for inquiry in the absence of a specific regulatory direction arising from section 50.47(b) and the implementation guidance in NUREG-0654, see CLI-90-2, 31 NRC at 213, 217; ALAB-932, 31 NRC at 424, as the Licensing Board recognized in its supplemental bench ruling, this clearly was not the basis upon which SAPL sought to have its contention litigated. See Tr. 15,658.

⁹⁸ Exercise Contentions Order at 68-69 (citing *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499 (1988)).

⁹⁹ See Tr. 25,189-222.

¹⁰⁰ The prefiled testimony in question, which was provided by Town of Kensington Emergency Management Director Sandra F. Mitchell, was marked for identification as MassAG Exh. 115 but was, of course, not admitted into evidence because of the Board's dismissal of the contention.

¹⁰¹ [TOH] and [NECNP] Brief on Appeal of LBP-89-32 (Jan. 24, 1990) at 28.

¹⁰² Although the applicants referred to their motion as one to "dismiss" the contention, it is apparent that given the proceeding's procedural posture at the time the motion was filed, it should more properly have been submitted and treated as motion for summary disposition, with the prefiled testimony serving as a statement of material facts not in dispute. See Motion to Dismiss Contention TOH/NECNP EX-2 (June 8, 1989) at 1-2. This labeling flaw aside, for the reasons set forth *infra*, the applicants were entitled to summary disposition in their favor on the merits of the contention.

fundamental flaw in that state's emergency plan. Whether through this testimony or otherwise, intervenors have failed to make any proffer suggesting why this apparent misstep "can be remedied only through a significant revision of the plan," the second element required to show a fundamental flaw. Relatively minor, additional training emphasizing careful attention to follow-up protective actions, not a significant redesign of the plan, is the appropriate course of action to correct a deficiency like that identified in the prefiled testimony. The prefiled testimony provided in support of Contention EX-2 thus having failed to establish any grounds for a finding that the exercise demonstrated a fundamental flaw in the emergency plan, intervenors' assertion that the Licensing Board erred in precluding further litigation on their contention is without justification.¹⁰³

I. TOA Contention No. 4 and TOS Contention Nos. 6 and 10 speak to the issue of the adequacy of the SPMC insofar as it concerns traffic control at key intersections along the evacuation routes. Each contention was rejected at the threshold in whole or in part on the ground that it lacked the requisite specificity.¹⁰⁴ More particularly, as the Licensing Board saw it, the sponsors of the contentions were obliged to identify the "critical" intersections that assertedly required greater traffic control resources than are contemplated by the SPMC.¹⁰⁵

The TOS/TOA attack upon the disposition of the three contentions focuses essentially upon the imposition of that obligation, which assertedly saddled those intervenors with an unduly large burden in the presentation of traffic control issues. TOS/TOA would have it that, even in the absence of an identification of particular intersections, the contentions "contained sufficient specificity for the other parties to know generally what was to be litigated" and that "further details" could be obtained "via discovery."¹⁰⁶

¹⁰³ Intervenors' reliance on this purported deficiency also appears to run afoul of the declaration in ALAB-903 that "a particular person's failure to follow the requirements of the emergency plan itself" will not be considered a fundamental flaw unless the person is shown to perform a critical role and there is no backup structure that would mitigate the effects of the individual's failure. ALAB-903, 28 NRC at 505-06. In this instance the prefiled testimony, although not addressing whether the individuals involved performed a critical role, does indicate that a backup structure existed. Ms. Mitchell states in her testimony that, when personnel in the incident field office who recognized there might be a problem with the school children made a telephone check with the State emergency operations center (EOC), EOC personnel indicated that arrangements for the children had been made (although they could not provide details about what the arrangements were). See MassAG Exh. 115, at 5.

¹⁰⁴ At the time of the submission of the contentions, 10 C.F.R. § 2.714(b) (1988) mandated that the bases for a contention be "set forth with reasonable specificity." The current Rule of Practice does not contain that language but imposes a higher standard: "[e]ach contention must consist of a specific statement of the issue of law or fact to be raised . . . with . . . [a] brief explanation of the bases of the contention . . . [and a] concise statement of the alleged facts . . . which support the contention . . ." 10 C.F.R. § 2.714(b)(2) (1990). See 54 Fed. Reg. 33,168 (1989).

¹⁰⁵ See SPMC Contentions Order — Part II, at 9-16, 43-44, 46-47.

¹⁰⁶ Brief of [TOS] and [TOA] on Appeal of [LBP-89-32] (Jan. 24, 1990) at 7-9, 16 [hereinafter TOS/TOA Brief]. Although TOS subsequently amended its Contention Nos. 6 and 10 to assert bases, see [TOS] Amended Contentions with Respect to Applicants' Plan for Massachusetts Communities (June 17, 1988) at 4-5, 6-7 [hereinafter TOS Amended Contentions], we do not understand it to claim that the amendments cured the deficiency that the Licensing Board found in those contentions as originally submitted. Indeed, had TOS deemed the amended

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We think otherwise. Presumably, the two towns are fully aware of the identity of every intersection within their borders that might be a part of an evacuation route. And, assuredly, at the time the contentions were filed, the towns must also have had in mind which of those intersections might require traffic control resources in addition to those (if any) now provided for in the SPMC. (Indeed, if this knowledge was not within the towns' grasp, one might well inquire into whether the contentions had any real foundation.) Thus, it scarcely can be seriously suggested that the Licensing Board's specificity ruling under attack placed an onerous burden upon them.

Nor can we accept the TOS/TOA insistence that, notwithstanding the lack of specification respecting the particular intersections that assertedly should receive additional traffic control resources, the applicants and the staff were on adequate notice as to "what was to be litigated."¹⁰⁷ The fact is that, without such specification, those parties had very little information of substance regarding the claim against which they were being called upon to defend. In this connection, the staff correctly observes that discovery is not an appropriate vehicle for determining the particulars of which traffic sites may impede a planned evacuation. We have determined previously that "[s]ection 2.714 [does not permit] the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery *against* the applicant or staff."¹⁰⁸ By the same token, an intervenor should not be allowed to transfer the burden of fleshing out a vague contention through discovery by the applicants and staff.¹⁰⁹

J. TOS Contention No. 3 alleges that the SPMC is deficient in that it fails to establish that applicants' ORO will be "sufficiently equipped and replenished" to provide necessary emergency services within the Town of Salisbury over a protracted period. No separate statement of basis was filed in support of this contention. The Licensing Board rejected it, citing "vagueness and lack of basis."¹¹⁰ Intervenor TOS now challenges this ruling, asserting that the contention did provide notice of what was to be litigated with reasonable specificity and that the issue presented by the contention — i.e., the adequacy of the SPMC's

contentions to identify sufficiently the intersections it had in mind, there would have been no necessity for it to confine itself before us to the extreme position that no such identification was required.

¹⁰⁷ TOS/TOA Brief at 16. As we have noted, one of the purposes of the specificity requirement is to put the other "parties on notice of what issues they will have to defend or oppose." *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-845, 24 NRC 220, 230 (1986).

¹⁰⁸ *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982) (emphasis supplied), *vacated in part on other grounds*, CLI-83-19, 17 NRC 1041 (1983); *see Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 192 (1973), *aff'd sub nom. Business and Professional People for the Public Interest v. AEC*, 502 F.2d 424 (D.C. Cir. 1974).

¹⁰⁹ Given the foregoing conclusions, the Licensing Board was justified in limiting the scope of the hearing on the matter at hand to the intersections that had previously been specifically identified. Those conclusions also render it unnecessary to consider any other, independent reason the Licensing Board might have assigned for the rejection of TOS Contention No. 10.

¹¹⁰ SPMC Contentions Order — Part II, at 42.

provisions for one shift of applicant-supplied, evacuation-related personnel, with additional personnel equal to twenty percent of the one shift total to be held in reserve — was appropriate for litigation in this proceeding.

TOS's protests notwithstanding, this contention clearly lacked the necessary basis and specificity. It is nothing more than a general statement declaring that applicants cannot provide the necessary response resources, without reference to any specific information indicating why this is so. Nor do we find persuasive the TOS argument that in discovery the parties would have revealed the specific bases for the contention.¹¹¹ Certainly, as applicable here, 10 C.F.R. § 2.714 does not require that all material factual information supporting a contention be disclosed in providing a basis for the contention.¹¹² Nonetheless, in putting forth a contention a party must make a showing sufficient to demonstrate to the Licensing Board "that there has been sufficient foundation assigned for it to warrant further exploration."¹¹³ Because TOS failed to provide even a minimal supporting basis for its Contention No. 3, the Board acted correctly in dismissing the contention.¹¹⁴

K. TOS also appeals the Licensing Board's dismissal of its Contention No. 7 for lack of basis and specificity. That contention alleges, again without any separate statement of basis, that the SPMC fails to compensate for the negative effect upon evacuation traffic flow of emergency personnel who park their vehicles at the transfer points and other traffic sensitive points in the Town of Salisbury.

In dismissing the contention, the Licensing Board declared its agreement with the staff's position that "such parking by emergency personnel is not likely to be done in a manner that will impede evacuation, nor does the contention include a basis for believing otherwise."¹¹⁵ Intervenor TOS characterizes this determination as an improper "finding of fact," made without litigating the contention, that parked cars would not impede traffic.¹¹⁶ We do not agree. As the Licensing Board correctly pointed out, intervenor TOS failed to provide any statement of basis in support of the central premise of the contention, i.e., that emergency workers will, for whatever reason, park their cars in a manner that

¹¹¹ See *supra* p. 427.

¹¹² See *supra* note 104.

¹¹³ *Philadelphia Electric Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (footnote omitted), *rev'd in part on other grounds*, CLI-74-32, 8 AEC 217 (1974).

¹¹⁴ Moreover, TOS's attempt now to provide such a basis by reference to the SPMC's provisions relating to evacuation personnel is unavailing. As applicants and the staff point out, other intervenor contentions — JI-11 and JI-12 (initially submitted as MassAG Contention Nos. 77 and 78) — squarely raised the issue of the capability for continuous staffing of the applicants' response organization. See Applicants' Brief at 39; NRC Staff Brief at 77. These contentions subsequently were litigated and decided by the Licensing Board in a merits determination, see LBP-89-32, 30 NRC at 472-73, from which none of the parties has appealed. Accordingly, the rejection of TOS Contention No. 3, even if erroneous, constitutes harmless error.

¹¹⁵ SPMC Contentions Order — Part II, at 45.

¹¹⁶ TOS/TOA Brief at 6.

could impede traffic. As a consequence of intervenor's failure to supply some support for this proposition, which is by no means self-evident, the Licensing Board properly dismissed the contention.¹¹⁷

L. With its Contention No. 9, intervenor TON sought to contest the adequacy of both the protective action option of sheltering as it is utilized under the SPMC and the criteria in the SPMC governing whether that option would be invoked. As the basis for this contention, TON alleged that the standards under which the option would be invoked were too vague; that there had been no evaluation of the sheltering capacity within the Town of Newbury or on the nearby beach area of Plum Island; and that there had been no consideration of whether owners of public buildings would allow their buildings to be used by others as shelters or that potential shelters would afford a sufficient level of protection.

The Licensing Board initially dismissed the entire contention, declaring that the "matters identified in the basis are in part conclusional and in part have been covered in prior litigation."¹¹⁸ Thereafter, in response to arguments by TON requesting clarification of its ruling,¹¹⁹ the Board admitted for litigation that portion of the basis alleging that the SPMC criteria for determining whether sheltering or evacuation should be utilized were too ambiguous.¹²⁰ Although acknowledging that the portion of the basis alleging noncooperation of building owners was properly dismissed,¹²¹ TON now asserts that the Board improperly dismissed those portions of the contention's basis alleging that there had been insufficient evaluations of sheltering capacity (particularly with regard to the transient population that utilizes the beach areas on Plum Island near the Town of Newbury) and of the level of protection afforded by potential shelter structures.

¹¹⁷ As with other of its contentions, prior to the Board's dismissal ruling, TOS sought to amend this contention to provide a supporting basis. See TOS Amended Contentions at 5. Again, however, it makes no claim that the amendment cured the deficiency found in its contention as originally submitted. See *supra* note 106. In any event, as applicants note, their testimony submitted in response to intervenor testimony challenging the sufficiency of emergency worker parking in the Town of West Newbury states that the procedures provided to traffic control point/access control point traffic guides contain the instruction to park their vehicles out of the way of the traffic flow. Applicants' Brief at 40-41; see Applicants' Rebuttal Testimony No. 9 (Traffic Management and Evacuation of Special Populations), fol. Tr. 17,333, at 28. The testimony further declares that there is no reason traffic guides will need their cars nearby because they will be given portable radios. Applicants' Rebuttal Testimony No. 9, at 28. Thus, as with TOS Contention No. 3, see *supra* note 114, any error in dismissing this contention was harmless.

¹¹⁸ SPMC Contentions Order — Part II, at 37.

¹¹⁹ Tr. 14,604-11.

¹²⁰ Memorandum and Order (Aug. 19, 1988) at 7 (unpublished).

¹²¹ [TON]'s Brief on Appeal of the Partial Initial Decision of the [SPMC] LBP-89-32 (Jan. 24, 1990) at 6 [hereinafter TON Brief]. It is apparent that TON is correct in this regard, given that the issue of cooperation by the private owners of buildings that could be used as shelters previously was litigated in the New Hampshire portion of this proceeding, LBP-88-32, 28 NRC at 759, 772, and TON made no attempt to show that building owners in Massachusetts would act any differently from those in New Hampshire. See *supra* pp. 402-03. Moreover, despite TON's suggestion to the contrary, see TON Brief at 6 n.4, its lack of participation in the New Hampshire portion of this proceeding in no way relieved it of the responsibility to make such a showing in challenging the utility plan for the Massachusetts plume EPZ.

The exact nature of the sheltering option, particularly as it affects the transient populations that use the New Hampshire and Massachusetts ocean beaches, has been the subject of some uncertainty in this proceeding, so much so that we had occasion recently in ALAB-939 to attempt to provide some explanation of our understanding of this protective action alternative and how it is to be carried out.¹²² As we described it there, if a directive is given to “shelter-in-place,” which is the general label that has been given to the sheltering option utilized under both the NHRERP and the SPMC,¹²³ those at home, at work, or in school are to remain where they are.¹²⁴ Transients located indoors or in private homes are to follow the same course of action, while transients without “access” to an indoor location are to evacuate from the EPZ as quickly as possible, either by using their own vehicle or in buses to be provided for those without a vehicle.¹²⁵ For the transient beach population that has transportation, a “shelter-in-place” directive would answer the obvious question of who has “access” to an indoor location by advising everyone who is not already inside a building to return to his or her car and evacuate.¹²⁶

As we indicated in ALAB-939, with this formulation of the sheltering option for the nontransportation dependent beach population, implementing detail becomes largely unnecessary. It is not a situation in which a large transient population is being directed by emergency response officials to seek shelter in a discrete location (e.g., a beachfront area) with a finite number of buildings that can provide protection. Accordingly, there is no need to determine the available shelter capacity for that population when the only instruction is to remain indoors if you are already there and to evacuate by car if you are not. Thus, TON’s assertion that a shelter capacity survey is necessary for implementing the SPMC shelter-in-place option is misdirected.

With respect to that portion of the basis for TON Contention No. 9 that questions the level of protection afforded by the shelter structures that might be available, as we have indicated previously in assessing the Board’s dismissal of MassAG Contention No. 28 concerning sheltering for trailer residents, the sheltering PAR for the SPMC is based upon the conservative sheltering factor for a wood frame house without a basement.¹²⁷ As with the MassAG’s Contention No. 28, TON has failed to provide any support for its central premise that buildings that potentially could be used as shelters are, to any significant degree,

¹²² 32 NRC 165, 168 (1990).

¹²³ See App. Tr. 75-76.

¹²⁴ ALAB-939, 32 NRC at 167-68.

¹²⁵ *Ibid.*

¹²⁶ See *id.* at 172-73.

¹²⁷ See *supra* note 60 and accompanying text.

of a type that would not yield this minimal sheltering factor.¹²⁸ Accordingly, this portion of the basis for TON Contention No. 9 also lacks an adequate foundation.¹²⁹

For the foregoing reasons, the Licensing Board's disposition in unpublished orders dated July 22, July 28, August 19, and December 15, 1988 (and related bench rulings) of MassAG Contention Nos. 28, 29, 30, 34, 35, 36, 38, 39 (Basis F), 41, 48 (Basis C), 49 (Basis A), 65, 74, 83 (Basis C), EX-12 (Bases A, B, and D), EX-13 (Bases A, B, and D), and EX-18 (Basis B); SAPL Contention No. 3; TOH/NECNP Contention No. EX-2; TOA Contention No. 4; TOS Contention Nos. 3, 6, 7, 10, and 21; TON Contention Nos. 1 (Basis b) and 9; and TOWN Contention No. 4 is *affirmed*.¹³⁰ Further, the Licensing Board's disposition of MassAG Contention No. 56 (Basis A) in its July 22, 1988 order is *reversed*. Finally, insofar as it relates to his Contention Nos. 18 (Basis E), 77 (Basis E), and 83 (Basis A1 and 3), the MassAG's appeal is *dismissed* for the want of adequate briefing.

It is so ORDERED.

FOR THE APPEAL BOARD

Barbara A. Tompkins
Secretary to the
Appeal Board

¹²⁸ While testimony from New Hampshire planning officials concerning the NHRERP's sheltering provisions suggested that some exploration of the level of protection afforded by potential shelters in the New Hampshire beach areas might be necessary, *see* ALAB-939, 32 NRC at 173-74, TON has made no showing indicating that similar concerns are applicable in Massachusetts.

¹²⁹ TON devotes several pages of its brief to the "revisionist" argument that hearing testimony concerning the adequacy of the SPMC's traffic management plan relative to access to Plum Island establishes a basis for the admission of Contention No. 9. TON Brief at 7-10. This, however, is of no moment with respect to the issue before us, i.e., whether TON *at the initial pleading stage* supplied sufficient information as a supporting basis for the admission of the contention.

¹³⁰ Before us, intervenor MassAG also characterizes a Licensing Board ruling concerning the admission of an exhibit relating to the PAR procedures for the Seabrook onsite emergency plan as an incorrect determination that MassAG Contention EX-19, Basis A, lacked specificity sufficient to allow the litigation of onsite plan decision criteria. MassAG Brief at 36-37. We will address this matter as part of our consideration of that portion of his appeal challenging the Board's merits determinations relative to the PARs. Also, we will address intervenor appeals from the Licensing Board's threshold disposition of MassAG Contention Nos. 1-6, and TOWN Contention Nos. 1 and 2 as part of our consideration of the MassAG's appeal relative to the Board's application of the "best efforts" presumption of 10 C.F.R. § 50.47(c)(1).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Peter B. Bloch, Chair
Dr. Richard F. Cole
Dr. Harry Foreman

In the Matter of

Docket Nos. 50-443-OLR
50-444-OLR
(ASLBP No. 90-600-01-OLR¹)
(Emergency Planning;
ALS² Patients)

PUBLIC SERVICE COMPANY OF
NEW HAMPSHIRE, *et al.*
(Seabrook Station, Units 1
and 2)

December 18, 1990

The Licensing Board dismissed, in response to a motion for Summary Disposition, an issue remanded to it by the Appeal Board concerning the expected time of evacuation for advanced life support patients. The Board decided that there is no purpose for which an ETE for ALS patients is applicable and that Intervenors failed to demonstrate the existence of a genuine issue of fact concerning whether adequate estimates of the ETE had been made.

¹ The case numbers in this Order are correct. Disregard the case numbers contained in the Order constituting this Board.

² ALS = Advanced Life Support.

EMERGENCY PLANNING: EXPECTED TIME OF EVACUATION (ETE); ADVANCED LIFE SUPPORT PATIENTS

There is no purpose for which an ETE for ALS patients is applicable. Decisions about the evacuation of each ALS patient will be made by the attending medical personnel based on medical considerations apart from an estimate of how long it would take to evacuate the last ALS patient.

RULES OF PRACTICE: SUMMARY DISPOSITION

The Board discussed the factors favoring and opposing the granting of motions for summary disposition.

MEMORANDUM AND ORDER (Summary Disposition Motion)

Memorandum

In this Memorandum and Order, we have decided to grant Public Service Company of New Hampshire *et al.*'s (Licensees') motion for summary disposition of an issue remanded to us by the Appeal Board and the Commission, relating to evacuation time estimates (ETEs) and the preparation of advanced life support (ALS) patients for evacuation in the New Hampshire Radiological Emergency Plan.

I. BACKGROUND OF THE CASE

In ALAB-924, 30 NRC 331 (1989), the Appeal Board questioned whether evacuation time estimates (ETEs) in the New Hampshire Radiological Emergency Response Plan (NHRERP) had been adequately derived with respect to consideration of the time necessary to prepare advanced life support patients for transportation.³ Consequently, the Appeal Board remanded the issue to Judges Smith, Cole, and McCollom (now known as "the offsite EP⁴ Board").

Before the offsite EP Board acted, the Commission itself issued its immediate effectiveness decision. CLI-90-3, 31 NRC 219 (1990). In that decision, in

³The Appeal Board's concern relates to the testimony of Intervenor's witness Joan Pilot that ALS patients cannot be prepared in any way for the arrival of an evacuation vehicle until after the arrival of the vehicle. ALAB-924, 30 NRC at 351.

⁴EP = Emergency Planning.

which the Commission authorized the operation of the Seabrook Station, the Commission summarized the Appeal Board's action as follows:

On the basis of our effectiveness review, we agree that the issue identified by the Appeal Board — whether the ETEs for nonambulatory individuals found in the NHRERP take into account the amount of time it would take to prepare ALS patients for evacuation — remains unresolved. It is simply not clear that the 40-minute "loading passenger" time found in the NHRERP includes this preparation time as the Licensing Board asserts. . . .⁵

Regarding the requirement that emergency plans include ETEs for each special facility, the Commission also stated, *id.* at 244, that, "We find reasonable the Licensing Board's extensive discussion of this issue in the SPMC decision, LBP-89-32, *supra*, 30 NRC at 421-23."

This Licensing Board notes that in the offsite EP Board's decision, cited by the Commission as "reasonable" and hence continuing to be the law of this case (as it has not been overturned), that Board found that it is not necessary for Applicant to calculate ETEs for "each special population group and special facility" because to do so would be

an impractical, unreasonable, and time-consuming approach to making a PAR Tr. 21,552-55; Apt. - Reb. No. 16, *supra*, at 62.⁶

In LBP-90-12, 31 NRC 427, 437 (1990), the offsite EP Board interpreted the ruling of the Appeal Board and the guidance of the Commission as remanding the issue of the NHRERP's assumptions about the evacuation times for *nonambulatory hospital* patients. That Board, *id.* at 438-39, identified the following subissues:

- (1) How long does it take to effectively prepare an ALS patient for transportation?
- (2) Would preparation of patients at an early initiating condition, e.g., declaration of an alert, or at an order to evacuate, be medically appropriate?
- (3) How many ALS patients are there in the EPZ? Where are the ALS patients? Only at Exeter and Portsmouth Hospitals?
- (4) Would uncertainties in the times available to prepare ALS patients for evacuation produce ETEs that are too inaccurate to be useful in the selection of protective action options?

Following a brief dissertation on the general rules for summary disposition, we shall discuss Licensees' proposed facts upon which it bases its motion for summary disposition and the subissues identified by the offsite EP Board.

⁵ *Id.* at 243 (footnote omitted).

⁶ LBP-89-32, 30 NRC 375, 422 (1989), Finding 2.97.

II. STANDARD FOR SUMMARY DISPOSITION⁷

Decisions concerning summary disposition are critical. If a motion is too readily granted, intervenors are deprived of their opportunity to cross-examine witnesses and otherwise establish that the licensee has not carried its burden of persuasion on issues of potentially great safety and environmental importance. If a motion is too readily denied, the result is unnecessary delay and hearing expense. In addition, an inappropriate denial of summary disposition may cause the hearing process to concentrate too heavily on unimportant issues and to detract from the time and energy that might be devoted to more important issues.

The Commission's Rules of Practice provide that summary disposition of any matter involved in an operating license proceeding shall be granted if the moving papers, together with the other papers filed in the proceeding, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law. 10 C.F.R. §2.749(d). The use of summary disposition has been encouraged by the Commission and the Appeal Board to avoid unnecessary hearings on contentions for which an intervenor has failed to establish the existence of a genuine issue of material fact. *E.g.*, *Statement of Policy on Conduct of Licensing Proceedings*, CLI-81-8, 13 NRC 452, 457 (1981), and *Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550-51 (1980). A material fact is one that may affect the outcome of the litigation. *Mutual Fund Investors, Inc. v. Putnam Management Co.*, 553 F.2d 620, 624 (9th Cir. 1977).

When a motion for summary disposition is made and supported by affidavit, a party opposing the motion may not rest upon the mere allegations or denials of an answer but must set forth specific facts such as would be admissible in evidence that show the existence of a genuine issue of material fact. 10 C.F.R. §2.749(b). All material facts set forth in the statement of material facts required to be served by the moving party will be deemed to be admitted unless controverted by the statement of material facts required to be served by the opposing party. 10 C.F.R. §2.749(a). Any answers supporting or opposing a motion for summary disposition must be served within twenty (20) days after service of the motion. *Id.* If no answer properly showing the existence of a genuine issue of material fact is filed, the decision sought by the moving party, if properly supported, shall be rendered. 10 C.F.R. §2.749(b).

In addition to the requirements of 10 C.F.R. §2.749, various licensing board and appeal board decisions set the standards for summary disposition. The appeal board decisions have stated that "summary disposition is a harsh remedy. It deprives the opposing litigant of the right to cross-examine the witness, which

⁷ This discussion was adapted from the discussion in *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), LBP-82-114, 16 NRC 1909, 1911-13 (1982).

is perhaps at the very essence of an adjudicatory hearing.” *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 755 (1977). Summary disposition is only authorized where the moving party is entitled to a judgment as a matter of law, where it is quite clear what the facts are, and where no genuine issue remains for trial. In determining such a motion, the record will be reviewed in the light most favorable to the party opposing the motion. The opposing party need not show that it would prevail on the factual issues, but only that there are such issues to be tried. *Pacific Gas and Electric Co.* (Stanislaus Nuclear Project, Unit 1), LBP-77-45, 6 NRC 159, 163 (1977).

Before granting a motion for summary disposition, the Licensing Board must conclude that there is no litigable issue of fact. *Power Authority of the State of New York* (Greene County Nuclear Power Plant), LBP-79-8, 9 NRC 339, 340 (1979). In addition, in an operating license proceeding, where significant health and safety or environmental issues are involved, the Licensing Board should only grant summary disposition if it is convinced that the public health and safety and environment will be satisfactorily protected. *Cincinnati Gas and Electric Co.* (William H. Zimmer Nuclear Power Station), LBP-81-2, 13 NRC 36, 40-41 (1981). Even if no party opposes a motion for summary disposition, the movant’s filing must still establish the absence of a genuine issue of material fact. *Perry*, ALAB-443, *supra*, 6 NRC at 753-54.

III. CONSIDERATION OF LICENSEES’ PROPOSED FACTS

In their motion for summary judgment on the ALS issue, Licensees have set forth sixteen statements of material facts which they say preclude any genuine issues for trial. The Licensees have supported their motion with four affidavits and one hospital plan, the New Hampshire Emergency Response Plan for Exeter Hospital.⁸ The NRC Staff has supported the Licensees’ motion and attached one affidavit of its own.⁹ The Intervenors have filed their opposition to the motion and provided the Board with four affidavits to counter the Licensees’ statements.¹⁰

Licensees’ proposed facts are as follows:

1. A prudent planning basis for the ALS patient census at the time of an emergency would be a total of 35 ALS patients in the entire EPZ (22 at Exeter and 13 at Portsmouth Regional Hospital).
2. This number of 35 would occur during the day on week days.

⁸ Licensees’ Motion for Summary Disposition with Respect to the “ALS Patient Issue” (June 26, 1990).

⁹ NRC Staff Answer in Support of Licensees’ Motion for Summary Disposition of ALS ETE Issue (July 16, 1990).

¹⁰ Intervenors’ Opposition to Licensees’ Motion for Summary Disposition with Respect to “the ALS Patients Issue” (July 31, 1990).

3. At Exeter Hospital the average preparation time for an ALS is 115 minutes, 70 minutes of which can be accomplished prior to ambulance arrival, leaving a final preparation and loading time of 45 minutes.
4. In the case of Portsmouth Regional Hospital, the average preparation time for an ALS patient is 45 minutes, 10 minutes of which can be accomplished prior to ambulance arrival, leaving a final preparation and loading time of 35 minutes.
5. In accordance with its emergency management plan, Portsmouth Regional Hospital will use internal operational procedures and protocols to ensure 24-hour staffing for emergency conditions.
6. Exeter Hospital commences calling in Staff for an emergency at Seabrook at the Site Area Emergency Classification.
7. The hospital emergency plans for both Exeter and Portsmouth Regional Hospitals provide for initiation of assembly of patients, as medically appropriate, upon receipt of the recommendation to evacuate which will maximize the number of patients available for evacuation upon arrival of the first ambulances.
8. The emergency plans for both hospitals provide for the decision on ALS patients protective actions (e.g., evacuation) to be made by the medical staff on a case-by-case basis and without reference to the ETE for that individual.
9. In the event an ALS patient is not evacuated or is delayed in evacuation, the only other protective action for such a patient is sheltering.
10. Exeter Hospital is located in ERPA F, the shortest midweek daytime ETE for which is 4:40.
11. Exeter Hospital is capable of loading five ambulances simultaneously. Patients will be loaded two per ambulance.
12. The Portsmouth Hospital is located in ERPA G, the shortest midweek daytime ETE for which is 5:35.
13. Portsmouth Hospital is capable of loading three ambulances simultaneously. Patients will be loaded one per ambulance.
14. The last ambulance is estimated in the ETE study to arrive at its assigned special facility 2:13 after the order to evacuate.
15. Towards the end of the evacuation time frame, the last ambulance to evacuate an ALS patient will take 15 minutes or less to proceed from the special facility to the EPZ boundary.
16. The loading of patients will begin before the last ambulance arrives at Exeter Hospital.

Most of Licensees' sixteen statements of material fact are not directly challenged by Intervenor. For certain of Licensees' statements, Intervenor would place limitations on the scope or application of the statements. The most serious challenges to Licensees' proposed statements are:

- the lack of consideration, in this remand, of ALS patients in Massachusetts (addressed under subissue 3 in section IV, *infra*);

- the use of midweek daytime estimates for preparing and loading ALS patients as compared to times that might be required during off-peak hours when hospital staffs are considerably reduced (addressed under subissue 1, *infra*); and
- a challenge to the assertion that ETEs are useless in the PAR decisionmaking process for ALS patients (addressed under subissue 4, *infra*).

The Board accepts as its findings each of Licensees' proposed facts, as limited by the following discussion. In particular, the remand was limited to the New Hampshire emergency plan and we therefore understand the proposed statement of material facts to relate solely to New Hampshire. We note that Material Fact 15 applies to any ambulance evacuating ALS patients toward the end of the evacuation time frame, when most of the general public has already left.

IV. FINDINGS WITH RESPECT TO FOUR SUBISSUES

A. Subissue (1): How long does it take to efficiently prepare an ALS patient for transportation?

Licensees' affiant Dr. Callahan states that the emergency planning time spent on ALS patients will be 90 minutes for preparation, 10 minutes moving and 15 minutes loading, giving a total preparation and loading time of 115 minutes for Exeter Hospital. Callahan at 6. He states that of this 115-minute time period, 70 minutes can be performed prior to the time an ambulance arrives at the hospital. *Id.* at 7.

The Intervenors do not present any evidence to contest Licensees' statement of the length of time to prepare and load an ALS patient at Exeter Hospital.

Licensees' affiant Dr. Albertson states that the total time to prepare an average ALS patient at Portsmouth Hospital is 45 minutes.¹¹ Albertson at 6. He states that 10 minutes of the preparation generally can be accomplished prior to the time the ambulance arrives at the hospital.

The Intervenors present the affidavit of Stanley J. Plodzick, Assistant Administrator of Patient Services for Portsmouth Regional Hospital. Mr. Plodzick does not differ with Dr. Albertson's statements concerning the 45-minute preparation and loading time for patients during the midweek daytime periods. Plodzick at 1, 2. However, Mr. Plodzick states that at times other than midweek daytime periods, such as evening or at night, staffing levels at Portsmouth Hospital are too low to allow such efficient patient preparation. According to Mr. Plodzick, the

¹¹ Dr. Albertson's estimate is "depend[ent] on the patient's condition, the life support equipment required, and how long it takes to stabilize the patient." Albertson at 6. The same is true with regard to the amount of preparation that can be accomplished prior to the arrival of the ambulance. *Id.* at 7.

time it would take to prepare and load an ALS patient into an ambulance during the evening or nighttime would probably be 60 to 90 minutes. *Id.* at 3. The testimony is consistent with that of Dr. Albertson, the Licensees' affiant, who indicates that his 45-minute estimate is dependent on full staffing of Portsmouth Hospital. Albertson at 6-10.

Licensees' Statement of Material Fact (5) anticipated Mr. Plodzik's argument, stating that provision has been made for 24-hour staffing of the hospital during an emergency. Dr. Albertson states, at 14, that:

[the] Hospital's Emergency Management Plan . . . ensure[s] 24-hour staffing for emergency conditions. The Hospital will use existing internal operational procedures and protocols to ensure appropriate assignment of staff.

Again, Mr. Plodzik's answer does not actually differ with Dr. Albertson's statement about the overall contours of the plan but he offers an important qualifier:

Although the . . . Hospital has an emergency preparedness program that allows for calling in additional staff in the event of an emergency, I do not believe that the activation of that call-in procedure would have a significant impact on reducing the sixty to ninety minute estimated time for preparing and loading ALS patients during the evening and night time.

Plodzik at 4. Taking Mr. Plodzik's assertion in a light most favorable to the Intervenor raises doubt as to whether Portsmouth Hospital staff can always prepare and load its ALS population as efficiently as Dr. Albertson asserts. Were an emergency to occur during the evening and weekend hours, patient preparation might take longer. However, Mr. Plodzik's argument fails to show why it is material that patient preparation during evenings and weekends might take 60 to 90 minutes.¹³

Even if some reduction in efficiency of preparation and loading of patients were to occur because of reduced staffing and we were to use Mr. Plodzik's off-hours time estimates, this would increase the preparation and loading time by 15 to 45 minutes per patient, which does not demonstrate any consequence

¹³ [There is no footnote 12. In numbering the footnotes in the slip opinion, it was inadvertently skipped; the omission has been continued in this publication.] In responding to a statement filed in support of a motion for summary disposition, a party who opposes the motion must aver specific facts in rebuttal. 10 C.F.R. § 2.749(b); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-83-32A, 17 NRC 1170, 1174 n.4 (1983). Further, by virtue of section 2.749(b), if a motion is properly supported, the opposition may not rest upon mere allegations or denials; rather the answer must set forth specific facts showing that there is a genuine issue of fact. *Houston Lighting and Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-629, 13 NRC 75, 78 (1981); *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-584, 11 NRC 451 (1980); 10 C.F.R. § 2.749(b).

with respect to the ability to evacuate ALS patients in about the same time as the general population will be evacuated during daytime hours.¹⁴

The *last* ambulance to arrive at its assigned special facility (either Exeter or Portsmouth Hospital) in daytime hours is expected to arrive 2 hours and 13 minutes after the order to evacuate. Licensees' Statement No. 14. Licensees' uncontradicted Statement No. 12 permits us to conclude that the shortest midweek daytime ETE in the emergency protective action zone for Portsmouth Hospital (ERPA G) is 5 hours and 35 minutes. The shortest midweek daytime ETE for ERPA F (Exeter Hospital) is 4 hours and 40 minutes which also results in an ALS ETE less than that for the general population.

We conclude that the ETE for ALS patients is favorable compared to that for the general population, even if we accept Intervenor's estimate of the time to prepare patients. Since we also find (in Section D, below) that neither the hospital staff nor emergency planning officials have any use for the ETE with respect to possible evacuation of hospital patients, there is no material issue of fact with respect to the time it takes to prepare ALS patients for transportation. In any event the time to prepare and load ALS patients for transportation following arrival of the ambulance in daytimes-midweek, when the ALS patient load is greatest, is estimated at 35 to 45 minutes (Facts 3 and 4) which comports well with the 40-minute "passenger loading" time found in the NHRERP (Vol. 6 at 11-26) and the ETE Study at 11-22 and appears to demonstrate that adequate consideration was given to the preparation and loading time of ALS patients.

B. Subissue (2): Would preparation of patients at an early initiating condition, e.g., declaration of an alert, or at an order to evacuate, be medically appropriate?

It is possible to do limited preparation of patients prior to the ambulance

¹⁴ Intervenor has not provided testimony that raises a genuine issue of fact concerning the ETE for ALS patients being materially longer than that for the general population.

The testimony fails to state how many fewer patients might be expected in the nonpeak census at Portsmouth Hospital or how the alleged increase in individual patient preparation times would impact on the total preparation and loading time for ALS patients. Compare Albertson at 10-12. Nor do Intervenor provide any testimony concerning how long it would take for different members of the Staff to begin arriving at the hospital during an extended emergency, under the emergency call-in plan. Albertson at 14; see Plodzik at 4. Presumably, periodic Staff arrivals would reduce patient preparation times. (Note that the ETE for the ERPA in which the Portsmouth Hospital is located is 5 hours and 35 minutes. ETE Handbook, Table 2-1, at 2-7; ETE Study, Table 108, at 10-24.)

It is possible (though Intervenor has failed to support the possibility in their affidavits) that the ETE for ALS patients will exceed that of the general population because some few ALS patients may not be evacuated within the time frame of the general population at the time the evacuation takes place. We do not consider even this speculative possibility to be material because: (1) both hospitals are at least 7 miles from Seabrook so that radiation doses will be somewhat dissipated; (2) patients will be evacuated when ready and only a few are likely to be delayed; (3) patients will be sheltered in the effective shelter of the hospital (see pp. 445-46, below, concerning sheltering) during their increased wait; (4) passage through the empty streets of the EPZ after others have evacuated will be speedy, resulting in minimal radiation exposure; and (5) no use will be made of the ETE for ALS patients, as we discuss below.

arrival depending on hospital practice and patient condition. There is some difference of opinion concerning this question, but the difference is without substantive effect. Licensees Statement No. 7 is:

The hospital emergency plans for both Exeter and Portsmouth Regional Hospitals provide for initiation of assembly of patients, as medically appropriate, upon receipt of the recommendation to evacuate, which will maximize the number of patients available for evacuation upon arrival of the first ambulances.

The Affidavit of Betsy Cohen seems to diverge from this point of view. However, she states, at 5, that:

Apart from the advance preparation of a patient's paper work,¹⁵ *in many, if not most*, instances it would probably not be medically appropriate to prepare an ALS patient at an earlier initiating point. [Emphasis added.]

This statement of Ms. Cohen, particularly when viewed in light of paragraph 4 of her statement (in which she includes detaching patients from life support equipment and substituting portable life support equipment within her estimate of preparation time for an ALS patient), is entirely consistent with Licensees' statement — which makes no effort to forecast the frequency that would be "medically appropriate" to prepare a patient at an earlier initiating point. Since none of the other affidavits address this point, we conclude that there is no genuine issue of fact concerning this issue.

**C. Subissue (3): How many ALS patients are there in the EPZ?
Where are the ALS patients? Only at Exeter and Portsmouth
Hospitals?**

There are, on average, thirty-five ALS patients in the New Hampshire EPZ at midweek during the daytime (twenty-two at Exeter Hospital and thirteen at Portsmouth Hospital).

Underlying the Licensees' estimates of the ALS population is the assumption that only the special facilities located in the *New Hampshire EPZ* should be counted in the planning basis. The Intervenor's do not take issue with the ALS populations for the New Hampshire EPZ.

The Intervenor's do take issue with the Licensees' assertion that only New Hampshire hospitals should be relied upon for an estimate of the ALS population. The Intervenor's argue that the ALS patient populations of Anna Jaques

¹⁵ The Board notes, at the suggestion of Dr. Foreman, that work ought to be done in advance to prepare the patient psychologically for the move. To the extent that Intervenor's witness may have left this work to be done after ambulance arrival, this much additional work can be done in advance.

Hospital (forty-three) and Amesbury Hospital (seven) in the Massachusetts EPZ should be included in the ETE planning basis. As support for this assertion, the Intervenor's point to language found in LBP-89-32, *supra*, 30 NRC at 402, where we said:

In fact, the ETEs presented in the SPMC are for the entire region under study, including both Massachusetts and New Hampshire areas, . . . that NUREG-0654 calls for integrated emergency planning between contiguous political jurisdictions (NUREG-0654, at 19, 23-24).

Response at 3.

We do not find the Intervenor's argument convincing. ALAB-924 was a remand of the issues evolving from the New Hampshire Radiological Emergency Response Plan. The Appeal Board was concerned that the ETEs for ALS patients found in the NHRERP had not received appropriate consideration, and the remand was designed to correct any deficiency the Board may find with respect to those ETEs. Clearly, the Appeal Board's concern focused on ETEs for New Hampshire special facilities. We are therefore persuaded that ALS populations in Massachusetts facilities are not material to the remanded issue.

Most important to this discussion, however, is that the Intervenor's have failed to offer any explanation as to how the Massachusetts patients could be material to the remanded issue. They contest the numbers of patients "in the EPZ," but just what does this protest do? Do these patients affect the Licensees' ETEs for Exeter and Portsmouth Hospitals? Do they show the plan to be deficient? Just why has this proposition been put before the Board? We are left to guess as to what the significance of the protest is, and we choose not to take this issue to trial on the basis of guesswork.¹⁶ It has also been amply demonstrated that the number of ALS patients in the New Hampshire EPZ is at a peak during midweek daytime periods. The parties are in general agreement that thirty-five ALS patients would be the planning number for a daytime midweek situation in the New Hampshire EPZ. Licensees' affiant Dr. Albertson states that the daytime midweek ALS population at Portsmouth Hospital is approximately thirteen and "at other times [the] . . . number of potential ALS patients . . . is reduced." Albertson at 4. Similarly, Dr. Callahan states that the patient population at Exeter Hospital reaches a peak during the daytime on weekdays and that "[d]uring other times [the] . . . potential number of ALS patients . . . will most probably be reduced." Callahan at 4.

The Intervenor's have failed to shoulder their burden by presenting evidence to controvert Licensees' assertion that ALS populations at Exeter and Portsmouth Hospitals are at their peak midweek during the daytime. Intervenor's affiant Mr.

¹⁶ See *supra* note 13.

Plodzick, the Assistant Administrator of Patient Services for Portsmouth Hospital, did not address the issue in his affidavit.¹⁷

Licenseses' Statement No. 1, cited above, says that there are expected to be only thirty-five ALS patients in the entire EPZ and that they will be only at Exeter Hospital and Portsmouth Regional Hospital. Intervenors did not challenge this statement with respect to the portion of the EPZ within New Hampshire.

Intervenors also attempt to raise a question concerning the maximum patient census in the hospitals. However, their affidavits do not support this alleged genuine issue of fact with respect to Licenseses' Statement of Fact No. 2. There are two affidavits referenced. One, by Allan DesRosiers, ¶ 8 (at 5), corroborates Licenseses' statements about the likelihood of a reduction of ALS patient census (at Essex County Hospital, in Massachusetts) during shifts other than weekdays.¹⁸ The other, by Betsy Cohen, ¶ 7 (at 2-3), states that for Amesbury Hospital the census on weekday evenings stays at approximately seven, which is the daytime peak. Consequently, her testimony corroborates the use of the daytime census as a maximum, even though she describes a very different hospital in a different state.¹⁹

D. Subissue (4): Would uncertainties in the times available to prepare ALS patients for evacuation produce ETEs that are too inaccurate to be useful in the selection of protective action options?

To answer a question concerning the usefulness of ETEs in selection of protective action determinations, we need to look at the procedures in place under which the determinations of protective action are made. First, it is uncontested that the ultimate decision whether to shelter or evacuate ALS hospital patients during an emergency rests with the medical personnel at the hospital. Callahan at 5; Albertson at 5, 15; Bonds at 7, 18; Callendrello at 9.

Initial notification to the hospitals of an emergency at Seabrook will be at the Alert stage and will be via telephone from the local (Exeter or Portsmouth) Emergency Response Organization. See NHRERP, Vol. 26A/Rev. 2, at 10, and Vol. 33/Rev. 3, at 3.9-2, respectively. The information related at that time will be the Emergency Classification Level of the ongoing incident at Seabrook. A tone-alert radio serves as an additional means of notification and is automatically

¹⁷ Intervenors' affiant Allan DesRosiers, the President of Anna Jaques Hospital located in the Massachusetts portion of the EPZ, states that with regard to his hospital, "there is likely to be some reduction in the ALS patient census . . . at night[] and on weekends" at his hospital. DesRosiers at 8.

¹⁸ Mr. DesRosiers challenges only the time estimates for preparing patients during the different shifts. His time estimates are based primarily on staff availability in relationship to expected patient census. His concern is of scarcity of staff during evening and weekday shifts.

¹⁹ Her testimony also concentrates on patient preparation time, arguing for longer times on evening and weekend shifts.

activated as part of the Public Alert and Notification System (PANS). (Exeter Hospital Support Plan at 9). Any changes in the classification of the accident will also be made by telephone from the local Emergency Response Organization.

The Emergency Classification Levels in order of severity are:

- A. Unusual Event
- B. Alert
- C. Site Area Emergency
- D. General Emergency

Id. at 3, 4.

Protective Action Recommendations (PARs) are made by State Officials for each Emergency Response Planning Area (ERPA). There are seven (7) ERPAs within the Emergency Planning Zone (EPZ), which is an area of approximately 10-mile radius surrounding the Seabrook Station. Some portions of the EPZ go out to almost 14 miles from the Station. Seabrook Station Evacuation Time Study, Rev. 2 (ETE Study), Figure 1-3, at 1-17. Exeter Hospital is located in ERPA F approximately 6 to 7 miles from Seabrook. Portsmouth is 11 to 12 miles away and is located in ERPA G. *Id.*, Table 10-31 at 10-19.

The PAR for all transit-dependent populations including ALS patients at the Portsmouth and Exeter Hospitals will be the same PAR proposed for the general population. Seabrook Station Evacuation Time Study Handbook (ETE Handbook), section 3.1.2, at 3-1. If the state recommendation is to evacuate the general population, the hospital officials will decide on a patient-to-patient basis whether to evacuate. At this stage it is a medical decision, and the ETE will not play a role in that decision. While the general-population ETE may have had a role in the state's recommendation, the medical personnel must decide if the ALS patient can handle the trip, a trip not only to the edge of the EPZ but past that to the receiving hospital. Once the decision as to medical feasibility of safe transport is made, hospital officials must decide whether to transport the patients as soon as ambulances are available or to wait for the general population to exit prior to transporting the patients.

A review of the NHRERP documents indicates that unless conditions at special facilities warrant individual attention by state and local emergency personnel, any PARs to the general population would apply to the special facilities. Based upon this, it is anticipated that ALS patients medically capable of safe transport will be transported when the PAR for the general population is to evacuate. In the case of special facilities such as hospitals, the PAR may be revisited based upon input received from facility managers. At the initiative of the manager of the hospital, a more detailed evaluation of the PAR for the specific facility can be undertaken based upon facility-specific sheltering protective factors. The sheltering factors for the Exeter and Portsmouth hospitals

are 0.20 and 0.25, respectively. NHRERP Vol. 8, § 6.2, at 6.2.1. As guidance, New Hampshire Emergency Response personnel can use a Form B “Special Facility Protective Action Worksheet” and Table 6.9 “Special Facility Protective Action Guidance Chart” to assess the options of shelter, evacuation, and/or KI issuance. NHRERP, Vol. 8/Rev. 3, § 6, at 6.2-1, 6.9-1. The resulting protective action recommendation would be a facility specific recommendation that takes into account accident-specific data and sheltering factors. *Id.*

The EMS vehicles are expected to be able to mobilize quickly (about 20 minutes) because of the emergency nature of their daily tasks. Then, assuming a 2½-hour transit time to an evacuating facility (via a staging area) and 40 minutes to load passengers, the vehicle would begin traveling out of the EPZ within about 3½ hours. *Id.* §3.2.2, at 3-2; NHRERP, Vol. 6, at 11-26. Outbound travel would be controlled by the speed of other evacuating vehicles or would take about 15 minutes if the roads were clear. As can be seen from Table 2-1, the shortest ETE is 3:35 (3 hours, 35 minutes), so any outbound EMS vehicles would commingle with the general population and their ETE would be considered the same. ETE Handbook at 2-7, 3-2; NHRERP, Vol. 6, at 11-26. The shortest ETE listed in Table 2-1 does not include ERPAs F and G. For those regions including Exeter or Portsmouth Hospital, and midweek daytime scenarios (Regions 11, 12, 16, 17, and Scenarios 3 through 7), the minimum ETEs are even longer (4:40 for Exeter and 5:35 for Portsmouth, respectively). ETE Handbook, Table 21, at 2-7; ETE Study, Table 10-8, at 10-24.

The envelope times for evacuation of ERPAs F and G for the different accident scenarios range from 4:40 to 9:10. For each of the accident scenarios, the time required to prepare and load ALS patients is within the general-population ETE for the ERPA. ETEs specific to a generic ALS patient population are of limited utility in deciding to evacuate or shelter an ALS patient, due to variation in patient preparation times.

As we have read and analyzed the papers with respect to this issue, we have concluded that there is no one who would use ETEs for the thirty-five New Hampshire ALS patients for any constructive purpose. These patients represent a very special subpopulation. Their ETEs appear to be shorter than that calculated for the general population. Furthermore, these patients — who include patients in the Intensive Care Unit, the Operating Room/Recovery Room, and those in active labor — are under extensive medical supervision, and these professional caregivers are the only people in a position to evaluate the condition of the patient, the risks of moving the patient, the nature of required life-support equipment and whether the patient can be prepared for evacuation before the arrival of an ambulance, and the availability of properly trained staff to effect the move. The medical staff also will be generally informed about the risk to their patients of a release from Seabrook Station and will be able to make a

rough comparison of the possible effects of a release and the health effects of moving them.

Licensees' uncontradicted Statement says:

8. The emergency plans for both hospitals provide for the decision on ALS patients protective actions (e.g., evacuation) to be made by the medical staff on a case-by-case basis and without reference to the ETE for that individual.

Since ETEs, strictly speaking, are averages and are not computed for individuals, we understand Licensees to be alleging that the medical staff will make its choices without reference to the ETE for that *class of individuals*.

Although Intervenors say they contest this Statement of Licensees (Intervenors' Statement No. 6), they do not allege any specifics. In particular, they do not state who would use the ETE for a class of individuals or for what purpose they would use it.²⁰

We conclude that the choice of the correct strategy must be made by the medical staff on an individual basis, given all the facts at hand, and that they would not (and should not) use a precalculated average value such as an ETE to make a decision for any particular patient. Hence, there is no genuine issue of fact here, either.

V. SUMMARY OF CONCLUSIONS

We grant summary disposition because there is no genuine issue of material fact as to any of these findings:

1. A prudent planning basis for the ALS patient census at the time of an emergency would be a total of thirty-five patients in the entire New Hampshire portion of the EPZ (22 at Exeter Hospital and 13 at Portsmouth Regional Hospital).
2. A prudent planning basis for the time required to prepare ALS patients to be moved by an ambulance is 45 minutes after the arrival of the ambulance.
3. The ETE for ALS patients is similar to that for the general population during daytime hours.
4. Decisions about whether to evacuate ALS patients will be made by medical staff on a case by case basis and without reference to the ETE for that class of patient.

We therefore conclude that there is no genuine issue of fact with respect to the remanded issue. Consequently, the issue will be summarily dismissed.

²⁰ See, e.g., Affidavit of Robert L. Goble, at iv, which states:

Although uncertainties are always present in developing ETE's, reasonable and attainable accuracy in the estimates will produce results which can make a difference in the choice of PAR across a broad spectrum of accident situations.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 18th day of December 1990, ORDERED, that:

Summary Disposition is granted with respect to the remanded question of whether evacuation time estimates (ETEs) in the New Hampshire Radiological Emergency Response Plan (NHRERP) had been adequately derived with respect to consideration of the time necessary to prepare advanced life support patients for transportation. ALAB 924, 30 NRC 331, 351 (1989).

This is a final disposition of the portion of this case that is pending before us.

THE ATOMIC SAFETY AND LICENSING BOARD

Dr. Richard F. Cole
ADMINISTRATIVE JUDGE

Dr. Harry Foreman (by PBB)
ADMINISTRATIVE JUDGE

Peter B. Bloch, Chair
ADMINISTRATIVE JUDGE

Bethesda, Maryland

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judge:

Peter B. Bloch
G. A. Linenberger, Technical Advisor

In the Matter of

Docket Nos. 70-00270
30-02278-MLA
(ASLBP No. 90-613-02-MLA)
(RE: TRUMP-S Project)
(Byproduct License No. 24-00513-32;
Special Nuclear Materials
License No. SNM-247)

CURATORS OF THE
UNIVERSITY OF MISSOURI

December 19, 1990

The Presiding Officer in this proceeding determined that Licensee did not need to disclose the curie content of ^{241}Pu and $^{241}\text{americium}$ in its special nuclear material because they contributed only a small proportion of the total biological dose, compared to ^{239}Pu and ^{240}Pu , and were not significant contaminants. This determination was related to a ruling that Licensee is not covered by regulations, effective after its license was granted, requiring that there be either an emergency plan or an evaluation of offsite dose in a possible emergency if the curie content of special nuclear material equals or exceeds 2 curies.

RULES OF PRACTICE: SUBPART L; REMEDIES OF LICENSE DEFECTS

In Subpart L proceedings, as in formal proceedings, showing that a license application has a defect does not demonstrate that the appropriate relief is denial

of the license. Relief is governed by 10 C.F.R. 2.1233(c), which says “the initial written presentation of a party that requested a hearing or petitioned for leave to intervene must . . . *describe in detail what relief is sought with respect to each deficiency or omission.*” (Emphasis added.)

RULES OF PRACTICE: LICENSEE NOT RESTRICTED TO THE CONTENT OF ITS APPLICATION

In attempting to demonstrate the validity of its license, a licensee is not restricted to the content of its application. It may introduce whatever evidence it chooses in rebuttal of Intervenor’s evidence.

RULES OF PRACTICE: RELIEF; BURDEN OF GOING FORWARD, PROOF

Intervenor’s must demonstrate that there is a reason for relief to be required. It is then up to licensee to demonstrate, by a preponderance of the evidence, that some lesser relief than license revocation is appropriate.

EFFECTIVE DATE OF REGULATIONS

Licensee need not comply with the provisions of 10 C.F.R. §§ 30.32(i)(1), 70.22(i) — relating to whether or not emergency planning may be required for some special nuclear materials licenses — because these sections became effective after its application was approved and because these sections govern the content of applications.

REGULATIONS NOT AFFECTING APPLICATIONS

Compliance with 10 C.F.R. §§ 30.35(c), 70.25(c), dealing with financial responsibility for decommissioning, is not germane to a license proceeding since these sections do not govern the content of applications for licenses but impose obligations on licensees.

PART 70 LICENSE: DISCLOSURE OF ²⁴¹Pu AND ²⁴¹AMERICIUM NOT REQUIRED

Pursuant to the regulations and to regulatory guidance, contained in Regulatory Guide 10.3, licensee need only disclose significant contaminants in an application for a Part 70 license. Significance is primarily determined with respect to the proportionate contribution to dose. However, also relevant may

be the absolute size of the dose and whether or not the curie content of the contaminants affects the imposition of applicable regulatory provisions.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: Biological effectiveness, ²⁴¹Pu; Plutonium isotopes in special nuclear material; Significant contaminant (Regulatory Guide 10.3).

MEMORANDUM AND ORDER

(Pending Motions, Including Those Related to Possession of ²⁴¹Pu)

Memorandum

The Curators of the University of Missouri (Licensee) and The Missouri Coalition for the Environment, the Mid-Missouri Nuclear Weapons Freeze, Inc., and the Physicians for Social Responsibility/Mid-Missouri Chapter and ten named individuals (Intervenors) have filed cross-motions requesting reconsideration of my Memorandum and Order (Licensee's Partial Response Regarding Temporary Stay), LBP-90-38, 32 NRC 359 (1990).¹ They also have filed other motions, with the result that some of the legal arguments that have been raised have been explored in more than one context, assuring more than ample opportunity to address these points.

These filings include a variety of procedural points and they also address a portion of LBP-90-38, 32 NRC at 362-63, in which I made the following determinations, in the context of a determination concerning the appropriateness of keeping a temporary stay in effect, concerning Licensee's possession of ²⁴¹Pu

¹"Licensee's Motion for Partial Reconsideration of 'Memorandum and Order (Licensee's Partial Response Concerning Temporary Stay),' " November 15, 1990 (Licensee's Partial Reconsideration Motion); "Intervenors' Answer to Licensee's Motion for Partial Reconsideration of 'Memorandum and Order (Licensee's Partial Response Concerning Temporary Stay),' " November 26, 1990 (Intervenors' Answer to Partial Reconsideration Motion); "Intervenors' Motion for Summary Disposition of Part 70 License Amendment," November 14, 1990 (Intervenors' Summary Disposition Motion); "Licensee's Response to 'Intervenors' Motion for Summary Disposition of Part 70 License Amendment," " December 3, 1990 (Licensee's Response to Summary Disposition); "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 (Licensee's Partial Response Concerning Temporary Stay) and Emergency Order That Staff Hold in Abeyance Order of November 1," November 12, 1990 (Intervenors' Motion for Reconsideration of November 1 Order); "Licensee's Response to 'Intervenors' Motion for Reconsideration . . . and Emergency Order . . . Part I," November 16, 1990 (Licensee's Response to Part I of Motion to Reconsider); "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 . . . Part II," November 16, 1990 (Intervenors' Motion, Part II); "Licensee's Response to 'Intervenors' Motion for Reconsideration . . . Part II," (Licensee's Part II Response). Also relevant is the "NRC Staff Response to Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 and Emergency Order That Staff Hold in Abeyance Order of November 1" (Staff Response).

as part of the material that also contains the ^{239}Pu and ^{240}Pu that Licensee has been authorized to possess:

[T]he Morris Affidavit provides a detailed analysis of the form of plutonium that Licensee possesses, including "New Brunswick Laboratory Certified Reference Materials Certificate of Analysis, CRM 127" (Attach. 1²), a similar analysis by the National Bureau of Standards of a predecessor form of this same material (Attach. 1B), a 1982 analysis of this same special nuclear material by the Los Alamos National Laboratory (Attach. 7) and a calculation deriving the amount of ^{241}Pu in September 1990 from the Los Alamos analysis (Attach. 6).

At the present time, it appears likely that Licensee can succeed on the merits of each of the following arguments:

- The plutonium that the Licensee has received is a single 5 gram lot of New Brunswick Laboratory (NBL) Certified Reference Material (CRM) 127.³
- A conservative estimate of the total curie content of the 10 gms of plutonium that Licensee is authorized to possess — including 1.21 curies of ^{241}Pu ⁴ — is 1.992 curies.⁵
- The biological effectiveness of 1.21 curies of ^{241}Pu is the same as .0242 curies, or 24.25 millicuries, of an equivalently effective alpha-emitter.⁶
- Although it would have been preferable to disclose this quantity of material as a significant contaminant under the regulations, since it is equivalent to a millicurie quantity of an alpha emitter, this omission is not fatal to the application.^{7, 8}

² All Attachments are to the Morris Affidavit.

³ Morris Affidavit at 3.

⁴ The possession of ^{241}Pu is not expressly authorized in the license amendment.

⁵ The amount is derived from the Los Alamos analysis (Attach. 7), adjusted according to Licensee's estimate (Attach. 6) and summarized in Morris Affidavit, Table 1, at 6 — adjusted by subtracting alpha activity attributed to americium. (If the americium is included, the total curie content is 1.992, which is still less than 2. However, I find that it is not necessary to include the americium in computing the amount of plutonium.)

I note also that the Statement of Considerations to 10 C.F.R. Parts 30, 40, and 70, "Emergency Preparedness for Fuel Cycle and Other Radioactive Material Licensees," April 7, 1989, 54 Fed. Reg. 14,051 at 14,052 states that the table of quantities in Part 30 "includes all alpha emitters listed on any license for which the quantity to theoretically deliver a 1-rem effective dose equivalent would be less than 2 curies." It therefore appears that the NRC did not intend to include ^{241}Pu , which is a beta emitter, in the 2 curies of plutonium listed in the regulations as the threshold for emergency planning.

⁶ Morris Affidavit, Finding 29, at 12 (citing 10 C.F.R. Part 71, Table A-2). The derivation of millicurie is my own.

⁷ Regulatory Guide 10.3, "Guide for the Preparation of Applications for Special Nuclear Material Licenses of Less Than Critical Mass Quantities," section 4.3 provides:

the special nuclear material requested should be identified by isotope; chemical or physical form; activity in curies, millicuries, or microcuries; and mass in grams. Specification of isotopes should include principal isotope and significant contaminants. Major dose-contributing contaminants present or expected to build up are of particular interest." [Emphasis added.]

Note that the Nuclear Material Transaction Report through which Licensee received the special nuclear material from Rockwell International Corporation disclosed that it contained trace amounts of Pu-241 and Pu-240. Morris Affidavit, Attach. 3.

Note also that Intervenor has stated on several occasions that Licensee has permission to possess 0.7 curies of plutonium. That does not appear to be the case. Their permission is to possess 10 grams of "Plutonium-239/Plutonium-240" in accordance with its application and three specified letters. SNM-247, Amendment No. 12, Docket 070-00270 (Mar. 19, 1990). I find that they can also possess the associated ^{241}Pu .

⁸ A sentence in the original order, purporting to authorize the Staff of the Commission to issue a license amendment, was deleted by subsequent order.

- The failure of Licensee to disclose the presence of 1.21 curies of ^{241}Pu — the equivalent in biological effectiveness of alpha radiation equal to .0242 curies — in the licensed amount of plutonium does not cast doubt on its competence or on the competence of its personnel. Although I consider this to be a mistake, it is a mistake without any serious safety significance.

In the set of motions I am reviewing, several questions that are primarily legal in nature are fully briefed and are therefore ripe for determination. These questions are:

1. To what extent is it appropriate to permit Licensee to file material in this case that expands upon the material already filed in its application for a license?
2. How do 10 C.F.R. §§ 30.32(i)(1), 70.22(i), and 30.35(c), 70.25(c) affect this proceeding?
3. Should Licensee have disclosed the presence of ^{241}Pu in the plutonium material that it is using for the TRUMP-S project?
4. Should Licensee have disclosed the presence of $^{241}\text{americium}$ in the plutonium material that it is using for the TRUMP-S project?

I. GOVERNING LAW

A. Appropriate Relief

Intervenors have argued that a deficiency in fully disclosing relevant isotopes in an application for a special nuclear material license should invalidate the license. This is similar to Intervenors' earlier argument, which stated that a license application must stand on its own and must not be supplemented in the course of a hearing. Intervenors said:

What is to be litigated in this proceeding is whether there is "any deficiency or omission in the license application." 10 C.F.R. 2.1233(c). If there is, then the license is to be set aside.

* * *

. . . The entire proceeding becomes a perfect circle if the Intervenors intervene, point out that the license application is deficient, obtain a finding that it is deficient, and then confront a ruling that the application will be "considered to be amended to contain" the isotopes and curies omitted, and authorizes the amendment which was not requested.⁹

⁹This portion of Intervenors' argument addresses a portion of an earlier decision in which I authorized a license amendment in what I came to believe was a premature ruling, which I subsequently withdrew. There was, at that time, inadequate opportunity to argue the merits of such an amendment. This does not mean, however, that I could not issue such an amendment at the close of the proceeding if it were justified and germane to the notice of hearing.

The ruling is even more incomprehensible in view of the Licensee's contention that the application is sufficient, and need not be amended. See Licensee's Submittal of October 30, 1990.

* * *

Intervenors have been unable to locate any regulation which confers on the Presiding Officer the authority to "consider the license application to be amended" to correct deficiencies he has ruled do indeed exist in the application as submitted. Since it is the sufficiency of the license application which we are litigating, it seems abundantly clear that the Presiding Officer has no authority to rewrite the application retroactively. If there were any regulation authorizing such action, it would be a flagrant denial of due process of law. Rewriting the license application retroactively, for the applicant (over the objection of all parties), by the Presiding Officer, deprives the public of any opportunity to participate, to be heard, to present evidence, and to explain why the newly "deemed" application is insufficient. The Presiding Officer is not to do the applicant's job for it, when the applicant has failed to do it; he is to rule whether the applicant has submitted a proper application.¹⁰

Despite Intervenors' eloquent plea, however, both the regulations and NRC practice suggest that the Presiding Officer has great latitude in fashioning an appropriate remedy within the scope of the Notice of Hearing. As Intervenors' Motion for Summary Disposition correctly states, at page 2, this question arises in the context of Subpart L of the procedural rules, particularly 10 C.F.R. § 2.1233(c), which says:

In a hearing initiated under § 2.1205(c), the initial written presentation of a party that requested a hearing or petitioned for leave to intervene must[
1.] describe in detail any deficiency or omission in the license application, with reference to any particular section or portion of the application considered deficient, [2.] give a detailed statement of reasons why any particular section or portion is deficient or why an omission is material, and [3.] describe in detail what relief is sought with respect to each deficiency or omission. [Emphasis added.]

This section of the regulations determines that the question of relief is to be resolved as a matter of argument and proof, which is consistent with prior NRC practice.¹¹ Intervenors have the burden of going forward to describe what relief they consider appropriate; in this instance, they have stated that rescission of the license is appropriate.¹² Once they have stated their position, the burden

¹⁰ Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990, at 7-8. Note that Intervenors use the term "applicant" to refer to the party that I refer to as "Licensee."

¹¹ See *Texas Utilities Generating Co.* (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-83-81, 18 NRC 1410, 1452-56 (1983) (discussion of appropriate relief in light of Board findings that quality assurance for design had been inadequate); *General Public Utilities Nuclear Corp.* (Three Mile Island Nuclear Station, Unit 2), LBP-89-7, 29 NRC 138, 141-42, 190 (1989). (Intervenors argued that they should prevail because the Staff's preliminary environmental impact statement was deficient; the Board ruled it would decide the issue on the entire evidentiary record before it, not just based on the corners of the environmental impact statement.)

¹² One alleged ground for denying the license is that the Staff has failed to fulfill its obligations. For this proposition, there is no regulatory support. Other than in certain limited contexts involving the National Environmental Policy Act, it would be improper to deny a license that has been properly applied for and that is merited on the ground that the Staff has made some error.

of persuasion lies (as is customary with each element of the case) with the Licensee, who may demonstrate by a preponderance of the evidence that some lesser relief is appropriate. *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-763, 19 NRC 571, 577, *review declined*, CLI-84-14, 20 NRC 285 (1984).

In this case, I will not determine the appropriate relief, if any, until after all the written filings have been made. Until that has occurred, it will not be possible to place issues in the full context of the admitted areas of concern¹³ and to determine the seriousness of alleged deficiencies in light of other allegations of deficiency. Hence, until that time I will not know what relief — if any — is appropriate.

Parties have permission to add their evidentiary filings on this question to filings yet to be made. (Intervenors may, however, have a right of rebuttal if new information is submitted in Licensee's last filing.)

B. Applicability of 10 C.F.R. §§ 30.32(i), 70.22(i), 30.35(c), 70.25(c)

1. Regulations Concerning Emergency Planning

Intervenors have argued that Licensee must comply with regulatory requirements concerning either an evaluation of dose effects *or* an emergency plan. These requirements may be found in 10 C.F.R. §§ 30.32(i)(1) and 70.22(i).

Intervenors are incorrect in both of these assertions because the sections involved both became effective on April 7, 1990 (54 Fed. Reg. 14,051) and are only applicable to *applications* filed after that time. In this instance, Licensee not only filed its application before that time but had its licenses granted before that time.

Because of Intervenors' argument that these sections should be applied to this case during the pendency of this hearing, I requested to be briefed on the subject. LBP-90-38, *supra*, 32 NRC at 364. However, I am wholly persuaded by Licensee's argument, which relies on the specific wording of these sections. The argument I adopt as my own (as applicable both to § 30.32(i)(1) and to § 70.22(i)) is:¹⁴

Section 30.32(i)(1) is a carefully crafted regulation which explicitly states:

Each *application* to possess radioactive materials in unsealed form, on foils or plated sources, or sealed in glass in excess of the quantities in § 30.72, "Schedule C — Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release," must contain either:

¹³ As Licensee points out in Licensee's Response to Intervenors' Motion for Reconsideration, at 7-8, Licensee's possession of ²⁴¹Pu is not itself an area of concern, but it may be relevant to other concerns, including 4 (emergency planning), 1 (consequences of a fire) and 3 (adequacy of administrative procedures).

¹⁴ Excerpted from Licensee's Written Presentation at 18-22, 23.

(i) An evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or 5 rems to the thyroid; or

(ii) An emergency plan for responding to a release of radioactive material.

10 C.F.R. § 30.32(i)(1) (1990) (emphasis added). This regulation did not become effective until April 7, 1990. 54 Fed. Reg. 14,051 (Apr. 7, 1989).

Thus, as explicitly adopted by the Commission, this regulation did not apply to anyone or to any "application" before April 7, 1990. Since Licensee's application relating to americium was filed on March 12, 1990, and the amendment was issued by the NRC on April 5, 1990, the requirements of § 30.32(i) were not yet applicable and the application could not have been deficient.

* * *

. . . As of April 7, 1990, § 30.32(i) does not impose any direct obligations on licensees; it explicitly affects only the required contents of pending and future "applications." If the Commission had intended to impose any immediate obligations upon holders of licenses as of April 7, 1990, it could have done so explicitly. In fact, it has done so in other instances in the past when it wished to impose obligations on licensees. *See, e.g.*, 10 C.F.R. §§ 70.25(c)(2), (c)(3) (1990) requiring holders of specific licenses issued before July 27, 1990, to submit certifications of financial assurance or a decommissioning funding plan on or before July 27, 1990).

This does not mean that holders of licenses as of April 7, 1990 will never have to comply with § 30.32(i) (i.e., will never have to submit either an emergency plan or an evaluation demonstrating low potential offsite exposures). Such licensees will, at some point, have to submit "applications" for renewals of their licenses and will have to comply with § 30.32(i) in such "applications." That this was the Commission's intent was explained when the regulation was adopted in the discussion of the applicability of the rule to existing licensees who had previously developed emergency plans under separate orders. If § 30.32(i) had been intended to apply to all licensees — rather than to "applications" — obviously such licensees would have had to comply on or before April 7, 1990. However, as the Commission pointed out, such licensees were not required to submit a new plan until their "regular five-year license renewal application was due." *See* 54 Fed. Reg. at 14,058. Then, and only then, would there be an "application" which would trigger the applicability of § 30.32(i). . . .

Accordingly, I conclude that Licensee is not now subject to the provisions concerning emergency planning or evaluations of dose effects that became effective on April 7, 1990.

2. Regulations Concerning Decommissioning

"Intervenors' Motion for Order Admitting Area of Concern Respecting Financial Assurance of Decommissioning," November 26, 1990, requested that we admit a new area of concern with respect to Licensee's alleged failure to comply with 10 C.F.R. §§ 30.32(h), 70.22(h), requiring a showing with respect

to financial assurance of decommissioning. However, Licensee is correct in arguing in response that:¹⁵

The pertinent NRC regulations (§§ 30.35(c) and 70.25(c))¹⁶ did not require that financial assurance for decommissioning be provided as part of the license amendment applications and considered as part of issuing such license amendments; instead, they required that such financial assurance be provided no later than July 27, 1990. . . . Whether or not Licensee has properly complied with the financial assurance requirements of the regulations subsequent to the issuance of the license amendments is a compliance or enforcement question. . . .

In consequence of this argument, I rule that the motion to admit a new concern is denied. This ruling does not, however, govern any ruling I may be called upon to make concerning the relevance of this argument to an already-admitted area of concern or the timeliness of evidence on this subject if Intervenors should choose to submit it in the rebuttal written filing that I have authorized.

C. The 2-Curies-of-Plutonium Requirement

A hotly contested matter in this proceeding is whether Licensee should have disclosed in its license application the curie content of ²⁴¹Pu which is intertwined in its licensed amount of ²³⁹Pu and ²⁴⁰Pu. As I have reflected on this matter, I have concluded that the obligation to disclose is closely related to whether or not the amount of ²⁴¹Pu has any regulatory consequence *other than* its dose effects.

Under current regulations, which do not affect Licensee, if a licensee possesses 2 curies or more of plutonium, then it must either demonstrate that the maximum dose to a member of the public off site would not exceed 1 rem effective dose equivalent or it must have an emergency plan. 10 C.F.R. § 70.22(i). The regulation does not specify that the 2 curies must consist of alpha emitters or gamma emitters. It is entirely silent on the source of the curies other than that it must come from the plutonium.¹⁷

Under these circumstances, there are two reasons a contaminant may be significant and may be required to be disclosed: (1) because of the dose

¹⁵ Licensee's Response (December 6, 1990) at 3.

¹⁶ "Intervenors' Motion for Order Admitting Area of Concern Respecting Financial Assurance of Decommissioning," November 26, 1990, cited 10 C.F.R. §§ 30.32(h) and 70.22(h) at page 1 of the Motion. However, § 30.32(h) only became effective on April 7, 1990. 54 Fed. Reg. 14,060 (Apr. 7, 1989). The reason this section does not affect this case is explained with respect to 10 C.F.R. §§ 30.32(i) and 70.22(i), above. (Section 70.22(h) does not deal with decommissioning.)

¹⁷ Since the plutonium is a single mass of material, it is also logical to count all sources of radiation in the curie total, including radiation emanating from ²⁴¹americium. That is, I would construe "plutonium" in the current regulations to include significant nonplutonium contaminants; and I would consider contaminants significant if the total radiation from the material, when combined with radiation from other contaminants, exceeded 2 curies.

consequence, and (2) because of the limit set on the curie content of licensed material before other regulatory provisions become applicable.¹⁸

However, under the regulations applicable to this case, a different set of parameters applies. Licensee is not subject to the 2-curie regulatory requirement (see above, pp. 455-56). Hence, there is no significance to the ²⁴¹Pu other than its dose consequence.

D. Isotopes That Must Be Disclosed

In LBP-90-38, 32 NRC at 363, I stated the following conclusion, which still appears to be correct:

- The biological effectiveness of 1.21 curies of ²⁴¹Pu [that is included in the plutonium material that is covered by Licensee's license] is the same as .0242 curies, or 24.25 millicuries, of an equivalently effective alpha-emitter.¹⁹

I also made the following conclusion, which now appears to be incorrect:²⁰

- Although it would have been preferable to disclose this quantity of material as a significant contaminant under the regulations, since it is equivalent to a millicurie quantity of an alpha emitter, this omission is not fatal to the application.

After considering all the arguments on this issue, I conclude that I was incorrect because I believed, at the time of the ruling, that the 2-curie emergency planning regulations affected Licensee. Under that circumstance, it was clear to me that 1.21 curies of ²⁴¹Pu was a "significant contaminant" as specified in Regulatory Guide 10.3. Although it is not a major dose-contributing contaminant — in relationship to the dose coming from the remainder of the material — and is therefore not "of particular interest" for that reason, it was still: (1) a substantial amount of plutonium, and (2) an apparently significant amount because it placed Licensee at the threshold of the regulatory requirement that it, at least, evaluate the maximum dose to a member of the public off site.

¹⁸ The only consequence of including curies derived from beta emitters in the 2-curie count in the current regulations is that an explanation must be provided, and it is consistent with the purpose of the regulation to give the words their natural, nonartificial meaning.

¹⁹ See *supra* note 6.

²⁰ My incorrect interpretation of the effective date seems also to have been shared by Intervenor and Licensee. In my unpublished Memorandum of Conference Call of October 19, 1990 (October 30, 1990), I stated, at page 5 that the following discussion had transpired during that conference call:

The Presiding Officer asked whether the Staff had been informed that the amendment authorizing possession of 25 curies of americium exceeded the amount of americium referenced in § 30.32(i). Mr. Axelrad stated that the Licensee had mentioned this and the applicability of the MURR Emergency Plan to the TRUMP-S work to Region III personnel upon receiving the Staff's affidavit. He also stated that the Licensee can demonstrate that it can satisfy both of the alternative requirements of § 30.32(i), i.e., an acceptable emergency plan or an acceptable evaluation of maximum dose.

The effective language is "significant contaminant." Necessarily, the decision as to what is significant requires judgment. It is similar to the normative judgment in the law concerning whether behavior is unreasonable and therefore negligent. There is no bright line, and judgment must be used. It is my conclusion that both the 1.21 curies of ^{241}Pu and — for similar reasons — the 70 millicuries of $^{241}\text{americium}$ are not significant contaminants and need not be disclosed.²¹ In reaching this conclusion, I am greatly influenced by the inapplicability of the 2-curie emergency planning threshold to this Licensee.

Consequently, I have decided to reconsider that portion of LBP-90-38, *supra*, in which I concluded that Licensee made a mistake in not disclosing the amount of ^{241}Pu and $^{241}\text{americium}$ that was included in the licensed material. Even though the amounts of these materials are substantial, they are not substantial contributors to dose, in light of the far larger dose attributable to ^{239}Pu and ^{240}Pu . Because I also conclude that the total curie count of the radioactive material did not have any significance for this Licensee, the application did not need to include the ^{241}Pu or the $^{241}\text{americium}$ as significant contaminants. Therefore, there was no error in the application.

Licensee's Motion for Partial Reconsideration of LBP-90-38, November 15, 1990, will be granted.

II. ANSWERS TO QUESTIONS

A. To what extent is it appropriate to permit Licensee to file material in this case that expands upon the material already filed in its application for a license?

There is no restriction on Licensee filing additional material to contest allegations of Intervenor.

B. How do 10 C.F.R. §§ 30.32(i)(1), 70.22(i), and 30.35(c), 70.25(c) affect this proceeding?

Sections 30.32(i)(1) and 70.22(i) relate to emergency planning and are not applicable in this proceeding because they apply only to applications filed after April 7, 1990, and Licensee's application was filed earlier than that.

Sections 30.35(c) and 70.25(c) relate to financial responsibility for decommissioning and are not applicable in this proceeding because they are obligations of

²¹ "The NRC Staff Response to Intervenor's Motion for Reconsideration, Affidavit of John Glenn," ¶ 12, at 7, stated that the ^{241}Pu in Licensee's material is 1.23 curies, producing a total count — including the curie activity of $^{241}\text{americium}$ — in excess of 2 curies. For reasons stated in the body of this Memorandum and Order, it seems to be immaterial or legally irrelevant whether the total curie activity is slightly greater than 2 curies.

licensees, are not required to be included in an application, and are not relevant to the question of whether or not an application should be granted.

C. Should Licensee have disclosed the presence of ^{241}Pu in the plutonium material that it is using for the TRUMP-S project?

Licensee was not required to make this disclosure, as ^{241}Pu is not a significant contaminant in its licensed material.

D. Should Licensee have disclosed the presence of $^{241}\text{americium}$ in the plutonium material that it is using for the TRUMP-S project?

Licensee also was not required to make this disclosure.

Order

For all the foregoing reasons and upon consideration of the entire record in this matter, it is, this 19th day of December 1990, ORDERED, that:

1. "Intervenors' Renewed Request for Stay Pending Hearing," October 15, 1990, is *denied*.²²

2. "Intervenors' Correction," October 25, 1990, is duly noted.

3. "Intervenors' Motion for Summary Disposition and Other Relief," October 25, 1990, is *denied*.

4. "Licensee's Related Motion to Strike," November 5, 1990 [combined with Licensee's Response to a motion for reconsideration] is *denied*, as Intervenors will be permitted to show the relevance of this material to admitted areas of concern.²³

5. "Intervenors' Motion for Reconsideration of Memorandum and Order of November 1, 1990 (Licensee's Partial Response Concerning Temporary Stay)

²² My reasons, including lack of likelihood of success on the merits, have been discussed in my prior decisions. There is, at this time, no showing of irreparable injury. LBP-90-41, 32 NRC 380, 383-85 (1990), especially (at 384-85) the following passage:

Because Licensee seems likely to prevail on the merits of its argument that fire with loss of containment is not a credible accident, I am likely to accept Dr. Morris's conclusion, in ¶52, that in the event of a hypothetical worst-case accident:

The doses at 100 meters resulting from a hypothetical worst-case accident at the MURR involving actinides are negligible. . . . Actual fractional release factors would be smaller than 1×10^{-6} and no credit is taken for effective emergency response (i.e., extinguishing the fire before the entire working inventory is consumed).

In lay terms, Dr. Morris is testifying that in the event of a worst-case fire incident involving experimental materials, less than one-millionth of the materials involved could be expected to be released to the environment.

²³ Relevance does not appear to have been shown at this time, but I prefer deferring the ruling pending the receipt of the additional filings.

and Emergency Order that Staff Hold in Abeyance Order of November 1, Part I," November 12, 1990, is *granted* to the following extent: (1) I already have rescinded the Staff's authorization to amend the license because I accepted Intervenor's argument that I had acted prematurely,²⁴ and (2) I now conclude that the license authorization is not needed because the amounts of ²⁴¹Pu and ²⁴¹americium possessed by Licensee were not significant contaminants and did not need to be disclosed. In all other respects, the Motion is *denied*.

6. "Intervenor's Motion for Summary Disposition of Part 70 License Amendment," November 14, 1990, is *denied*.²⁵

7. "Intervenor's Motion for Order Recommending Formal Hearing, or in the Alternative Requiring Oral Presentations," November 14, 1990, is summarily *deferred* until after all written filings, including the rebuttal and surrebuttal, have been received and analyzed.

8. "Licensee's Motion for Partial Reconsideration of Memorandum and Order (Licensee's Partial Response Concerning Temporary Stay)," November 15, 1990, is *granted*.

9. "Intervenor's Motion for Reconsideration of Memorandum and Order of November 1, 1990 (Licensee's Partial Response Concerning Temporary Stay), Part II," November 16, 1990, is *denied*. In light of my legal rulings in the accompanying memorandum, it is unlikely that small differences in the total quantity of curies will have any significance, but Intervenor may attempt to show differences if they choose. They would be well advised to offer persuasive evidence concerning the alleged link between "inaccuracies" and incompetence.

10. "Intervenor's Motion for Order Admitting Area of Concern Respecting Financial Assurance of Decommissioning," November 26, 1990, is *denied*.

11. "Intervenor's Motion to Strike Irrelevant and Unreliable Matters," November 26, 1990, is *denied*.

12. This decision supersedes all prior decisions to the extent that they may be inconsistent with this decision.

²⁴ Memorandum and Order (Clarification of LBP-90-39), November 15, 1990, unpublished.

²⁵ Intervenor's argument concerning the need to use a thick metal shield to handle americium, is not decided. It shall be part of the decision on the written filings.

13. To the extent that conclusions in this opinion are made with respect to motions for reconsideration, those conclusions in this Memorandum and Order are not subject to a motion for reconsideration.²⁶

Respectfully ORDERED,

Peter B. Bloch, Presiding Officer
ADMINISTRATIVE JUDGE

Bethesda, Maryland

²⁶ Even good things can be overdone.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Charles Bechhoefer, Chairman
Dr. Walter H. Jordan
Dr. Jerry R. Kline

In the Matter of

Docket Nos. 030-31379-OM
030-01615-OM
(ASLBP No. 90-612-04-OM)
(EA No. 90-071)
(Order Suspending
Brachytherapy Activities
and Modifying License)

ST. MARY MEDICAL CENTER—
HOBART
ST. MARY MEDICAL CENTER—
GARY

December 26, 1990

The Licensing Board approves a settlement agreement and terminates the proceeding subject to the terms of that agreement.

RULES OF PRACTICE: SETTLEMENT OF PROCEEDINGS

A licensing board's authority to approve the settlement of show-cause proceedings stems from 10 C.F.R. § 2.203, which requires that any such settlement accord "due weight to the position of the staff" as well as the "public interest."

MEMORANDUM AND ORDER (Order Approving Settlement Agreement)

This proceeding involves an immediately effective order, dated April 27, 1990,¹ modifying the byproduct materials licenses of St. Mary Medical Center—Hobart and Gary (hereinafter, Licensees) to (1) suspend brachytherapy activities under those licenses (subject to certain conditions) and (2) require an audit of past brachytherapy activities. Parties are the Licensees, the NRC Staff, and Dr. Koppolu P. Sarma (Intervenor).² For further details, see our Memorandum and Order (Schedules for Filings and Prehearing Conference), dated May 30, 1990 (unpublished), and our Prehearing Conference Order, LBP-90-21, 31 NRC 589 (June 26, 1990).

At the prehearing conference, the Licensing Board granted the parties' joint motion to defer the proceedings for 30 days to accommodate ongoing settlement negotiations, with a report to be filed if settlement was not reached. Thereafter, based on status reports filed by the parties (at the Board's direction), the Board on several occasions granted the parties' further joint motions to extend the dates for deferral of proceedings. Memoranda and Orders dated July 24, 1990, August 23, 1990, October 3, 1990, and December 6, 1990 (all unpublished). The latest of these orders noted the parties' agreement that the Licensees were in compliance with the modification order and extended the deferral as long as the Licensees remained in compliance, retaining authority for the Board to resolve certain potential disputes arising out of the prescribed audit (which had been undertaken but not yet reported).³

On December 17, 1990, the parties to this proceeding jointly filed a proposed settlement agreement. (A copy of this agreement is attached hereto.) The agreement apparently predates the receipt (or at least the evaluation) of the audit report. It leaves the modification order in effect, thus precluding brachytherapy activities at the hospital except as may be permitted by NRC under specified conditions (i.e., based on certifications to be provided to the Region III Administrator concerning certain aspects of the brachytherapy program).

The agreement further designates the violations thus far discovered to be nonwillful and defines the scope of further enforcement activities arising from the audit. No civil penalties are to be imposed for past nonwillful violations (such as misadministrations), although the Staff retains the right to impose other corrective actions based on audit findings. The agreement also establishes a time

¹ The Order was published at 55 Fed. Reg. 19,376 (May 9, 1990).

² A Notice of Hearing and Prehearing Conference was issued on May 31, 1990, and published at 55 Fed. Reg. 23,157 (June 6, 1990).

³ We required a further report by January 14, 1991, if settlement was not reached by that date.

frame for the reporting to the NRC of any misadministrations uncovered by the audit.

Our authority to approve the settlement of proceedings of this type stems from 10 C.F.R. §2.203, which requires that any such settlement accord "due weight to the position of the staff" as well as the "public interest." The parties jointly express their belief that termination of this proceeding on the basis of the settlement agreement "is in the public interest." Inasmuch as the modification order remains in effect as originally intended and the parties challenging the order no longer wish to do so, we agree with that evaluation, noting that, in our view, the settlement in fact accords "due weight to the position of the staff." Accordingly, the parties' joint motion is *granted* and, subject to the terms of the settlement agreement, this proceeding is hereby *terminated*.

This order is subject to Commission review pursuant to 10 C.F.R. §2.762. Absent any such review, this order shall become the final action of the Commission thirty (30) days from the date of its issuance. 10 C.F.R. §2.760(a).

IT IS SO ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD

Charles Bechhoefer, Chairman
ADMINISTRATIVE JUDGE

Dr. Walter H. Jordan (by CB)
ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE

Bethesda, Maryland
December 26, 1990

SETTLEMENT AGREEMENT

The United States Nuclear Regulatory Commission (hereinafter "NRC Staff"), St. Mary Medical Center—Hobart and St. Mary Medical Center—Gary (hereinafter collectively referred to as "Licensees") and Koppolu P. Sarma, M.D. (hereinafter "Dr. Sarma") in comprehensive settlement of all issues raised in this proceeding hereby agree as follows:

1. That, on April 27, 1990, an Order Suspending Brachytherapy Activities and Modifying License (hereinafter "Order") was issued by the NRC. The Order, among other things, provided for the immediate suspension of certain portions of Licensees' licenses pertaining to brachytherapy treatments carried on at Licensees' facilities and required Licensees to "retain an independent medical consultant or organization to assist with the audit of all appropriate records and patient medical files of the brachytherapy department since program inception."

2. That, on May 17, 1990, Licensees filed an answer in which certain allegations contained in the Order were admitted and certain allegations contained in the Order were denied because the Licensees were without knowledge or information sufficient to form a belief as to the veracity of those certain factual allegations. Nothing contained in this Settlement Agreement shall be taken as an admission by Licensees, or Dr. Sarma, of any fact or conclusion not otherwise admitted in Licensees' Answer or in the Answer filed by Dr. Sarma.

3. That, in conjunction with their Answer, Licensees also filed a request for a hearing on the Order.

4. That, on May 17, 1990, Dr. Sarma submitted a petition to intervene, a request for a hearing on the Order, and an Answer, and that Dr. Sarma was admitted as an intervenor to the proceedings in this matter by Prehearing Conference Order of the Atomic Safety and Licensing Board dated June 26, 1990.

5. That, by letter dated September 28, 1990, Licensees nominated an audit group (hereinafter "Independent Auditor") and by letter dated November 7, 1990, Licensees submitted an Audit Plan, which includes a provision for submission of a written report to the NRC at the completion of the audit, pursuant to the terms of Item V.B of the Order, as last modified by the Regional Administrator, Region III, on October 30, 1990.

6. That the NRC Staff regards any written report of the audit provided to the NRC Staff as an agency record and, as such, the public availability of the report is as prescribed in 10 C.F.R. § 2.790 (Availability of Official Records) and 10 C.F.R. Part 9, Subpart A (Freedom of Information Act Regulations).

7. That, in accordance with the guidance regarding press releases in the NRC Enforcement Manual, in the event the NRC Staff decides to issue a press release concerning matters in this settlement agreement, such press release will not be issued until 24 hours after the Licensees and counsel for Dr. Sarma have been notified and provided a copy of the press release that is substantively the same as the press release to be issued.

8. That by this Settlement Agreement, the NRC Staff agrees that the conclusions, opinions, and recommendations in the Independent Auditor's written report shall solely be the conclusions, opinions, and recommendations of the Independent Auditor, and Dr. Sarma and Licensees agree that in the event that either Dr. Sarma or Licensees do not agree with the written report of the In-

dependent Auditor, the party disagreeing with any of the conclusions, opinions, and recommendations of the Independent Auditor will submit to the NRC Staff an explanation of the bases for such disagreement within thirty (30) days of the party's receipt of the Independent Auditor's written report.

9. That, by this Settlement Agreement, Licensees agree to timely make the required reports of any misadministration in compliance with 10 C.F.R. § 35.33 that the Licensees may discover as a result of the audit, as required in Item V.B of the Order, and the NRC Staff agrees that, regarding misadministrations that may be discovered as a result of the audit, the time for making the notifications required in 10 C.F.R. § 35.33, or any other rule or regulation regarding misadministrations, shall be computed from delivery of the Independent Auditor's written report to the Licensees.

10. That, by this Settlement Agreement and in consideration of Licensees undertaking a comprehensive audit by the Independent Auditor of all appropriate brachytherapy records and patient medical files since program inception, the NRC Staff agrees that it will not assess civil penalties against Licensees or Dr. Sarma as a result of any nonwillful violations of any statute, rule, or regulation involving the operation of the Licensees' brachytherapy program from its inception to the date of the issuance of the Order. Notwithstanding that the NRC Staff has not identified, as of the date of its approval of the Audit Plan, any willful violations involving the operation of the Licensees' brachytherapy program, nothing in this condition shall be construed to prevent the NRC Staff from taking enforcement action as a result of any willful violations, as willful is defined in 10 C.F.R. Part 2, Appendix C, Section III, which may be identified as a result of the Licensees' audit or as a result of any subsequent investigation by the NRC Staff. Further, nothing in this condition shall be construed to prevent the NRC Staff from issuing a Notice of Violation without proposed civil penalty from any nonwillful violation of any rule or regulation involving the operation of the Licensees' brachytherapy program which may be identified as a result of the Licensees' audit or as a result of any inspection or investigation by the NRC Staff.

11. That, by this Settlement Agreement, the NRC Staff agrees that the remaining requirements of Item V.B of the Order, to wit, the completion of the audit with submission of results to the NRC and notifications pursuant to 10 C.F.R. § 35.33, is met when the Independent Auditor's written report is in the hands of the NRC Staff and the items in Condition 9 of this Settlement Agreement are complete.

12. That, by this Settlement Agreement, Licensees agree that they will continue to comply with and will not challenge Item V.A of the Order.

13. That the NRC Staff, Licensees, and Dr. Sarma agree to file a joint motion with the Atomic Safety and Licensing Board ("Board") for an Order approving this Settlement Agreement and terminating this proceeding.

14. That this settlement agreement shall become effective upon approval by the Board and that in the event the Board does not approve this settlement agreement, it shall be null and void.

FOR THE NRC STAFF

By: Susan Chidakel Dated: 12/17/90
Counsel for NRC Staff

By: Eugene Holler Dated: 12/17/90
Counsel for NRC Staff

**ST. MARY MEDICAL CENTER—HOBART
ST. MARY MEDICAL—GARY
("LICENSEES")**

By: Stephen W. Lyman Dated: 12/11/90

By: Steven H. Pratt Dated: 12/11/90
Attorneys for Licensees

KOPPOLU P. SARMA, M.D. ("INTERVENOR")

By: Paige Clousson Dated: 12/14/90
Attorney for Koppolu P. Sarma, M.D.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Thomas E. Murley, Director

In the Matter of

Docket No. 50-322

LONG ISLAND LIGHTING
COMPANY(Shoreham Nuclear Power Station,
Unit 1)

December 20, 1990

In this Director's Decision, the Director of the Office of Nuclear Reactor Regulation has responded to Petitions filed on behalf of the Shoreham-Wading River Central School District (School District), Scientists and Engineers for Secure Energy, Inc. (SE2), and the Long Island Association, requesting that certain actions be taken with regard to Shoreham Nuclear Power Station, Unit 1. The actions requested by the School District and SE2 included, among others, issuance of an immediately effective order to the Long Island Lighting Company (LILCO) to cease and desist from activities related to the defueling and destaffing of the facility and return to the "*status quo ante*," civil penalties against the licensee, deferral of consideration of LILCO's request to reduce its onsite property insurance until after publication of a Final Environmental Impact Statement, and remedial action plans. The School District and SE2 alleged that such actions were necessary to avoid potentially hazardous conditions arising from unreviewed safety questions, violations of the Licensee's full-power operating license, and unreviewed environmental questions. They further alleged that LILCO is undertaking a course of action that will willfully avoid the full and effective Commission consideration of the environmental consequences of Licensee action and is contrary to the provisions of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Guidelines, and the Commission's regulations by presenting for regulatory review defueling and destaffing plans that are the initial actions in a single course of action to transfer the license for Shoreham and to decommission the plant. The

Long Island Association Petition requested that the Commission order the suspension of LILCO's actions in furtherance of a "minimum posture condition" at Shoreham, undertake an investigation into whether license violations have occurred, initiate an environmental review of the planned decommissioning of Shoreham, and devise a process to consider Shoreham issues. As grounds for these requests, the Petition alleged that LILCO has taken actions that are inconsistent with the premises underlying its license and that are aimed at the ultimate filing of a decommissioning application. For the reasons set forth in the Decision, with the exception of the issues raised in a supplement filed November 19, 1990, to the School District and SE2 Petitions, the Director has denied the Petitions. The issues raised in the November 29, 1990 supplement will be considered in a separate Director's Decision.

NEPA: ENVIRONMENTAL REVIEW OF DECOMMISSIONING

The Commission's regulations in 10 C.F.R. Part 51, which implement section 102(2) of NEPA, require that each applicant for a license amendment authorizing the decommissioning of a facility submit a supplement to its environmental report and that, in connection with the amendment of an operating license to authorize the decommissioning of such a facility, the NRC Staff will prepare a supplemental environmental impact statement or environmental assessment. However, there is no requirement that an environmental review of decommissioning be undertaken prior to the submittal of an application for the decommissioning of a facility.

NEPA: CONSIDERATION OF ALTERNATIVES

NEPA requires all federal agencies to consider, in connection with proposals for every major federal action significantly affecting the environment, reasonable alternatives to the proposed action. However, the NRC has determined that the NRC need not address resumed operation of a facility as an alternative in its NEPA analysis of the request for approval of activities associated with decommissioning.

NRC: AUTHORITY

Absent highly unusual circumstances, the NRC lacks authority to direct a licensee to operate a licensed facility.

OPERATING LICENSES: RESPONSIBILITY OF LICENSEE

Every licensee is obligated to comply with the terms and conditions of its license and the requirements of the NRC's regulations. No private agreement can relieve a licensee of this responsibility, and a licensee may not contract away its obligations as a licensee.

REGULATIONS: INSURANCE REQUIREMENTS

The purpose of the insurance requirement set forth in 10 C.F.R. § 50.54(w) is to ensure the financial ability of a licensee to establish and maintain a stable condition for a nuclear power plant following an accident, including necessary decontamination, and thereby protect the public health and safety. Thus, the amount of insurance coverage called for is not driven by the value of the facility, but rather by the potential cost of establishing and maintaining a safe, stable condition following an accident which, in turn, is a function of the potential accidents to which a facility might be subject and the consequent radiological hazard.

REGULATIONS: INSURANCE REQUIREMENTS

It is only activities associated with removal of a facility from service and reduction of residual radioactivity to which the decommissioning process applies; the insurance requirement in 10 C.F.R. § 50.54(w) is not a necessary element of decommissioning which has a wholly independent financial requirement.

TECHNICAL ISSUES DISCUSSED

The following technical issues are discussed: Defueling and spent fuel pool storage of fuel; Maintenance and surveillance of inoperable equipment; Staffing of facility in defueled condition; Unresolved safety questions.

DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206

INTRODUCTION

On July 14, 1989, James P. McGranery, Jr., filed a request with the Executive Director for Operations pursuant to 10 C.F.R. § 2.206 on behalf of the Shoreham-Wading River Central School District requesting that action be taken with regard to Shoreham Nuclear Power Station Unit 1 (hereinafter School Dis-

trict Petition). Specifically, the School District Petition requested that a temporary immediately effective order be issued to the Long Island Lighting Company (LILCO) to cease and desist from any and all activities related to the defueling and destaffing of the facility and return to the "*status quo ante*," pending further consideration by the Commission. The Petition further requested that such an order be accompanied by an announcement of the Commission's intention to fine the Licensee a substantial amount per day for any violation or continuing violation of the Commission's orders. Briefly summarized, the bases set forth for the Petition were that: (1) such an order is necessary to avoid potentially hazardous conditions arising from unreviewed safety questions, violations of the Licensee's full-power operating license, and unreviewed environmental questions; and (2) that LILCO is undertaking a course of action that will willfully avoid the full and effective Commission consideration of the environmental consequences of Licensee action and is contrary to the provisions of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Guidelines, and the Commission's regulations by presenting for regulatory review defueling and destaffing plans that are the initial actions in a single course of action to transfer the license for Shoreham and to decommission the plant. The School District supplemented this Petition by a letter dated July 19, 1989, which, among other things, suggested that cumulative fines of at least \$250,000 per day would be necessary to act as an economic deterrent to a continuing violation by LILCO.

By letter dated July 20, 1989, I acknowledged receipt of the School District Petition. In my acknowledgment letter, I indicated that a preliminary review of the concerns in the Petition did not indicate any need to take immediate action because, on the basis of current information, the Licensee was currently in compliance with the provisions of its full-power license, as the defueling of the reactor vessel is an activity permissible under the terms of Facility Operating License NPF-82, and the destaffing of the plant would not be implemented until early August.

The School District responded to my July 20 letter by a letter dated July 21, 1989, urging immediate reconsideration of my position as set forth in the July 20 letter, and taking issue with statements made therein.

On July 26, 1989, Mr. McGranery filed a Petition on behalf of Scientists and Engineers for Secure Energy, Inc. ("SE2") (hereinafter SE2 Petition). This Petition requested immediately effective orders and the institution of proceedings to the same extent and on the same bases as the request made by Shoreham-Wading River Central School District. The Petition stated that SE2 adopted and incorporated the July 14 request made by the School District as supplemented on July 19 and July 21, 1989, and requested consolidation of its Petition with that of the School District. By letter dated August 21, 1989, I acknowledged receipt of the SE2 Petition. On July 31, 1989, and January 23, April 5, May 4,

November 14, and November 29, 1990, additional supplements to the Petitions filed by the School District and SE2 were submitted.

The July 31 supplement, among other things, requested that immediately effective orders be issued that: (1) barred LILCO from transferring John D. Leonard, Jr., Vice President–Nuclear Operations, from his post or further depleting the Shoreham staff, and mandated that LILCO return LILCO and contractor personnel to their positions to allow for prior review of LILCO's proposed actions, and (2) barred LILCO from discontinuing any required maintenance or modifications.

The January 23, 1990 supplement alleged that the NRC has been pursuing a continuing course of conduct giving various forms of "permission" to LILCO that have adverse environmental impacts and diminish the choice of reasonable alternatives to be considered in the NEPA proceedings on the proposed Shoreham decommissioning.

The April 5 supplement requested that the Commission deny or, at least defer until after publication of a Final Environmental Impact Statement (EIS), consideration of LILCO's request to reduce its onsite property insurance. This request by LILCO, according to Petitioners, constitutes another "segmented proposal" in furtherance of LILCO's decommissioning proposal. In their April 5 supplement, the Petitioners stated that they were incorporating into their Petition an enclosed "comment" to the Secretary of the Commission (also dated April 5, 1990). In that comment, the Petitioners again asked the Commission to either (1) deny a request by the Long Island Lighting Company (LILCO) for an exemption from the onsite primary property damage insurance requirements of 10 C.F.R. § 50.54(w)(1) for operation of the Shoreham facility and withdraw its proposal to consider the issuance of this exemption, or (2) announce its intention to defer decision until after publication of a Final EIS on the decommissioning proposal. The Petitioners alleged that LILCO's request was violative of NEPA, the Atomic Energy Act (AEA), the Administrative Procedure Act, and the regulations of the CEQ and the NRC. By letter dated April 27, 1990, I responded to this supplement and informed the Petitioners that the requests in their April 5 supplement were denied.

On May 4, 1990, Petitioners submitted a further supplement reiterating their request that the proposed reduction in onsite property insurance be denied or, at least deferred until after publication of a final EIS. In this supplement, the Petitioners stated that they were incorporating an enclosed "supplemental comment" dated April 23, 1990. The Petitioners stated that this supplement was deemed necessary because my April 27 letter did not recognize the existence of this comment.

The November 14 supplement alleged that the Commission has determined that LILCO has disbanded a portion of its technical staff and begun training the remaining staff for defueled operation only, that conditions exist as to staffing

and training that are in direct violation of 10 C.F.R. Part 55, and that LILCO is in knowing violation of its license and technical specifications by having implemented these reductions in staffing and training prior to NRC approval. Consequently, the Petitioners requested that a Notice of Violation be issued including a proposed civil penalty and remedial action plan to bring Shoreham's staffing and training into compliance with Part 55 and its license.

The November 29 supplement stated that LILCO had "recently" informed the NRC that 137 fuel support castings and 12 peripheral pieces from the Shoreham reactor vessel were being stored on the south separator/reheater roof above the turbine deck, causing posting of a high radiation area. According to the Petitioners, those circumstances raised questions as to whether LILCO is violating NRC regulations and a Confirmatory Order issued March 29, 1990, that had required continued maintenance of structures, systems, and components necessary for full-power operation. The Petitioners also noted the pendency of a LILCO license amendment application for shipment of these parts to the Barnwell, South Carolina, low-level waste storage facility for burial, and alleged that such a license amendment would be contrary to "the decision reached by the Commission on recommendations of SECY-89-247," other regulatory requirements of 10 C.F.R. Chapter I, the Low-Level Waste Policy Amendments Act of 1985, and NEPA, and that an attempt to bury these parts would violate a criminal statute. Consequently, the Petitioners requested that a Notice of Violation be issued including a proposed civil penalty and remedial action plan to bring LILCO into compliance with the Confirmatory Order and other requirements and to ensure proper preservation of these reactor parts.

On August 4, 1989, Leonard Bickwit, Jr., submitted a Petition on behalf of the Long Island Association requesting action regarding Shoreham Nuclear Power Station Unit 1 similar to that requested by Mr. McGranery and on similar bases. Specifically, the Long Island Association Petition requested that the Commission order the suspension of LILCO's actions in furtherance of a "minimum posture condition" at Shoreham, undertake an investigation into whether license violations have occurred, initiate an environmental review of the planned decommissioning of Shoreham, and devise a process to consider Shoreham issues. As grounds for its requests, the Petitioner asserted that LILCO has taken actions that are inconsistent with the premises underlying its license, including actions that constitute changes to its facility without prior Commission approval that give rise to an unreviewed safety question, having allowed New York State authorities to assume unauthorized control over the Shoreham license, and having commenced *de facto* decommissioning; and that LILCO is taking actions aimed at the ultimate filing of a decommissioning application, mandating Commission involvement consisting of an environmental review under NEPA and the regulations of the CEQ.

By letter dated August 24, 1989, I acknowledged receipt of the Long Island Association Petition. In my acknowledgment letter, I indicated that action would be taken upon the Petitioner's request within a reasonable time.

A notice was published in the *Federal Register* indicating that the Petitioners' requests were under consideration. 54 Fed. Reg. 36,077 (Aug. 31, 1989). By letter dated September 15, 1989, the Licensee was requested to respond to the School District, SE2, and Long Island Association Petitions. By letter dated November 10, 1989, the Licensee responded to the Petitions.

I have now completed my evaluation of the School District and SE2 Petitions and the Petition filed by the Long Island Association. I have determined, for the reasons set forth below, that the Petitions should be denied. (The issues discussed in the Petitioners' November 29, 1990 supplement will be addressed by a separate Director's Decision).

BACKGROUND

On February 28, 1989, LILCO entered into an agreement with the State of New York to transfer its Shoreham assets to an entity of the State of New York for decommissioning. However, LILCO continued to pursue with the NRC its request for a full-power license to operate Shoreham Station. On April 21, 1989, the NRC issued Facility Operating License NPF-82 to LILCO which allows full-power operation of the Shoreham plant. On June 28, 1989, LILCO's shareowners ratified LILCO's agreement with the State of New York.

Consistent with the terms of the settlement agreement, which prohibits further operation of the Shoreham facility by LILCO, LILCO began a defueling operation of the facility on June 30, 1989, which was completed on August 9, 1989, and reduced its operating and support staff. Further, LILCO is proceeding with its plans to discontinue customary maintenance for systems LILCO considers unnecessary to support operation when all the fuel is placed in the spent fuel pool, by deenergizing and protecting these systems rather than maintaining them in an operationally ready condition. On January 12, 1990, LILCO submitted a letter to the NRC in which it stated that it would not place nuclear fuel back into the reactor without prior NRC approval. This commitment was confirmed by a Confirmatory Order issued on March 29, 1990. 55 Fed. Reg. 12,758 (Apr. 5, 1990). On June 28, 1990, LILCO and the Long Island Power Authority (LIPA) submitted a joint application for an amendment to LILCO's license to authorize transfer of the Shoreham facility to LIPA. That application is still pending before the Staff and has not yet been noticed in the *Federal Register*.

DISCUSSION

Briefly summarized, the Petitioners make two broad arguments in support of their request for action, namely, that: (1) there are unreviewed safety questions, violations of the Licensee's full-power operating license, including technical specifications, and unreviewed environmental questions that may result in potentially hazardous conditions; and (2) that LILCO is undertaking a course of action in a manner that will willfully avoid the full and effective Commission consideration of the environmental consequences of Licensee action contrary to the provisions of NEPA, the CEQ Guidelines, and the Commission's own regulations, by presenting for regulatory review defueling and destaffing plans that are the initial actions in a single course of action to transfer the license for Shoreham and decommission the plant. As such, the Petitioners assert that the Commission should not wait until the last step of the process (i.e., application for decommissioning) to conduct its NEPA review.

As specific bases for these assertions, the Petitioners argue that: (1) the defueling of the core of the Shoreham Station involves an unreviewed safety question, because it is unnecessary and because the transfer of fuel to the spent fuel pool will result in a reduced margin of safety; (2) the issuance of the full-power operating license for the facility was premised, among other things, on adequate staffing, and the Licensee has now declared to the Commission its intention to willfully reduce staffing by about half, which would violate the basis of the issuance of its license and the Licensee's prior commitments to the Commission; (3) the lack of maintenance activities at the facility is contrary to a March 1989 Operational Readiness Assessment (ORAT) Report; (4) the Licensee's plan to substitute fossil-fuel-burning units for the Shoreham station is a matter that may result in an adverse environmental impact previously evaluated in the Final Environmental Statement for the operating license, and, as such, presents an unreviewed environmental question that requires prior Commission approval as provided by its license; (5) such an order would allow for a full environmental review pursuant to NEPA, the CEQ guidelines, and the Commission's regulations in 10 C.F.R. Part 51; and (6) if the Commission does not issue an order to the Licensee to restore the plant and staff to the "*status quo ante*" at this time, it would be allowing the Licensee to "whittle away the scope of the action being considered" to the point where there would be an insufficient staff to operate the plant and the plant may have deteriorated to the point where several years might be required to make it available as a source of electricity.

With regard to the Petitioners' broad assertions, the NRC has determined that LILCO currently satisfies all applicable terms and conditions of its operating license for the Shoreham facility. As will be discussed more fully below, staffing at the Shoreham Station meets NRC requirements, including the technical

specifications for the plant's defueled condition, and also meets levels stated in the Shoreham Updated Safety Analysis Report (USAR). With regard to defueling, removal of fuel from the reactor core and subsequent storage of the fuel in the spent fuel storage pool is an activity associated with normal nuclear plant operations. It is an activity that is permitted by Shoreham's technical specifications. Finally, with regard to maintenance, the LILCO staff currently performs maintenance and surveillance activities necessary to demonstrate operability of systems required to be operable at all times. The NRC has determined that LILCO's decision to defer maintenance on systems and components unnecessary to support their current configuration is a reasonable action. This deferral of maintenance renders these items inoperable, and surveillance requirements are not applicable to inoperable equipment. These systems and components are not required by the terms of LILCO's license or the NRC's regulations to be operable in a defueled condition. If the Licensee were to resume operation after shutdown, it would be obligated to perform all required maintenance and surveillance activities to restore system and component operability.

With regard to the Petitioners' assertion that LILCO is undertaking a single course of action to transfer the license for Shoreham and decommission the plant, and that the Commission should act now to conduct its NEPA review,¹ LILCO has repeatedly restated to the NRC its commitment to abide by all terms and conditions of its license and NRC regulations so long as it remains the Shoreham Licensee.²

¹ I note that the Petitioners made a similar argument before the Commission in six "Petition[s] to Intervene and Request[s] for Hearing[s]" regarding the Confirmatory Order issued March 29, 1990, prohibiting LILCO from placing nuclear fuel in the reactor vessel without prior NRC approval; a request by LILCO for an amendment to the Shoreham operating license allowing changes in the physical security plan of the plant; and a request by LILCO for an amendment to the Shoreham operating license removing certain license conditions regarding offsite emergency preparedness activities. In its decision regarding those Petitions, CLI-90-8, 32 NRC 201 (1990), the Commission determined, *inter alia*, that the request by Petitioners that the Commission order the Staff to prepare an EIS on the proposed decommissioning of the Shoreham facility and to consider in the EIS resumed operation as an alternative to decommissioning should not be granted. On October 29, 1990, the Petitioners petitioned the Commission for reconsideration of CLI-90-8.

² In a letter dated August 30, 1989, the Staff requested LILCO to provide its written commitment and plans to ensure that, until decommissioning or other disposition of the facility is authorized by the NRC: (1) all systems required for safety in the defueled mode are maintained in fully operable status; (2) all systems required for full-power operation of the facility are to be preserved from degradation, with such maintenance and custodial services and appropriate documentation as may be necessary to ensure such preservation; and (3) there shall be an adequate number of properly trained staff to ensure plant safety in the defueled state, including the ability to cope with malfunctions, accidents, and unforeseen events. LILCO, in a letter dated September 19, 1989, submitted the details of its system layup (equipment preservation) program. This program was developed and implemented to prevent the Shoreham plant from "decommissioning itself," as requested by the NRC Staff in its letter of August 30. Further, the NRC Staff, based on its review of LILCO's system layup program, found this program to be well defined, properly implemented in accordance with approved procedures, and adequate to prevent deterioration of protected systems (Inspection Report 50-322/90-01).

By letter dated November 8, 1990, LILCO informed the Staff that it desired to ship 137 fuel support castings and 12 peripheral pieces to the Low-Level Radioactive Waste Repository at Barnwell, South Carolina, before December 7, 1990. On November 14, 1990, the Staff responded to LILCO's November 8th letter informing

(Continued)

The NRC regulations applicable to transferring or terminating an operating license are found in Title 10 of the *Code of Federal Regulations*, sections 50.80 and 50.82, respectively. As already indicated, LILCO has submitted an application for an amendment to its license to authorize the transfer of the Shoreham facility to LIPA. The NRC will ensure that the applicable regulations are satisfied in considering this request. After giving notice to interested parties and performing all appropriate and prescribed reviews, the NRC may approve the transfer if the transfer is otherwise permissible and if it determines that LIPA is qualified to be the license holder.

Similarly, LILCO has not engaged in decommissioning of the facility. None of the actions taken at Shoreham are inconsistent with the operation of the facility by some entity other than LILCO, and the NRC does not consider LILCO's actions to date to be "irreversible." The Commission's regulations in 10 C.F.R. Part 51, which implement section 102(2) of NEPA, require that each applicant for a license amendment authorizing the decommissioning of a production or utilization facility submit a supplement to its environmental report, and that in connection with the amendment of an operating license to authorize the decommissioning of such a facility, the NRC Staff will prepare a supplemental environmental impact statement or environmental assessment. See 10 C.F.R. § 51.95(b). However, there is no requirement that an environmental review of decommissioning be undertaken prior to the submittal of an application for the decommissioning of a facility. LILCO has not to date submitted an application for the decommissioning of its Shoreham facility. Consequently, there is no requirement that an environmental review of decommissioning be conducted at this time. At such time as LILCO submits an application for the decommissioning of the facility, an environmental review will be conducted. Moreover, prior to any decision with respect to decommissioning, any authorization by the NRC to amend the Shoreham license will be accompanied by the required environmental review called for by 10 C.F.R. Part 51 and consistent with the Commission's decision in CLI-90-8.

Turning now to the Petitioners' specific bases in support of their broad assertions, the School District and SE2 Petitions first assert that the defueling of

LILCO that such an activity requires NRC authorization and its November 8th letter was being processed as a request for an amendment of its license. This request is still under consideration. The Petitioners' November 29, 1990 supplement alleges that LILCO is storing these parts on the south separator/reheater roof above the turbine deck, and that this raises questions as to whether LILCO is violating NRC regulations and the March 29, 1990 Confirmatory Order requiring continued maintenance of structures, systems, and components necessary for full-power operation. The Petitioners further allege that a license amendment allowing shipment of these parts for burial would be contrary to "the decision reached by the Commission on recommendations of SECY-89-247," other regulatory requirements of 10 C.F.R. Chapter I, the Low-Level Waste Policy Amendments Act of 1985, and NEPA, and that an attempt to bury these parts would violate a criminal statute. Consequently, the Petitioners requested that a Notice of Violation be issued including a proposed civil penalty and remedial action plan to bring LILCO into compliance with the Confirmatory Order and other requirements and to ensure proper preservation of these reactor parts. These concerns and requests will be considered in a separate Director's Decision.

the core involves an unreviewed safety question because it is unnecessary and will result in a reduced measure of safety due to the risk of accident in transfer to the spent fuel pool. Therefore, the Petitioners assert that the defueling is in violation of 10 C.F.R. § 50.59 and requires prior Commission approval.

As explained above, movement of fuel to, and storage of fuel in, the spent fuel storage pool is a normal operating procedure permitted by the existing Shoreham technical specifications. The design and construction of the Shoreham spent fuel storage pool was reviewed as part of the USAR that was submitted by LILCO and approved by the Commission in granting the operating license for Shoreham Station. Further, the most radiologically severe fuel-handling accident considered credible is hypothesized and analyzed in Chapter 15, Accident Analysis, of the Shoreham USAR. The radiological consequences of this hypothetical accident do not exceed any criteria specified in current regulatory requirements. Therefore, the movement of fuel to the spent fuel pool does not involve changes in the facility or procedures as described in the USAR, does not involve a change in Shoreham's technical specifications, and does not constitute an unreviewed safety question or otherwise require prior Commission approval.

The Petitioners next argue that issuance of the full-power operating license was premised, among other things, upon adequate staffing; that the Licensee has openly declared to the Commission its intention to willfully reduce that staff, which constitutes a willful violation of the bases of the issuance of the license and the Licensee's prior commitments to the Commission, and that the NRC Regional Administrator, Region I, has "openly admitted" that if he found staff at any other plant reduced by 40 or 50 percent, this would call for enforcement action, and there is no reason why the Shoreham plant should be treated differently than any other plant.

As explained above, current staffing at Shoreham Station meets NRC requirements, including the technical specifications for the plant's defueled condition, and also meets the levels stated in the Shoreham USAR. This was verified by a site inspection conducted in September 1989 (Inspection Report 50-322/89-91) and continues as the Station hires, trains, and qualifies personnel to maintain its nonlicensed staffing requirements. Two additional inspections were conducted from January 29 to May 5, 1990, and May 6 through August 25, 1990 (Inspection Reports 50-322/90-01 and 50-322/90-02, respectively) which determined that the staffing levels were reasonable for the current defueled plant status. In fact, the Shoreham site staff has NRC-licensed operators (Senior Reactor Operators and Reactor Operators) in excess of current requirements. In addition, LILCO has committed to promptly notify the NRC of any substantial variations from the staffing plan assessed during the above-referenced inspections.

The Petitioners next assert that the proposed lack of conduct of maintenance activities at Shoreham appears to be contrary to the Operational Readiness

Assessment Team (ORAT) Report. In further support of this assertion, the Petitioners state that at a briefing presented by LILCO before the NRC on July 28, 1989, LILCO stated that it was going to maintain 40 operating systems as "operable," 42 systems in a "functional condition," 36 system in a "secured" condition, and 7 systems in a "preserved" condition. The Petitioners argue that the Shoreham technical specifications contain no definitions of "functional," "secured," or "preserved," and that LILCO is creating a new Operating Condition ("OC 6").

The Operational Readiness Assessment Team inspection was conducted March 11 through March 27, 1989, to determine the operational readiness status of the plant and staff for purposes of determining readiness for full-power operation of the Shoreham facility. The findings of that inspection, documented in a report issued April 4, 1989, are inapplicable to the current status of the plant, which is in a defueled condition.

With regard to the Petitioners' argument that LILCO is creating a new operating condition in violation of its technical specifications, Table 1.2 of the Shoreham technical specifications defines the operational conditions of the plant. However, because the reactor is defueled and the vessel is drained, the operational conditions specified in Table 1.2 are not applicable. Therefore, the only specifications that are applicable to the Shoreham plant are those that are annotated as such in the applicability statement of each technical specification. LILCO is in full compliance with all requirements of the Shoreham technical specifications that are applicable at this time.

The Petitioners next state that Appendix B, Paragraph 3.1 of the Shoreham license, forbids the Licensee from making changes in facility operations affecting the environment if the change would involve an "unreviewed environmental question" and would "significantly affect the environment," and that a proposed change shall be deemed to involve an unreviewed environmental question if it concerns a matter that may result in significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) or a matter not previously reviewed and evaluated in the FES that may have a significant adverse environmental impact. The Petitioners assert that LILCO's plans to substitute fossil-fuel-burning units for the Shoreham Nuclear Power Station is a matter that may result in a significant increase in any adverse environmental impact previously evaluated in the FES.³ As such, it is argued that these matters involve unreviewed environmental questions that require prior

³The Petitioners enclose with their Petition two sections of the FES (section 8, "Need for Station," and section 10, "Benefit/Cost Summary") which they state "represent the bases for the conclusions that the Shoreham Nuclear Power Station is needed, that it is the preferable alternative realistic source of electric energy and that it has a favorable cost/benefit analysis for the people of Long Island."

Commission approval pursuant to the license. Therefore, according to the Petitioners, LILCO is in violation of the conditions of its license.

NEPA requires all federal agencies to consider, in connection with proposals for every major federal action significantly affecting the environment, reasonable alternatives to the proposed action. Consequently, at such time as LILCO submits an application for the decommissioning of the Shoreham facility, the NRC will conduct an environmental review that will consider such alternatives. However, in a recent Memorandum and Order, CLI-90-8, *supra*, the Commission has determined that the NRC need not address resumed operation of a facility as an alternative in its NEPA analysis of the request for approval of activities associated with decommissioning. In its Memorandum and Order, the Commission responded to an argument made by these same Petitioners, who had filed Petitions to Intervene and Requests for Hearings related to various actions taken by the NRC Staff and LILCO concerning the Shoreham facility,⁴ that the actions taken by LILCO and the NRC Staff amount to *de facto* decommissioning requiring an EIS under NEPA, and that such an EIS must consider resumed full-power operation of Shoreham as an alternative to decommissioning. See note 1, *supra*. In its Memorandum and Order, the Commission noted that, while basic NEPA principles require that an agency consider "reasonable" alternatives to a proposal for a recommended course of action, there is no need to consider alternatives of speculative feasibility, or which could only be implemented after significant changes in governmental policy or legislation. As the Commission noted, under NRC regulations, while the NRC must approve a licensee's decommissioning plan, including consideration of alternative ways whereby decommissioning may be accomplished, the regulations do not contemplate that the NRC need approve of a licensee's decision that a plant should not be operated. In fact, absent highly unusual circumstances not present here, the NRC lacks authority to direct a licensee to operate a licensed facility, and LILCO is legally entitled under the Atomic Energy Act and NRC regulations to make an irrevocable decision not to operate Shoreham. The alternative of "resumed operation" or other methods of generating electricity are alternatives to the decision not to operate Shoreham and, as such, are beyond the Commission's authority. The NRC need only consider alternatives to the *method* of decommissioning that the licensee's plan proposes and review the plan to ensure that it provides for safe and environmentally sound decommissioning, as opposed to reviewing the decision of *whether* to decommission a facility. CLI-90-8, 32 NRC at 207.

⁴ As noted earlier, the Petitioners filed six "Petition[s] to Intervene and Request[s] for Hearing[s]" regarding the Confirmatory Order issued March 29, 1990, prohibiting LILCO from placing nuclear fuel in the reactor vessel without prior NRC approval; a request by LILCO for an amendment to the Shoreham operating license allowing changes in the physical security plan of the plant; and a request by LILCO for an amendment to the Shoreham operating license removing certain license conditions regarding offsite emergency preparedness activities.

The Petitioners next assert that an order to LILCO mandating that it cease and desist from activities related to defueling and destaffing would allow a full environmental review to be conducted pursuant to NEPA, the CEQ guidelines, and the Commission's regulations. In this connection, Petitioners argue that LILCO is engaged in a unitary course of action leading to decommissioning of the Shoreham facility and, while it may not be involved in the actual management of decommissioning, it is responsible for the total financial support of that activity.

The Commission's regulations in 10 C.F.R. Part 51, which implement section 102(2) of NEPA, require that each applicant for a license amendment authorizing the decommissioning of a production or utilization facility submit a supplement to its environmental report, and that in connection with the amendment of an operating license to authorize the decommissioning of such a facility, the NRC Staff will prepare a supplemental environmental impact statement or environmental assessment. See 10 C.F.R. § 51.95(b). However, there is no requirement that an environmental review of decommissioning be undertaken prior to the submittal of an application for the decommissioning of a facility. To date, LILCO has not submitted an application for the decommissioning of its Shoreham facility. Consequently, there is no requirement that an environmental review be conducted at this time. At such time as an application for the decommissioning of the facility is submitted, an environmental review will be conducted. Furthermore, as noted above, prior to any decision with respect to decommissioning, any authorization by the NRC to amend the Shoreham license will be accompanied by the required environmental review called for by 10 C.F.R. Part 51 and consistent with the Commission's decision in CLI-90-8.

With regard to the CEQ regulations, by way of background, on November 29, 1978, pursuant to Executive Order, the CEQ published final regulations relating to the implementation by federal agencies of all of the procedural provisions of NEPA. Accordingly, the NRC revised 10 C.F.R. Part 51. The CEQ reviewed NRC's NEPA procedures (revised 10 C.F.R. Part 51) and determined that these regulations addressed all of the sections of the CEQ regulations required to be addressed. See 49 Fed. Reg. 9380 (Mar. 12, 1984). As stated above, these regulations do not require that an environmental review be conducted at this time.

Finally, the Petitioners argue that the Commission's regulations recognize that the Commission need not passively wait for a license application authorizing decommissioning, but should conduct its regulatory functions in a manner that is receptive to environmental concerns. In this connection, Petitioners assert that the Regional Administrator, Region I, has expressed concern that the activities currently being conducted by the Licensee may require application for a license amendment. The Petitioners assert that if the Commission does not issue a cease-and-desist order to the Licensee to restore the plant and staff to the "status

quo ante” at this time, there will be insufficient staff to operate the plant and the plant will have deteriorated so that several years might be required to make it again available.

LILCO has assured the NRC Staff that it is not permitting the condition of plant systems, including “nonsafety” systems, to deteriorate. The NRC does not believe that the reduction in number of the Licensee’s operating staff should be treated as the equivalent of *de facto* decommissioning. Provided that there is an adequate number of properly trained staff to meet NRC requirements and to ensure safety of the facility in the defueled condition, the NRC does not intend to require that additional staff sufficient to operate the plant at full power be maintained while the decommissioning plan is under development and, in any event, does not consider the current reductions to represent an irreversible action. The NRC will continue to monitor and evaluate the Licensee’s activities on an ongoing basis and, if necessary, will take appropriate action to ensure plant safety pending the development and NRC review of decommissioning plans.

With regard to the need for activities being conducted requiring application for a license amendment, as already indicated, the NRC Staff has determined that LILCO is in full compliance with its license and NRC regulations. In those instances in which LILCO has sought relief from the requirements of its license or NRC regulations, LILCO has submitted the appropriate requests for license amendments or exemptions to the NRC, which have either been approved or are being currently reviewed by the NRC Staff.

As noted above, the School District and SE2 submitted supplements dated July 19, 21, and 31, 1989, and January 23, April 5, May 4, November 14, and November 29, 1990, in which additional assertions are made in support of their requests for action. Provided below is a summary of each of these assertions, followed by the NRC’s response to that assertion:

1. *Assertion:* An article that appeared in the *New York Times* on July 18, 1989, supports the allegation that LILCO is removing the fuel and destaffing the plant as part of a single course of action to decommission the plant without applying for permission to decommission. This article also demonstrates that the New York Public Service Commission and Licensee are pursuing the current course of conduct in order to put the plant into the least expensive configuration possible.

Response: The article that the Petitioner references does not provide any new information not already known to the NRC. Nothing in its license prohibits LILCO from removing fuel as a way of controlling costs at the plant. Regarding destaffing, as described above, current staffing levels satisfy all NRC requirements.

2. *Assertion:* A letter from the Governor of the State of New York to the people of Long Island, dated March 21, 1989, indicates that the Governor engineered the settlement agreement on the basis of the substitution of his

judgment of the risk posed by the facility and the need for the facility for that made by the Commission in issuing the full-power operating license, in violation of the doctrine of federal preemption.

Response: The views expressed in the Governor's March 21, 1989, letter are irrelevant to any decision that will be made by the NRC regarding the Shoreham operating license. The NRC will exercise its regulatory responsibilities and make its own independent determinations regarding any issue concerning the licensing of the Shoreham facility.

3. *Assertion:* My [Dr. Murley's] statement in my July 20, 1989, letter that the "destaffing of the plant will not be implemented until August" is clearly in error, as revealed by the *New York Times* article dated July 18, 1989, which states that LILCO had begun to transfer about 150 employees to other jobs 3 days before the article was written. Similarly, my statement in that letter that defueling is permissible under the license is, at best, "disingenuous," because LILCO's defueling is not the "normal type of defueling," as the NRC Regional Administrator, Region I, has admitted.

Response: In its letter to the Region I Regional Administrator dated July 5, 1989, LILCO stated that it "expects to complete defueling by about August 15. Between now and August 15 the Company intends to reduce staffing levels as discussed on June 30, consistent with our obligations under the operating license." Thus, the transfer of approximately 150 employees of the Nuclear Operations staff to other positions (within LILCO) that began in mid-July 1989, and continued throughout the summer, is consistent with LILCO's stated intent. In its letter dated July 20, 1989 (SNRC-1615), LILCO announced staffing changes at Shoreham. These staffing changes affected the Vice President-Nuclear Operations, and the managers of nuclear engineering, nuclear quality assurance, operations, and nuclear operations support. However, while LILCO may have finalized its plans to reduce Shoreham site staffing by reassigning LILCO personnel to other areas in its company and to reduce contractor support on site and notified the affected personnel prior to August 1, 1989, the actual implementation of these changes did not occur until after August 1, 1989.

With regard to the Petitioners' assertion that LILCO's defueling is not the "normal type of defueling," while the defueling (off-loading) of the Shoreham reactor core for this purpose may not have been explicitly considered when the Shoreham plant was licensed, the ability to off-load and store the entire Shoreham reactor core, for whatever reason, was reviewed and found acceptable. The NRC Staff found, based on its review of the design of the Shoreham spent fuel pool, that the spent pool is capable of storing 2184 irradiated fuel assemblies (390% of a full-core load). This capacity meets the requirements of 10 C.F.R. Part 50 Appendix A, General Design Criteria 62 (see NUREG-0420, § 9.1.2).

4. *Assertion:* The briefing presented by LILCO to NRC senior management on July 28, 1989, revealed certain "new information." Specifically this

information included that: (1) defueling has not been conducted in accordance with 10 C.F.R. § 50.59 in that, because LILCO's section 50.59 analysis was incomplete, there is no basis from which to conclude that defueling does not involve an unreviewed safety question, and the section 50.59 analysis did not consider the acceptability of the risk in light of the fact that defueling is unnecessary; (2) that it had already reduced staff and has plans for more significant reductions. In this regard, the Petitioners express concern regarding the transfer of John D. Leonard, Jr., LILCO's Vice President-Nuclear Operations, because he is the "key man" on whom the NRC relies for assuring compliance with the terms of the operating license, and because his transfer may lead to a "cascading effect" of staff being promoted to positions for which they may not be qualified; and (3) LILCO's statement that it was having a hard time deciding whether to transfer its license to LIPA or apply for a "possession only" license is a "stalling technique" that will allow the plant to decommission itself.

Response: As explained above, removal of fuel from the reactor core and subsequent storage of the fuel in the spent fuel storage pool is an activity associated with normal nuclear plant operations. It is an activity that is permitted by Shoreham's technical specifications and is not a change, test, or experiment that involves a change in plant technical specifications or an unreviewed safety question. Thus, defueling and storage of Shoreham's fuel in its spent fuel storage pool does not require a 10 C.F.R. § 50.59⁵ evaluation. The then-uncompleted safety analysis to which LILCO personnel referred at the July 28 briefing was an analysis being developed by LILCO's Nuclear Engineering Department to support certain license amendment and regulatory exemption requests that LILCO was preparing to submit to the NRC. (See Transcript of Management Level Meeting Between the Nuclear Regulatory Commission and Long Island Lighting Company at 14 (July 28, 1989), which is a publicly available document.) LILCO was not required to complete and submit this analysis to the NRC prior to defueling Shoreham.

As explained above, LILCO publicly announced planned staffing changes in its letter dated July 5, 1989. Nevertheless, LILCO to date remains within the staffing requirements of its operating license. With respect to the transfer of Mr. Leonard from the Shoreham site and his replacement by Mr. Steiger as the senior LILCO manager directly responsible for the Shoreham facility, LILCO is free to make such management changes. The qualifications of Mr. Steiger were reviewed by the NRC, along with those of a number of other LILCO employees

⁵ Section 50.59 permits a licensee to make changes to a facility without prior Commission approval provided that such changes do not involve a change to its technical specifications or an unreviewed safety question. A proposed change is deemed to involve an unreviewed safety question if the probability or consequences of an accident previously evaluated in the safety analysis report may be increased; or if a possibility of an accident different than any evaluated previously in the safety analysis may be created; or if the margin of safety as defined in the basis of any technical specification is reduced.

who changed positions as a result of LILCO's destaffing efforts. The NRC Staff found that, generally, the staffing, technical support, and program functions are as described in the Shoreham USAR and as required by the Shoreham technical specifications.⁶ However, Mr. Steiger has since been promoted to Vice-President, Office of Engineering and Construction, and Mr. Leonard, as Vice-President, Office of Corporate Service and Office of Nuclear, once again is the Licensee's corporate officer responsible for the Shoreham facility.

With regard to the Petitioners' statement that LILCO's statement that it cannot decide whether to transfer its license to LIPA or apply for a "possession only" license is a "stalling technique," as already described, LILCO in its letter of September 19, 1989, committed to an equipment preservation program to prevent degradation of the plant until NRC authorization of decommissioning or other disposition of the facility. The NRC Staff has reviewed the LILCO program and, based on its review, found this program to be well defined, properly implemented in accordance with approved procedures, and adequate to prevent deterioration of protected systems. Thus, the plant will not be allowed to "decommission itself." With regard to LILCO's November 8, 1990 letter concerning its desire to ship certain fuel support castings and peripheral pieces to the Low-Level Waste Repository,⁷ the Staff is evaluating that proposed action as a license amendment request and will ensure that the required environmental review called for by 10 C.F.R. Part 51 is performed.

5. Assertion: A letter dated July 17, 1989, from Admiral James B. Watkins, U.S. Secretary of Energy, to NRC Chairman Kenneth M. Carr, stating that the Department of Energy would support the issuance by the NRC of an immediately effective order prohibiting LILCO from taking actions that in effect initiate the decommissioning process for Shoreham before NRC permission is sought, indicates where the public interest lies, and supports the issuance of an immediately effective order.

Response: Chairman Carr responded to Secretary Watkins by letter dated September 15, 1989. In that letter, he stressed that, because the activities that LILCO is carrying out thus far are authorized under the existing license as amended and because the Commission will continue onsite inspections to ensure that such activities comply with the requirements of the operating license and NRC regulations, at this time the NRC did not perceive a regulatory need to issue an order halting activities currently going on at the Shoreham facility. As Chairman Carr explained, if necessary, the NRC will issue appropriate orders or sanctions to ensure compliance with Commission regulations in the event of

⁶The Radiological Controls Division Manager did not meet the explicit requirements of Regulatory Guide 1.8 (1973). However, the individual who reports to the Radiological Controls Division Manager does meet those qualifications. Therefore, the NRC Staff has determined that this does not pose a safety concern.

⁷See note 2, *supra* pp. 477-78).

improper activities such as safety violations, violations of license conditions, or the start of decommissioning without Commission approval.⁸

6. *Assertion:* The NRC has been "giving various forms of permission to LILCO" that have adverse environmental impacts and diminish the choice of reasonable alternatives to be considered in the NEPA proceedings. These include, at a September 28, 1989 management conference, permission to dismantle the plant and failure to object to a proposal by LILCO not to institute personnel replacement training classes; actions regarding LILCO's Security Training and Qualification Plan, approval in Inspection Reports of LILCO's reduction of staff, discontinuance of training, failure to maintain the facility, and partial-participation emergency exercise without participation of any local emergency response organization; and allowance of a "flow" of surrendered operator's licenses without inquiry into LILCO's plans for replacement. The Petitioners also state that they are aware of a series of license exemption and amendment requests allegedly recognizing a unitary decommissioning plan demanding unified consideration in an EIS.

Response: With regard to the Petitioners' assertion that the NRC has been giving permission to LILCO to take actions that adversely impact the environment, each of the license amendments and exemptions to the NRC regulations that have been approved to enable the Licensee to take the requested actions have been in accordance with all applicable environmental regulations of 10 C.F.R. Part 51. Moreover, none of the actions authorized were considered by the staff to be irreversible;⁹ therefore they do not "diminish the choice of reasonable alternatives to be considered in NEPA proceedings," as alleged by the Petitioners. With respect to the Petitioners' assertion that these exemption and amendment requests recognize a "unitary decommissioning plan demanding unified consideration in an EIS," the Staff has granted only those requests that the Staff has determined do not impact safety or adversely affect the environment and, as stated above, these actions are not considered by the Staff to be irreversible. Therefore these actions are not considered to be decommissioning actions.

7. *Assertion:* An exemption that was granted to LILCO allowing reduction of onsite property insurance at Shoreham further allows LILCO to engage in "piecemeal" decommissioning and is in violation of NEPA, the AEA, the Administrative Procedure Act, and the regulations of the CEQ and the NRC. The proposed reduction of onsite property insurance should be denied or at least

⁸ Secretary Watkins sent an additional letter to Chairman Carr, dated September 18, 1990, in which he requested that the Staff prepare an EIS prior to taking any action on the issuance of a "possession only" license amendment to LILCO, and expressed concern that failure to do so would allow LILCO to "make the destruction of the facility a *fait accompli*." The matter of whether an EIS or an Environmental Assessment (EA) should be prepared with regard to issuance of a possession-only license is currently being considered by the Commission.

⁹ See note 3, *supra* p. 480).

deferred until after publication of a final EIS on the decommissioning proposal. Furthermore, my letter of April 27, 1990, which denied relief based upon this assertion, did not recognize a comment by the Petitioners, dated April 23, 1990.

The Petitioners make three broad arguments in support of this assertion. These can be summarized as follows:

- (1) Neither the fact that Shoreham is presently shut down, nor the mere existence of the settlement agreement under which LILCO does not operate Shoreham, renders LILCO similarly situated to those licensees previously receiving exemptions. NRC consideration of exemptions to 10 C.F.R. § 50.54(w) exemption requests to date has uniformly rested upon one of two circumstantial predicates: the plant's physical characteristics, or possession of other than a full-power operating license. LILCO has based its request on neither. Furthermore, Shoreham differs from other facilities for which exemptions have been granted.
- (2) A decision to grant the insurance exemption request would violate the AEA. In conjunction with this assertion, Petitioners argue that:
 - (a) Section 50.54(w) does not except licensees in extended outages from carrying the full insurance coverage. Both the lack of a provision addressing reactor licensees in extended outages, and the existence of a provision anticipating the possibility of resumed operation following an accident, support the conclusion that granting an exemption for Shoreham would be at variance with this regulation.
 - (b) Section 50.12 of 10 C.F.R., which addresses the criteria for the grant of an exemption, provides in part that the Commission may grant only exemptions that are authorized by law, and that the Commission will not grant an exemption unless certain special circumstances are present. With regard to whether an exemption is authorized by law, an inquiry must be made as to whether the proposed action would violate other pertinent laws. In the present case, granting the requested exemption would violate the AEA and NEPA. Furthermore, although LILCO argued that its request should be considered under the special-circumstance provision which provides that an exemption will be granted if application of the regulation would not serve the underlying purpose of the rule (section 50.12(a)(2)(ii)) or the provision that provides that an exemption will be granted if compliance would result in undue hardship or other costs that are in excess of those incurred by others similarly situated (section 50.12(a)(2)(iii)), no special circumstances justifying this exemption are present.

- (c) A grant of the exemption request would violate the Commission's rules for license amendment proceedings. The exemption, in effect, amends LILCO's operating license and, as such, the Commission should have provided for a hearing on the proposed exemption.
- (3) The exemption is in violation of NEPA and the NEPA regulations promulgated by the CEQ and NRC. The proposed exemption is one part of the larger decommissioning action and cannot be considered independently from the decommissioning proposal, which requires preparation of an EIS: Section 51.101 of 10 C.F.R. prohibits the Commission from taking any action that would have an adverse environmental impact or limit the choice of reasonable alternatives. A decision to grant LILCO's exemption request would do both. Furthermore, the Commission has violated NRC and CEQ regulations calling for preparation and distribution of a draft finding of no significant impact in these circumstances. The Petitioners allege that, as a discreet action, the exemption proposal is without precedent; that as part of the larger decommissioning action, it is part of an action that requires preparation of an EIS; and that, as an action with NEPA implications, the exemption merits comment. For all of these reasons, a draft finding of no significant impact should have been prepared, accompanied by a request for public comment. Finally, the Environmental Assessment (EA) of this exemption request was inadequate because the Commission focussed only upon the proposed property insurance exemption and failed to recognize the proposal as an interdependent part of the larger decommissioning proposal; neither the basis for the proposed action nor the environmental impacts of that action are explained in adequate detail to allow for a meaningful evaluation of the action or its consequences; the EA neglected to mention that LILCO had previously made an almost identical exemption request that was rejected; the EA provides an inadequate basis for the finding of no significant impact; the NRC erroneously asserted in the EA that the possibility that the environmental impact of licensed activities would be altered by changes in insurance coverage is extremely remote; and the Staff did not consult other agencies or persons.

Response: With regard to the Petitioners' first argument (that consideration of exemption requests to date has rested upon the plant's physical characteristics or possession of other than a full-power operating license), although these factors certainly may provide a basis for an exemption as they have in the past, other factors, too, may provide justification. As I briefly explained in my April 27, 1990 letter acknowledging receipt of this supplement to the Petition, the purpose of the insurance requirements set forth in 10 C.F.R. § 50.54(w) is to ensure the

financial ability of a licensee to establish and maintain a stable condition for a nuclear power plant following an accident, including necessary decontamination, to protect the public health and safety. Thus, the amount of insurance coverage called for is not driven by the value of the facility, but rather by the potential cost of establishing and maintaining a safe, stable condition following an accident. This, in turn, is a function of the potential accidents to which a facility might be subject and the consequent radiological hazard, for example, the fission product inventory available for release. These factors were expressly addressed in each of the exemptions that the Petitioners cited in their Petition, as they acknowledge. These factors are indeed the very factors relied on in granting the exemption to LILCO for the Shoreham facility. Notwithstanding that the Shoreham facility is new, in granting the requested exemption, I considered that all fuel has been removed from the reactor, that little fission product inventory is available in light of the extremely short period of operation, and (although not explicitly stated in the exemption) that, in accordance with the Confirmatory Order issued on March 29, 1990, fuel cannot be reloaded in the reactor and the reactor cannot be operated without prior NRC approval. In light of these specific factors, it is evident that the potential for an accident is extremely low and the potential cost of any cleanup likewise is much lower than for a normally operating facility. Accordingly, the exemption granted is wholly consistent with the Petitioners' own position that the amount of insurance coverage be adequate to ensure that sufficient funds will be available to meet the consequences of the worst accident possible in light of the authorization accorded by the operating license.

With regard to the Petitioners' second argument (that a decision to grant the exemption would violate the AEA), the exemption was issued pursuant to 10 C.F.R. § 50.12(a)(2)(iii), it having been concluded that insurance coverage in the amount of \$337 million would be adequate in these circumstances to satisfy the regulatory objective of 10 C.F.R. § 50.54(w) and the overall objective of the AEA. Thus, the exemption is authorized by law. As the Petitioners correctly note, the Commission has not granted exemptions from the requirements of 10 C.F.R. § 50.54(w) to licensees whose facilities are in extended shutdown; the premise is that such facilities have been in operation, have generated a substantial fission product inventory, and will resume operation. On the other hand, no request for exemption addressing this circumstance has been submitted for consideration by licensees whose facilities are in extended shutdown.¹⁰ In any event, unlike those situations, LILCO has determined that it will not operate Shoreham, a decision that it on its own is free to make. *See* CLI-90-8, *supra*. It is also a decision that it would have to address in the context of post-accident

¹⁰ The NRC has received requests for exemptions from other licensees who have also requested that their operating licenses be amended to reflect a permanent shutdown condition. These requests are currently under NRC review.

cleanup, as noted in the regulation. That LILCO's decision is made at this juncture is of no moment in the context of the exemption request.

The Petitioners argue that 10 C.F.R. § 50.12 provides that the Commission will not grant an exemption unless certain special circumstances exist, and that no such circumstances are present in this case. However, the Staff, in granting the exemption, determined that requiring LILCO to carry insurance coverage in the amount of \$1.06 billion would impose undue economic hardship on LILCO based on Shoreham's defueled condition. Consequently, the Staff determined that the special circumstances of 10 C.F.R. § 50.12(a)(2)(iii) exist in this instance. The Petitioners claim that LILCO's reliance on "undue hardship" is misplaced, and that it did not make an adequate showing. The Staff disagrees. LILCO asserted that insurance in the amount of \$337 million is sufficient now that the fuel has been removed from the reactor core. The Staff has evaluated this assertion and concluded that this position is correct, based on the plant's defueled condition and the attendant decreased likelihood and reduced consequences of an accident. LILCO expects that the premium for \$337 million in coverage would be approximately \$2.1 million, or \$1.66 million less than its current coverage. Since the Staff concluded that requiring LILCO to maintain insurance coverage beyond \$337 million is unnecessary, it agrees with LILCO that an unnecessary expenditure of \$1.66 million would impose an undue hardship and constitutes special circumstances warranting the grant of an exemption in accordance with 10 C.F.R. § 50.12(a)(2)(iii). Furthermore, although not explicitly relied upon in granting the exemption, I note that in the circumstances described above, requiring LILCO to maintain full coverage required by the rule would not serve the underlying purpose of the rule and is not necessary to achieve the underlying purpose of the rule. Therefore, granting the exemption also would be warranted based on the special circumstance of 10 C.F.R. § 50.12(a)(2)(ii).

The Petition also suggests that the exemption constitutes a step in the eventual decommissioning of Shoreham and, as such, is an amendment to the Shoreham operating license of the type contemplated by the Commission's decommissioning regulations, thus requiring an opportunity for a hearing. That is not the case. As the Commission made clear in promulgating the decommissioning regulations in 10 C.F.R. § 50.82, decommissioning is defined to include those activities necessary "to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of license." See 10 C.F.R. § 50.4. It is only activities associated with such removal from service and reduction of residual radioactivity to which the decommissioning process applies; the insurance requirement from which an exemption was granted is not a necessary element of decommissioning that has a wholly independent financial requirement. See 10 C.F.R. §§ 50.75 and 50.82.

With regard to the Petitioners' third argument (that the exemption granted violates the requirements of NEPA in that an environmental impact statement has

not been prepared discussing all alternatives to the decommissioning of Shoreham, including the alternative of resumed operation, and that the Environmental Assessment and Finding of No Significant Impact that was prepared prior to issuance of the exemption violates both the NRC's and the CEQ's regulations in that it was not first published in draft form for comment), this argument must be rejected. As noted above, the decision not to operate a facility is one that the Licensee may on its own make without NRC approval or action that would otherwise require an environmental review. See CLI-90-8, *supra*. Thus, resumed operation of the Shoreham facility need not be considered as an alternative in any environmental review otherwise necessary in connection with an action that the NRC must take — for example, the issuance of a license amendment. *Id.* What is required when acting on a matter calling for NRC approval is that the action being approved not foreclose any alternatives to the method of decommissioning or demonstrably increase the cost of such alternatives. *Id.*; see also 10 C.F.R. § 51.101. It is clear that the insurance exemption here involved does neither. It is likewise clear that the exemption does not authorize an action by the Licensee that would have any significant environmental impact; hence, the preparation of an environmental assessment, as opposed to an environmental impact statement, and the publication of a final, as opposed to a draft, finding of no significant impact without consultation with other federal agencies were fully justified and in keeping with the Commission's regulations.

In this regard, the NRC's earlier rejection of LILCO's first exemption request, in July 1989, is not inconsistent with the recent action granting LILCO's second request. While, in the first instance, the request was denied because the non-operating status of Shoreham was essentially self-imposed, it is significant that, now, the non-operating status is compelled by the NRC's Confirmatory Order of March 29, 1990. Should the suspension of operation that is mandated by that Order be rescinded such that operation could lawfully be resumed, the insurance exemption would, by its own terms, expire and the Licensee would be obligated to obtain the full amount of coverage called for by 10 C.F.R. § 50.54(w) or otherwise seek a new exemption.

With regard to the Petitioners' other arguments concerning the adequacy of the EA, all of the requisite findings were made consistent with the regulations, and the level of detail normally contained in exemption requests. In any event, these arguments do not provide a basis for any action pursuant to 10 C.F.R. § 2.206.¹¹

¹¹ The Petitioners assert that in my letter dated April 27, 1990, which denied relief based upon their April 5, 1990 supplement to their Petition, I failed to recognize their comment dated April 23, 1990. The Petitioners are correct that my letter of April 27, 1990, did not address their comment of April 23, 1990. However, this comment does not raise any new information or issues that were not considered in granting the exemption.

8. *Assertion:* The Commission has determined (in CLI-90-8) that LILCO has disbanded a portion of its technical staff and begun training the remaining staff for defueled operation only. This Commission finding recognizes that conditions exist at Shoreham as to both staffing and training that are in direct violation of 10 C.F.R. Part 55 and LILCO's full-power operating license. Further, since LILCO has submitted various applications for license amendments and other request for relief from the requirements of its license, this finding by the Commission recognizes that LILCO is in knowing violation of its license and technical specifications by having implemented these reductions in staffing and training prior to NRC approval.

Response: As already fully explained, LILCO is in full compliance with all NRC requirements, including the requirements of its license. With regard to the matter raised involving LILCO's training of its staff for defueled operation only, this modification in training has not been implemented by the Licensee and is the subject of a pending exemption request by the Licensee, which is under consideration by the NRC Staff.

9. *Assertion:* LILCO recently informed the NRC that 137 fuel support castings and 12 peripheral pieces from the Shoreham reactor vessel are being stored on the south separator/reheater roof above the turbine deck, causing posting of a high radiation area. These circumstances raise questions as to whether LILCO is violating NRC regulations and the Confirmatory Order issued March 29, 1990, which required continued maintenance of structures, systems, and components necessary for full-power operation. Furthermore, the granting of a LILCO license amendment application for shipment of these parts to the Barnwell, South Carolina, low-level waste storage facility for burial of those parts would be contrary to "the decision reached by the Commission on recommendations of SECY-89-247," other regulatory requirements of 10 C.F.R. Chapter I, the Low-Level Waste Policy Amendments Act of 1985, and NEPA, and an attempt to bury these parts would violate a criminal statute.

Response: As noted above, this concern will be considered in a separate Director's Decision. See note 2, *supra*.

The Long Island Association Petition raises arguments similar to those raised by the School District and SE2 Petitions. First, the Petitioner asserts that LILCO has bound itself to undertake actions that are inconsistent with the understandings on which the issuance of its license was based, and that the Commission should issue an order suspending these "minimum posture" activities pending an investigation into whether license violations have occurred, environmental review of the planned decommissioning, and the formulation of an orderly process to govern the future consideration of Shoreham issues. The "actions" that are inconsistent with the premises of LILCO's license include such actions as cutting staff, disregarding Commission "upgrade orders," and reducing maintenance and surveillance and deactivating procedures, all of which

are changes without prior Commission approval that give rise to an unreviewed safety question as defined by 10 C.F.R. § 50.59. In this connection, the Petitioner claims that LILCO cannot elude the requirements of section 50.59 on the grounds that no violation of the Licensee's technical specifications has yet occurred, because the changes could impact sections of the updated FSAR or other commitments made to the NRC. In addition, the Petitioner asserts that LILCO has allowed New York State authorities, through the settlement agreement, to assume unauthorized control over the Shoreham license; and LILCO has taken actions that constitute a *de facto* decommissioning of Shoreham.

As already explained, LILCO has not undertaken any actions to date that are inconsistent with its license. Specifically, plant staffing levels meet the requirements of the Shoreham technical specifications for the defueled condition, and LILCO is performing all required maintenance and surveillance activities. The "upgrade orders" to which the Petitioner refers are actually requests for information called generic letters and bulletins. LILCO currently meets the requirements for responding to such information requests as specified by 10 C.F.R. § 50.54(f). The LILCO staff currently performs maintenance and surveillance activities necessary to demonstrate operability of systems required operable at all times, and those additional systems required to support the shutdown and defueled condition.

With regard to the Petitioner's claim that LILCO cannot "elude the requirements of § 50.59" on the grounds that no violation of the Licensee's technical specifications has yet occurred, because the changes could impact sections of the updated FSAR or other commitments made to the NRC, the Staff has found no evidence that LILCO has been trying to "elude" these requirements. LILCO has been conducting reviews as required by that regulation. Based on the Staff reviews of the annual reports submitted by LILCO pursuant to the requirements of § 50.59 and the normal onsite reviews performed by the Staff of Licensee's analyses supporting these changes, the Staff has found no instance in which LILCO failed to comply with the requirements of 10 C.F.R. § 50.59.

With regard to the argument that the Licensee has allowed New York State authorities to assume unauthorized control over the Shoreham license, the NRC emphasizes that every licensee is obligated to comply with the terms and conditions of its license and the requirements of the NRC's regulations. No private agreement can relieve a licensee of this responsibility, and a licensee may not contract away its obligations as a licensee. With regard to the matter of Shoreham, although LILCO has submitted an application for a license amendment to authorize transfer of the Shoreham facility to LIPA, there is no indication that LILCO has surrendered control over Shoreham to New York State. To the contrary, LILCO has committed to the NRC that it fully intends to abide by all of the terms and conditions of its license until transfer is authorized, and that, while under the terms of the settlement agreement LILCO is obligated

not to operate Shoreham and to cooperate with New York State in obtaining NRC permission to transfer the plant, in all matters concerning regulatory compliance and conduct of licensed activities, LILCO will continue to exercise its own independent judgment. Furthermore, LILCO has committed that, should a conflict arise between its obligation under the settlement agreement and its duty as an NRC licensee, LILCO will do whatever is required to meet its NRC obligations. See "LILCO's Response to the September 15, 1989 Letter from NRC (T. Murley) to LILCO (W. Steiger, Jr.)" (November 10, 1989).

With regard to the argument that the Licensee is taking actions that constitute a *de facto* decommissioning of Shoreham, this is a similar argument to that raised by the School District and SE2 and has already been addressed above. As already discussed, these actions do not constitute a *de facto* decommissioning because none of the actions taken to date prevent the future operation of the plant by some entity other than LILCO. With respect to LILCO's desire to ship certain fuel support castings and peripheral pieces to the Low-Level Waste Repository, as noted above, the Staff is evaluating that proposed action as a license amendment request and will ensure that any environmental review required by 10 C.F.R. Part 51 is performed.

The Long Island Association alleges further that the actions being implemented at Shoreham are aimed at the ultimate filing of a decommissioning application. As such, the Petitioner argues that the requirements of NEPA and the CEQ mandate that the Commission take steps now to ensure that proper environmental studies are undertaken. This too is a similar argument to that raised by the School District and SE2. As explained above, there is no obligation under NEPA or the Commission's regulations, which have been approved by the CEQ, to conduct an environmental review at this time.

CONCLUSION

For the reasons explained above, I find that there is no basis to take the actions requested by the Petitioners. (The issues discussed in the Petitioners' November 29, 1990 supplement will be addressed by a separate Director's Decision). I have made this decision based upon all information that is currently available to the NRC. This information includes the inspection reports that resulted from the September 1989 team inspection and Resident Inspector inspections conducted January through August 1990 at Shoreham (Inspection Reports 50-322/89-91, 50-322/90-01, and 50-322/90-02), the Updated Safety Analysis Report, plant technical specifications, and a review of correspondence between the NRC and LILCO.

As fully discussed in this Decision, in its current shutdown and defueled status, Shoreham satisfies all applicable requirements of its operating license

and the Commission's regulations. The Commission's regulations in 10 C.F.R. Part 51, which implement section 102(2) of NEPA, require that each applicant for a license amendment authorizing the decommissioning of a production or utilization facility submit a supplement to its environmental report, and that in connection with the amendment of an operating license to authorize the decommissioning of such a facility, the NRC Staff will prepare a supplemental environmental impact statement or environmental assessment. However, there is no requirement that an environmental review be undertaken prior to the submittal of an application for the decommissioning of a facility. As LILCO has not to date submitted an application for decommissioning of the Shoreham facility, and I have determined that the Licensee has not engaged in *de facto* decommissioning of the facility, the Petitioners have failed to demonstrate that an environmental review is necessary or required at this time. Furthermore, the Petitioners have failed to demonstrate that an unreviewed safety question is involved, and have not raised any substantial health and safety issues that warrant the requested relief. As the Petitioners have failed to raise substantial health and safety issues, no basis exists for taking the actions requested in the Petitions based on the asserted health and safety concerns. *See Consolidated Edison Co. of New York (Indian Point, Units 1, 2, and 3), CLI-75-8, 2 NRC 173, 176 (1975); Washington Public Power Supply System (WPPSS Nuclear Project No. 2), DD-84-7, 19 NRC 899, 923 (1984).* Accordingly, the Petitions are denied. A copy of this Decision will be filed with the Secretary for the Commission's review in accordance with 10 C.F.R. § 2.206(c).

FOR THE NUCLEAR
REGULATORY COMMISSION

Thomas E. Murley, Director
Office of Nuclear Reactor
Regulation

Dated at Rockville, Maryland,
this 20th day of December 1990.

CASE NAME INDEX

ALL CHEMICAL ISOTOPE ENRICHMENT, INC.

CONSTRUCTION PERMIT MODIFICATION AND SHOW CAUSE; MEMORANDUM AND ORDER (Ruling on NRC Staff Motion for Summary Disposition and Dismissal of Proceeding); Docket Nos. 50-603, 50-604 (ASLBP No. 89-596-01-OM/SC (Construction Permit Nos. CPEP-1 and CPEP-2); LBP-90-26, 32 NRC 30 (1990)

ARIZONA PUBLIC SERVICE COMPANY, et al.

REQUEST FOR ACTION; PARTIAL DIRECTOR'S DECISION UNDER 10 C.F.R. §2.206; Docket Nos. 50-528, 50-529, 50-530; DD-90-7, 32 NRC 273 (1990)

CITIZENS TASK FORCE OF CHAPEL HILL, et al.

DENIAL OF PETITION FOR RULEMAKING; Docket Nos. PRM 50-31, PRM 50-45, PRM 50-46; DPRM-90-1, 32 NRC 281 (1990)

CLEVELAND ELECTRIC ILLUMINATING COMPANY, et al.

OPERATING LICENSE AMENDMENT; MEMORANDUM AND ORDER (Denying Staff's and Licensee's Motions for Reconsideration); Docket No. 50-440-OLA-2 (ASLBP No. 90-605-02-OLA); LBP-90-25, 32 NRC 21 (1990)

OPERATING LICENSE AMENDMENT; INITIAL DECISION (Approving License Amendment); Docket No. 50-440-OLA-2 (ASLBP No. 90-605-02-OLA); LBP-90-39, 32 NRC 368 (1990)

REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. §2.206; Docket No. 50-440; DD-90-6, 32 NRC 195 (1990)

COMMONWEALTH EDISON COMPANY

ENFORCEMENT; MEMORANDUM AND ORDER (Approving Settlement Agreement and Terminating Proceedings); Docket Nos. 50-254-OM, 50-265-OM (ASLBP No. 90-609-02-OM) (EA 90-032) (Facility Operating License Nos. DPR-29 and DPR-30); LBP-90-28, 32 NRC 85 (1990)

COMMONWEALTH EDISON COMPANY, et al.

CONSTRUCTION PERMIT WITHDRAWAL; ORDER APPROVING WITHDRAWAL AND TERMINATING PROCEEDING; Docket Nos. 50-599-ESR, 50-600-ESR (ASLBP No. 79-422-01-ES); LBP-90-37, 32 NRC 270 (1990)

CURATORS OF THE UNIVERSITY OF MISSOURI

MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Intervenor's Motion for Directed Certification); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (TRUMP-S Project) (Byproduct License No. 24-00513-32; Special Nuclear Materials License No. SNM-247); LBP-90-23, 32 NRC 7 (1990)

MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Completeness of the Hearing File); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (TRUMP-S Project) (Byproduct License No. 24-00513-32; Special Nuclear Materials License No. SNM-247); LBP-90-27, 32 NRC 40 (1990)

MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Temporary Stay Request); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (Re: TRUMP-S Project) (Byproduct License No. 24-00513-32; Special Nuclear Materials License No. SNM-247); LBP-90-30, 32 NRC 95 (1990)

MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Intervenor's Renewed Motion for Completion of Hearing File and Related Matters); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (RE: TRUMP-S Project) (Byproduct License No. 24-00513-32, Special Nuclear Materials License No. SNM-247); LBP-90-33, 32 NRC 245 (1990)

CASE NAME INDEX

- MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Motion for Order Concerning Documents); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (RE: TRUMP-S Project) (Byproduct License No. 24-00513-32; Special Nuclear Materials License No. SNM-247); LBP-90-34, 32 NRC 253 (1990)
- MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Grant of Temporary Stay); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (RE: TRUMP-S Project) (Byproduct License No. 24-00513-32; Special Nuclear Materials License No. SNM-247); LBP-90-35, 32 NRC 259 (1990)
- MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Licensee's Partial Response Concerning Temporary Stay); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (RE: TRUMP-S Project) (Byproduct License No. 24-00513-32, Special Nuclear Materials License No. SNM-247); LBP-90-38, 32 NRC 359 (1990)
- MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Dissolution of Stay); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (RE: TRUMP-S Project) (Byproduct License No. 24-00513-32, Special Nuclear Materials License No. SNM-247); LBP-90-41, 32 NRC 380 (1990)
- MATERIALS LICENSE AMENDMENT; MEMORANDUM AND ORDER (Pending Motions, Including Those Related to Possession of ^{241}Pu); Docket Nos. 70-00270, 30-02278-MLA (ASLBP No. 90-613-02-MLA) (RE: TRUMP-S Project) (Byproduct License No. 24-00513-32, Special Nuclear Materials License No. SNM-247); LBP-90-45, 32 NRC 449 (1990)
- FLORIDA POWER AND LIGHT COMPANY
- OPERATING LICENSE AMENDMENT; MEMORANDUM AND ORDER (Motion to Dismiss); Docket Nos. 50-250-OLA-5, 50-251-OLA-5 (ASLBP No. 90-602-01-OLA-5) (Technical Specifications Replacement) (Facility Operating License Nos. DPR-31, DPR-41); LBP-90-24, 32 NRC 12 (1990)
- OPERATING LICENSE AMENDMENT; MEMORANDUM AND ORDER (Consideration of Possible Sua Sponte Issues); Docket Nos. 50-250-OLA-5, 50-251-OLA-5 (ASLBP No. 90-602-01-OLA-5) (Technical Specifications Replacement) (Facility Operating Licenses Nos. DPR-31, DPR-41); LBP-90-32, 32 NRC 181 (1990)
- GEORGIA POWER COMPANY, et al
- OPERATING LICENSE AMENDMENT; MEMORANDUM AND ORDER (Intervention Petition); Docket Nos. 50-424-OLA, 50-425-OLA (ASLBP No. 90-617-03-OLA) (Facility Operating Licenses NPF-68 and NPF-81); LBP-90-29, 32 NRC 89 (1990)
- LONG ISLAND LIGHTING COMPANY
- OPERATING LICENSE AMENDMENT; MEMORANDUM AND ORDER; Docket No. 50-322; CLI-90-8, 32 NRC 201 (1990)
- REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. §2.206; Docket No. 50-322; DD-90-8, 32 NRC 469 (1990)
- MARVIN LEWIS
- DENIAL OF PETITION FOR RULEMAKING; Docket No. PRM 50-52; DPRM-90-3, 32 NRC 326 (1990)
- PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, et al
- OPERATING LICENSE; DECISION; Docket Nos. 50-443-OL, 50-444-OL (Offsite Emergency Planning Issues); ALAB-934, 32 NRC 1 (1990); ALAB-935, 32 NRC 57 (1990); ALAB-936, 32 NRC 75 (1990); ALAB-937, 32 NRC 135 (1990); ALAB-941, 32 NRC 337 (1990); ALAB-942, 32 NRC 395 (1990)
- OPERATING LICENSE; MEMORANDUM AND ORDER REGARDING REFERRED QUESTIONS; Docket Nos. 50-443-OL, 50-444-OL (Offsite Emergency Planning Issues); ALAB-939, 32 NRC 165 (1990)
- OPERATING LICENSE; MEMORANDUM AND ORDER; Docket Nos. 50-443-OL-1, 50-444-OL-1 (Low-Power Testing); ALAB-940, 32 NRC 225 (1990)
- OPERATING LICENSE; ORDER; Docket Nos. 50-443-OL, 50-444-OL (Offsite Emergency Planning); CLI-90-10, 32 NRC 218 (1990)

CASE NAME INDEX

- OPERATING LICENSE REMAND; MEMORANDUM AND ORDER (Denying Licensee's Motion for Summary Disposition of Issues Remanded in ALAB-937); Docket Nos. 50-443-OLR-3, 50-444-OLR-3 (ASLBP No. 90-619-03-OLR-3) (Offsite Emergency Planning); LBP-90-40, 32 NRC 376 (1990)
- OPERATING LICENSE REMAND; MEMORANDUM AND ORDER (Summary Disposition Motion); Docket Nos. 50-443-OL-R, 50-444-OL-R (ASLBP No. 90-600-01-OL-R) (Emergency Planning; ALS Patients); LBP-90-44, 32 NRC 433 (1990)
- REQUEST FOR ACTION; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206; Docket No. 50-443; DD-90-4, 32 NRC 45 (1990); DD-90-5, 32 NRC 109 (1990)
- ROBERT L. DICKHERBER
- ENFORCEMENT; MEMORANDUM AND ORDER (Approving Settlement Agreement and Terminating Proceedings); Docket No. 55-5043-SC (ASLBP No. 90-610-01-SC) (EA 90-031) (Senior Operator License Limited to Fuel Handling, No. SOP-2365-8); LBP-90-28, 32 NRC 85 (1990)
- SIERRA CLUB
- DENIAL OF PETITION FOR RULEMAKING; Docket No. PRM 40-23; DPRM-90-2, 32 NRC 317 (1990)
- ST. MARY MEDICAL CENTER—HOBART and ST. MARY MEDICAL CENTER—GARY
- MODIFICATION OF LICENSE; MEMORANDUM AND ORDER (Motion to Strike Certain Documents); Docket Nos. 030-31379-OM, 030-01615-OM (ASLBP No. 90-612-04-OM) (EA No. 90-071) (Order Suspending Brachytherapy Activities and Modifying License); LBP-90-36, 32 NRC 267 (1990)
- MODIFICATION OF LICENSE; MEMORANDUM AND ORDER (Order Approving Settlement Agreement); Docket Nos. 030-31379-OM, 030-01615-OM (ASLBP No. 90-612-04-OM) (EA No. 90-071) (Order Suspending Brachytherapy Activities and Modifying License); LBP-90-46, 32 NRC 463 (1990)
- STATE OF ILLINOIS
- SECTION 274 AGREEMENT; MEMORANDUM AND ORDER; Docket No. PR 90-1-MISC (Amendment No. 1 to Section 274 Agreement Between NRC and Illinois); CLI-90-9, 32 NRC 210 (1990)
- SECTION 274 AGREEMENT; MEMORANDUM AND ORDER; Docket No. PR 90-1-MISC (Amendment No. 1 to Section 274 Agreement Between NRC and Illinois); CLI-90-11, 32 NRC 333 (1990)
- TULSA GAMMA RAY, INC.
- ENFORCEMENT ACTION; MEMORANDUM AND ORDER (Memorializing Prehearing Conference); Docket No. 30-12319-CivP (ASLBP No. 90-618-03-CivP) (Materials License No. 35-17178-01) (EA 89-223); LBP-90-43, 32 NRC 390 (1990)
- ENFORCEMENT ACTION; PREHEARING CONFERENCE MEMORANDUM AND ORDER; Docket No. 30-12319-CivP (ASLBP No. 90-618-03-CivP) (Materials License No. 35-17178-01) (EA 89-223); LBP-90-42, 32 NRC 387 (1990)
- ENFORCEMENT; NOTICE OF HEARING AND OTHER MATTERS; Docket No. 30-12319-CivP (ASLBP No. 90-618-03-CivP) (EA 89-223) (Material License No. 35-17178-01); LBP-90-31, 32 NRC 107 (1990)
- VERMONT YANKEE NUCLEAR POWER CORPORATION
- OPERATING LICENSE AMENDMENT; MEMORANDUM AND ORDER; Docket No. 50-271-OLA (Spent Fuel Pool Amendment); CLI-90-7, 32 NRC 129 (1990)
- OPERATING LICENSE AMENDMENT; NOTICE; Docket No. 50-271-OLA (Spent Fuel Pool Amendment); ALAB-938, 32 NRC 154 (1990)

LEGAL CITATIONS INDEX
CASES

- Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), ALAB-852, 24 NRC 532, 546 (1986)
scope of exercise of emergency notification system; ALAB-941, 32 NRC 347 (1990)
- Cincinnati Gas and Electric Co. (William H. Zimmer Nuclear Power Station, Unit 1), CLI-82-20, 16 NRC 109, 110 (1982)
criteria for admission as a sua sponte issue; LBP-90-32, 32 NRC 183 (1990)
sua sponte adoption of issues that have already been spotlighted for consideration by staff;
LBP-90-24, 32 NRC 18 (1990)
- Cincinnati Gas and Electric Co. (William H. Zimmer Nuclear Power Station), LBP-81-2, 13 NRC 36, 40-41 (1981)
standard for grant of summary disposition motions; LBP-90-44, 32 NRC 437 (1990)
- Cities of Statesville v. AEC, 441 F.2d 962, 974 (1969)
post-licensing review and revocation of licenses for post-licensing failures; LBP-90-26, 32 NRC 37 (1990)
- City of New York v. U.S. Department of Transportation, 715 F.2d 732, 742-43 (2d Cir. 1983)
range of alternatives to proposed action to be considered; CLI-90-8, 32 NRC 206 (1990)
- Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 755 (1977)
standard for grant of summary disposition; LBP-90-44, 32 NRC 437 (1990)
- Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), CLI-86-7, 23 NRC 233, 235 (1986), aff'd sub nom. Ohio v. NRC, 814 F.2d 258 (6th Cir. 1987)
burden on sponsors of reopening motion; ALAB-936, 32 NRC 82 n.18 (1990)
- Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), LBP-82-114, 16 NRC 1909, 1911-13 (1982)
standard for summary disposition; LBP-90-44, 32 NRC 436 (1990)
- Coalition for the Environment, St. Louis Region v. NRC, 795 F.2d 168, 172 (D.C. Cir. 1986)
rulemaking process applied to financial qualifications rule; DPRM-90-3, 32 NRC 331 (1990)
- Consolidated Edison Co. of New York (Indian Point, Units 1, 2, and 3), CLI-75-8, 2 NRC 173, 176 (1975)
standard for institution of show-cause proceedings; DD-90-5, 32 NRC 128 (1990); DD-90-7, 32 NRC 278 (1990); DD-90-8, 32 NRC 496 (1990)
- Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-691, 16 NRC 897, 907 (1982), sua sponte review declined, 17 NRC 69 (1983)
dismissal of appeal of intervenor for failure to participate before the licensing board; ALAB-934, 32 NRC 4 (1990)
- Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 NRC 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 NRC 1041 (1983)
improper use of discover to flesh out vague contentions; ALAB-942, 32 NRC 427 (1990)
- Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041 (1983)
five factor test for admission of late-filed contentions; ALAB-937, 32 NRC 147 n.40 (1990)
- Duke Power Co. (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-143, 6 AEC 623, 625-26 (1973)
applicability in informal proceedings; LBP-90-34, 32 NRC 255 (1990)

LEGAL CITATIONS INDEX CASES

- licensee obligation to inform presiding officer and parties of relevant and material new information; LBP-90-36, 32 NRC 269 (1990)
- Final Rule on Emergency Planning, CLI-80-40, 12 NRC 636, 638 (1980)
- reason for 5- to 10-mile range for alerting system; ALAB-935, 32 NRC 72 n.55 (1990)
- Florida Power and Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989)
- showing necessary to establish standing to intervene in license amendment proceeding; LBP-90-29, 32 NRC 91 (1990)
- Ft. Pierce Utilities Authority of City of Ft. Pierce v. United States, 606 F.2d 986, 996 (1979), cert. denied, 444 U.S. 862
- post-licensing review and revocation of licenses for post-licensing failures; LBP-90-26, 32 NRC 37 (1990)
- General Public Utilities Nuclear Corp. (Three Mile Island Nuclear Station, Unit 2), LBP-89-7, 29 NRC 138, 141-42, 190 (1989)
- basis for grant of relief in Subpart L proceedings; LBP-90-45, 32 NRC 454 n.11 (1990)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-291, 2 NRC 404, 408 (1975)
- licensee obligation to inform presiding officer and parties of relevant and material new information; LBP-90-34, 32 NRC 255 (1990)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-851, 24 NRC 529, 530-31 (1986)
- dismissal of appeal of intervenor for failure to participate before the licensing board); ALAB-934, 32 NRC 4 (1990)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-859, 25 NRC 23, 27 (1987)
- jurisdiction over an issue being appealed; LBP-90-32, 32 NRC 184 (1990)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), ALAB-872, 26 NRC 127, 131 (1987)
- adequacy of brief as basis for accepting or rejecting appeals; ALAB-937, 32 NRC 153 n.59 (1990)
- Georgia Power Co. (Vogtle Electric Generating Plant, Units 1 and 2), LBP-84-35, 20 NRC 887, 916 (1984)
- standing to intervene on basis of participation in other proceedings; LBP-90-29, 32 NRC 91 (1990)
- Greene County Planning Board v. FPC, 455 F.2d 412 (2d Cir. 1972), cert. denied, 409 U.S. 849 (1972)
- applicability to licensee decision not to operate a nuclear power plant; CLI-90-8, 32 NRC 207 (1990)
- Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 547-49 (1980)
- merits determinations of contentions at admission stage; ALAB-938, 32 NRC 163 n.5 (1990)
- Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550-51 (1980)
- purpose of summary disposition; LBP-90-44, 32 NRC 436 (1990)
- Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-629, 13 NRC 75, 78 (1981)
- content of responses to summary disposition motions; LBP-90-44, 32 NRC 440 n.13 (1990)
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), ALAB-549, 9 NRC 644, 647 (1979)
- organizational standing to intervene, basis for; LBP-90-29, 32 NRC 92 (1990)
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-79-10, 9 NRC 439, 443-44 (1979), aff'd, ALAB-549, 9 NRC 644 (1979)
- basis for standing to intervene in license amendment proceeding; LBP-90-29, 32 NRC 92 (1990)
- Houston Lighting and Power Co. (South Texas Project, Units 1 and 2), LBP-86-15, 23 NRC 595, 624 (1986)
- test for relevance and materiality of documents; LBP-90-34, 32 NRC 257 (1990)
- Kerr-McGee Chemical Corp. (West Chicago Rare Earths Facility), LBP-90-9, 31 NRC 150 (1990)
- onsite disposal of mill tailings; CLI-90-9, 32 NRC 212 (1990)

LEGAL CITATIONS INDEX CASES

- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 NRC 275, 290, review declined, CLI-88-11, 28 NRC 603 (1988) timing requirement for warning systems; ALAB-935, 32 NRC 70 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-901, 28 NRC 302, 307-08 & n.6, review declined, CLI-88-11, 28 NRC 603 (1988)
jurisdiction where multiple boards are used in a single licensing proceeding; ALAB-942, 32 NRC 418 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-902, 28 NRC 423, 430, review declined, CLI-88-11, 28 NRC 603 (1988)
restrictions on use of multiple boards in a single licensing proceeding; ALAB-942, 32 NRC 421 n.85 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499 (1988)
showing of fundamental flaw in an emergency plan; ALAB-942, 32 NRC 425 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499, 505 (1988)
definition of "fundamental flaw" in an emergency plan; ALAB-942, 32 NRC 414 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-903, 28 NRC 499, 506 (1988)
specificity required for admission of emergency exercise contentions; ALAB-941, 32 NRC 352 n.38 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-905, 28 NRC 515, 522-28 (1988)
planning basis for for monitoring arrangement in emergency planning; ALAB-942, 32 NRC 405 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-86-11, 23 NRC 577, 581 (1986)
fundamental flaw standard admission of contentions on emergency exercises; ALAB-942, 32 NRC 414 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22 (1986)
origin of realism rule; ALAB-937, 32 NRC 149 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22, 30 (1986)
definition of "adequate protective measures" as used in emergency planning regulations; DPRM-90-1, 32 NRC 291 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22, 31 (1986)
assumption of best-efforts response by state and local governments in an emergency; ALAB-936, 32 NRC 82 n.17 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-5, 25 NRC 884, 887-88 (1987)
presumption of American Red Cross response during an emergency; ALAB-941, 32 NRC 349 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-5, 25 NRC 884, 888 (1987)
weight given to emergency response commitment of American Red Cross; ALAB-937, 32 NRC 142 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383 (1987)
adequacy of 10-mile emergency planning zone in context of severe accidents; DPRM-90-1, 32 NRC 290 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-88-11, 28 NRC 603 (1988)
fundamental flaw standard for litigation of emergency exercise contentions; ALAB-941, 32 NRC 345 (1990)
- Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-89-2, 29 NRC 211 (1989)
sanction of dismissal for nonparticipation on remanded issues; ALAB-934, 32 NRC 5 (1990)
- Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1, 5, aff'd sub nom. Oystershell Alliance v. NRC, 800 F.2d 1201 (D.C. Cir. 1986)
burden on sponsors of reopening motion; ALAB-936, 32 NRC 82 n.18 (1990)

LEGAL CITATIONS INDEX CASES

- Massachusetts v. United States, 856 F.2d 378, 383 (1st Cir. 1988)
applicability of realism rule to school personnel; ALAB-937, 32 NRC 150 (1990)
- Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), CLI-79-8, 10 NRC 141, 147-48 (1979)
staff obligation to serve a party or establish a local public document room; LBP-90-27, 32 NRC 42 (1990)
- Mutual Fund Investors, Inc. v. Putnam Management Co., 553 F.2d 620, 624 (9th Cir. 1977)
definition of "material fact" for purpose of summary disposition; LBP-90-44, 32 NRC 436 (1990)
- New England Coalition on Nuclear Pollution v. NRC, 727 F.2d 1127 (D.C. Cir. 1984)
rulemaking process applied to financial qualifications rule; DPRM-90-3, 32 NRC 331 (1990)
- Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear-1), ALAB-224, 8 AEC 244, 246-48 (1974)
claims of disenchantment with prior licensing board rulings as basis for claims of bias; ALAB-936, 32 NRC 83 n.24 (1990)
- Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear-1), ALAB-244, 8 AEC 244, 251 (1974)
dismissal of appeal of intervenor for failure to participate before the licensing board); ALAB-934, 32 NRC 4 (1990)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 192 (1973), aff'd sub nom. Business and Professional People for the Public Interest v. AEC, 502 F.2d 424 (D.C. Cir. 1974)
improper use of discover to flesh out vague contentions; ALAB-942, 32 NRC 427 (1990)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-252, 8 AEC 1175, aff'd, CLI-75-1, 1 NRC 1 (1975)
cross-examination by an intervenor on another party's issues; ALAB-942, 32 NRC 406 n.24 (1990)
- Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-288, 2 NRC 390, 393 (1975)
forfeiture by intervenor of entitlement to party status on particular issue because of failure to participate on remand; ALAB-934, 32 NRC 4 n.14 (1990)
- Northern States Power Co. (Tyrone Energy Park, Unit 1), ALAB-492, 8 NRC 251 (1978)
appealability of dismissal of contentions; ALAB-941, 32 NRC 344 n.4 (1990)
- NRDC v. Callaway, 524 F.2d 79, 92 (2d Cir. 1975)
resumed operation as an alternative to decommissioning; CLI-90-8, 32 NRC 208 (1990)
- NRDC v. Callaway, 524 F.2d 79, 93 (2d Cir. 1975)
consideration of alternatives that are speculative or require changes in governmental policy or legislation; CLI-90-8, 32 NRC 206 (1990)
- NRDC v. EPA, 822 F.2d 104, 126-31 (D.C. Cir. 1987)
scope of review under NEPA; CLI-90-8, 32 NRC 208 (1990)
- NRDC v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972)
rule of reason in considerations of alternatives to proposed action; CLI-90-8, 32 NRC 206 (1990)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-583, 11 NRC 447, 448 (1980)
appeal rights of intervenors who fail to participate on licensing issues being appealed; ALAB-934, 32 NRC 4 n.13 (1990)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-583, 11 NRC 447, 449 (1980)
participation by interested state on appeals; ALAB-942, 32 NRC 421 n.83 (1990)
- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1345 (1983)
definition of significant safety issue for purpose of reopening a record; ALAB-940, 32 NRC 243 (1990)

LEGAL CITATIONS INDEX

CASES

- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-763, 19 NRC 571, 577, review declined, CLI-84-14, 20 NRC 285 (1984)
burden of persuasion in Subpart L proceeding on materials license amendment; LBP-90-45, 32 NRC 455 (1990)
- Pacific Gas and Electric Co. (Stanislaus Nuclear Project, Unit 1), LBP-77-45, 6 NRC 159, 163 (1977)
showing necessary by opponent of summary disposition motion; LBP-90-44, 32 NRC 437 (1990)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-804, 21 NRC 587, 592 n.6 (1985)
responsibility for supplying bases for contentions; ALAB-942, 32 NRC 417 (1990)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-834, 23 NRC 263, 264 (1986)
weight given to criteria for reopening a record; ALAB-940, 32 NRC 243 (1990)
- Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-845, 24 NRC 220, 230 (1986)
purpose of specificity requirement for admission of contentions; ALAB-942, 32 NRC 427 n.107 (1990)
- Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20, rev'd in part on other grounds, CLI-74-32, 8 AEC 217 (1974)
specificity required of contention bases; ALAB-942, 32 NRC 428 (1990)
- Porter County Chapter of the Izaak Walton League v. AEC, 533 F.2d 1011 (7th Cir.), cert. denied, 429 U.S. 945 (1976)
standard for consideration of class 9 accidents; DD-90-4, 32 NRC 51 n.1 (1990)
- Portland General Electric Co. (Pebble Springs Nuclear Plant, Units 1 and 2), CLI-76-27, 4 NRC 610, 612, 614-17 (1976)
test for discretionary intervention by an organization; LBP-90-24, 32 NRC 15 (1990)
- Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 271-74 (1979)
interpretation of matters that must be included in technical specifications; LBP-90-25, 32 NRC 23 (1990)
need for cycle-specific operating limits to be in Technical Specifications; LBP-90-39, 32 NRC 369 (1990)
- Power Authority of the State of New York (Greene County Nuclear Power Plant), LBP-79-8, 9 NRC 339, 340 (1979)
finding to be made by licensing board prior to grant of summary disposition motion; LBP-90-44, 32 NRC 437 (1990)
- Process Gas Consumers Group v. U.S. Department of Agriculture, 694 F.2d 728, 769 (2d Cir. 1981)
range of alternatives to proposed action to be considered; CLI-90-8, 32 NRC 206 (1990)
- Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), LBP-86-37, 24 NRC 719 (1986)
board jurisdiction prior to issuance of Notice of Hearing; LBP-90-32, 32 NRC 184 (1990)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-748, 18 NRC 1184 (1983); ALAB-749, 18 NRC 1195 (1983); ALAB-751, 18 NRC 1313 (1983)
claims of disenchantment with prior licensing board rulings as basis for claims of bias; ALAB-936, 32 NRC 83 n.24 (1990)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 241 (1989)
dismissal of contention based on factual underpinning that has been essentially repudiated by the source of that document; ALAB-938, 32 NRC 162 (1990)
- Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-83-32A, 17 NRC 1170, 1174 n.4 (1983)
content of responses to summary disposition motions; LBP-90-44, 32 NRC 440 n.13 (1990)
- Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-397, 5 NRC 1143, 1145 (1977)
test for discretionary intervention by an organization; LBP-90-24, 32 NRC 15 (1990)

LEGAL CITATIONS INDEX

CASES

- Rockwell International Corp. (Rocketyne Division), ALAB-925, 30 NRC 709 (1989), *aff'd*, CLI-90-5, 31 NRC 337 (1990)
authority of presiding officer to complete the hearing record; LBP-90-27, 32 NRC 42 n.3 (1990)
board jurisdiction prior to issuance of Notice of Hearing; LBP-90-32, 32 NRC 184 (1990)
- San Luis Obispo Mothers for Peace v. NRC, 751 F.2d 1287 (D.C. Cir. 1984)
materiality of low-power testing to grant of full-power license; ALAB-940, 32 NRC 232-33 (1990)
- San Luis Obispo Mothers for Peace v. NRC, 789 F.2d 26, 30 (D.C. Cir. 1986), *cert. denied*, 479 U.S. 923 (1986)
hearing rights on low-power testing; ALAB-940, 32 NRC 241 n.44 (1990)
- Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968)
notice and comment procedures for consideration of state alternative standards for regulation of byproduct material; CLI-90-9, 32 NRC 215 (1990)
- Sierra Club v. Lynn, 502 F.2d 43, 62 (5th Cir. 1974), *cert. denied*, 421 U.S. 994 (1975)
consideration of alternatives that are speculative or require changes in governmental policy or legislation; CLI-90-8, 32 NRC 206 (1990)
- Sierra Club v. NRC, 862 F.2d 222 (9th Cir. 1989), *as amended*
motion for reconsideration of environmental contention; ALAB-938, 32 NRC 159 (1990)
- Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-82-39, 15 NRC 1163, 1171-73 (1982)
extension of EPZ because of evacuation shadow phenomenon; DPRM-90-1, 32 NRC 307 (1990)
- Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 457 (1981)
purpose of summary disposition; LBP-90-44, 32 NRC 436 (1990)
- Tennessee Valley Authority (Browns Ferry Nuclear Plant, Units 1, 2, and 3), ALAB-677, 15 NRC 1387, 1388, 1394 (1982)
licensee obligation to inform presiding officer and parties of relevant and material new information; LBP-90-36, 32 NRC 269 (1990)
- Tennessee Valley Authority (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1421 n.4 (1977)
basis for standing to intervene in license amendment proceeding; LBP-90-29, 32 NRC 92 (1990)
- Tennessee Valley Authority (Watts Bar Nuclear Plant, Units 1 and 2), ALAB-413, 5 NRC 1418, 1422 (1977)
test for discretionary intervention by an organization; LBP-90-24, 32 NRC 15 (1990)
- Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-81-36, 14 NRC 1111, 1114 (1981)
effect of a party's withdrawal on litigation of its contentions; LBP-90-32, 32 NRC 183 (1990)
test for determining whether to adopt dismissed intervenor's contentions *sua sponte*; LBP-90-24, 32 NRC 18 (1990)
- Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2), LBP-83-81, 18 NRC 1410, 1452-56 (1983)
basis for grant of relief in Subpart L proceedings; LBP-90-45, 32 NRC 454 n.11 (1990)
- Union Electric Co. (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983)
definition of significant safety issue for purpose of reopening a record; ALAB-940, 32 NRC 243 (1990)
- Union of Concerned Scientists v. NRC, 735 F.2d 1437 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1132 (1985)
materiality of low-power testing to grant of full-power license; ALAB-940, 32 NRC 232 (1990)
- Union of Concerned Scientists v. NRC, 735 F.2d 1437, 1441-42 (D.C. Cir. 1984), *cert. denied*, 469 U.S. 1132 (1985)
materiality of emergency planning deficiencies to grant of full-power license; ALAB-940, 32 NRC 232 (1990)

**LEGAL CITATIONS INDEX
CASES**

- Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-138, 6 AEC 520, 523 (1973)
support for motions to reopen; ALAB-940, 32 NRC 242 (1990)
- Virginia Electric and Power Co. (North Anna Power Station, Units 1 and 2), ALAB-363, 4 NRC 631 (1976)
test for discretionary intervention by an organization; LBP-90-24, 32 NRC 15 (1990)
- Virginia Electric and Power Co. (North Anna Power Station, Units 1 and 2), ALAB-522, 9 NRC 54, 56 (1979)
basis for standing to intervene in license amendment proceeding; LBP-90-29, 32 NRC 92 (1990)
- Virginia Electric and Power Co. (North Anna Power Station, Units 1 and 2), ALAB-584, 11 NRC 451 (1980)
content of responses to summary disposition motions; LBP-90-44, 32 NRC 440 n.13 (1990)
- Washington Public Power Supply System (WPPSS Nuclear Project No. 2), DD-84-7, 19 NRC 899, 923 (1984)
standard for institution of show-cause proceedings; DD-90-5, 32 NRC 128 (1990); DD-90-7, 32 NRC 278 (1990); DD-90-8, 32 NRC 496 (1990)

LEGAL CITATIONS INDEX
REGULATIONS

- 10 C.F.R. Part 2
amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. 2.4
revocation of definition of "electric utility"; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. 2.103, 2.104
prior notice and hearings on special nuclear material licenses; LBP-90-23, 32 NRC 8 (1990)
- 10 C.F.R. 2.104(c)(4)
amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. 2.107
authority of a board to determine issues related to a withdrawal of an application, based on notice of hearing; LBP-90-32, 32 NRC 186 (1990)
board jurisdiction prior to issuance of Notice of Hearing; LBP-90-32, 32 NRC 184 (1990)
- 10 C.F.R. Part 2, Subparts B and G
notice of hearing on civil penalty; LBP-90-31, 32 NRC 107 (1990)
- 10 C.F.R. 2.200-2.206
regulations applicable to low-power testing; ALAB-940, 32 NRC 235 (1990)
- 10 C.F.R. 2.201(c)
immediate effectiveness of license amendments, standard for; LBP-90-26, 32 NRC 33 n.1 (1990)
- 10 C.F.R. 2.201-2.205
notice and hearing procedures for enforcement sanctions; ALAB-940, 32 NRC 237 n.33 (1990)
- 10 C.F.R. 2.202
scope of relief under; DD-90-7, 32 NRC 275 (1990)
- 10 C.F.R. 2.203
licensing board authority to approve settlements of show-cause proceedings; LBP-90-46, 32 NRC 465 (1990)
weight given to position of staff in terminating a proceeding on the basis of a settlement agreement; LBP-90-28, 32 NRC 86 (1990)
- 10 C.F.R. 2.206
accumulation of operating discharges from Seabrook plant, denial of petition asserting potential for harm from; DD-90-4, 32 NRC 46-55 (1990)
denial of petition alleging emergency lighting and fire protection violations and NRC personnel proprieties; DD-90-7, 32 NRC 274 (1990)
denial of petition requesting cessation of defueling and destaffing at Shoreham; DD-90-8, 32 NRC 471 (1990)
extension of stay of operating license requested on basis of recent previously undisclosed industry reports of noncompliance at Seabrook; DD-90-5, 32 NRC 110-128 (1990)
nonadjudicatory route for consideration of significant safety concerns; CLI-90-10, 32 NRC 221 n.5 (1990)
violation of technical specifications at Perry plant, denial of 2.206 petition alleging; DD-90-6, 32 NRC 195-99 (1990)

LEGAL CITATIONS INDEX
REGULATIONS

- 10 C.F.R. 2714
admissibility of contentions in operating license amendment proceeding; LBP-90-39, 32 NRC 369 (1990)
content of basis supporting a contention; ALAB-942, 32 NRC 428 (1990)
- 10 C.F.R. 2714(a)
standard for intervention in operating license amendment proceedings; LBP-90-29, 32 NRC 91 (1990)
- 10 C.F.R. 2714(a)(1)
application of five-factor test to timely filed contentions; ALAB-938, 32 NRC 160 (1990)
five-factor test for admission of late-filed contentions; ALAB-937, 32 NRC 147 n.40 (1990)
five-factor test for admission of supplements to contentions; ALAB-938, 32 NRC 163 n.5 (1990)
- 10 C.F.R. 2714(a)(1)(i)-(v)
criteria for grant of motion to reopen relating to issues not previously in controversy among the parties;
ALAB-936, 32 NRC 79 (1990)
- 10 C.F.R. 2714(a)(3)
amendment of intervention petitions without leave of the board; LBP-90-29, 32 NRC 91 (1990)
- 10 C.F.R. 2714(b)
basis and specificity requirements for admission of contentions; ALAB-941, 32 NRC 345 n.5 (1990);
ALAB-942, 32 NRC 426 n.104 (1990)
five-factor test for admission of supplements to contentions; ALAB-938, 32 NRC 163 n.5 (1990)
- 10 C.F.R. 2714(b)(1)
deadline for filing contentions; LBP-90-29, 32 NRC 91 (1990)
- 10 C.F.R. 2714(b)(2)
content of contentions; LBP-90-29, 32 NRC 92-93 (1990)
specificity requirements for contention bases; ALAB-942, 32 NRC 426 n.104 (1990)
supporting documentation required for contentions at admission stage; ALAB-938, 32 NRC 164 (1990)
- 10 C.F.R. 2714(d)(2)
supporting documentation required for contentions at admission stage; ALAB-938, 32 NRC 164 (1990)
- 10 C.F.R. 2714(d)(2)(i)
prejudgment of merits of a contention; LBP-90-25, 32 NRC 25 (1990)
- 10 C.F.R. 2715(c)
participation by interested state on appeals; ALAB-942, 32 NRC 421 n.83 (1990)
- 10 C.F.R. 2718
obligation of offsite licensing board to refer appropriate matters to onsite licensing board in
multiple-board proceedings; ALAB-942, 32 NRC 421 n.85 (1990)
- 10 C.F.R. 2720(h)(2)(i), (ii)
discovery of NRC Staff; LBP-90-43, 32 NRC 392 (1990)
- 10 C.F.R. 2730(f)
appealability of dismissal of contentions; ALAB-941, 32 NRC 344 n.4 (1990)
- 10 C.F.R. 2734
admission standards applied to low-power testing contentions; ALAB-940, 32 NRC 239, 241 (1990)
burden on proponent of reopening motion; CLI-90-10, 32 NRC 221 (1990)
criteria for reopening a record on low-power testing issues; ALAB-940, 32 NRC 232 (1990)
- 10 C.F.R. 2734(a)
criteria for grant of motion to reopen; ALAB-936, 32 NRC 79 (1990); ALAB-940, 32 NRC 242 (1990)
- 10 C.F.R. 2734(a)(1)
timeliness of reopening motions based on new letters or expressions of concern that are not promptly
developed on new information; CLI-90-10, 32 NRC 222 (1990)
- 10 C.F.R. 2740-2742
authorization for discovery in remanded operating license proceeding; LBP-90-40, 32 NRC 379 (1990)
- 10 C.F.R. 2740(f)(3)
discovery of NRC Staff; LBP-90-43, 32 NRC 392 (1990)
- 10 C.F.R. 2740(j)
discovery of NRC Staff; LBP-90-43, 32 NRC 392 (1990)

LEGAL CITATIONS INDEX
REGULATIONS

- 10 C.F.R. 2.741(e)
discovery of NRC Staff; LBP-90-43, 32 NRC 392 (1990)
- 10 C.F.R. 2.743
distinction between admission into evidence and inclusion in docket file; LBP-90-36, 32 NRC 269 (1990)
- 10 C.F.R. 2.744
discovery of NRC Staff; LBP-90-43, 32 NRC 392 (1990)
- 10 C.F.R. 2.749
authority of presiding officers under; LBP-90-26, 32 NRC 36 (1990)
- 10 C.F.R. 2.749(a)
burden on opponent of summary disposition motion; LBP-90-44, 32 NRC 436 (1990)
statement of material facts accompanying summary disposition motion; LBP-90-26, 32 NRC 35 (1990)
- 10 C.F.R. 2.749(b)
burden on opponents of summary disposition; LBP-90-40, 32 NRC 377 (1990); LBP-90-44, 32 NRC 436, 440 n.13 (1990)
content of responses to summary disposition motions; LBP-90-44, 32 NRC 440 n.13 (1990)
- 10 C.F.R. 2.749(d)
showing necessary to obtain summary disposition; LBP-90-44, 32 NRC 436 (1990)
standard for grant of summary disposition; LBP-90-26, 32 NRC 36 (1990)
- 10 C.F.R. 2.760
appealability of dismissal of intervenor; LBP-90-24, 32 NRC 19 (1990)
- 10 C.F.R. 2.760(a)
appealability of initial decisions; LBP-90-39, 32 NRC 371 (1990)
finality of licensing board approval of settlement agreements; LBP-90-46, 32 NRC 465 (1990)
- 10 C.F.R. 2.760a
board findings required under, prior to declaration of sua sponte issue; LBP-90-32, 32 NRC 185 (1990)
procedure for raising sua sponte issues; LBP-90-25, 32 NRC 25 (1990)
standard for licensing board sua sponte adoption of uncontroverted issues; LBP-90-32, 32 NRC 183 (1990)
standard for sua sponte adoption of issues by the presiding officer; LBP-90-24, 32 NRC 17 (1990)
sua sponte adoption of issues because of dismissal of sole remaining intervenor; LBP-90-24, 32 NRC 13 (1990)
- 10 C.F.R. 2.762
appeals of decision approving operating license amendment; LBP-90-39, 32 NRC 370 (1990)
Commission review of licensing board approval of settlement agreements; LBP-90-46, 32 NRC 465 (1990)
- 10 C.F.R. 2.762(d)(1)
proposed findings of fact on and appeals of issues not placed in controversy by an intervenor; ALAB-942, 32 NRC 406 n.24 (1990)
- 10 C.F.R. 2.764
immediate effectiveness review of decisions authorizing operating license issuance; ALAB-934, 32 NRC 3 n.4 (1990)
- 10 C.F.R. 2.764(f)(2)(i), (iii)
definition of low-power license; ALAB-940, 32 NRC 229 n.1 (1990)
- 10 C.F.R. 2.788
failure of motion for extension of stay to address criteria; DD-90-5, 32 NRC 110 (1990)
ground for temporary stay of licensee's use of plutonium, americium, and neptunium; LBP-90-38, 32 NRC 360 (1990)
standards for grant of a stay of staff's licensing actions; LBP-90-30, 32 NRC 98 (1990)
- 10 C.F.R. 2.788(d)
right of intervenors to reply to temporary stay; LBP-90-38, 32 NRC 361 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. 2.788(e)
 - failure of motion to address stay criteria; CLI-90-11, 32 NRC 334 (1990)
 - standards for grant of a stay of a Staff licensing action; LBP-90-35, 32 NRC 262 (1990)
- 10 C.F.R. 2.788(g)
 - circumstances appropriate for grant of temporary stay; LBP-90-35, 32 NRC 261 n.1, 262 (1990)
 - purpose of grant of stay of Staff licensing action; LBP-90-35, 32 NRC 262 (1990)
- 10 C.F.R. 2.788(i)
 - right of intervenors to reply to temporary stay; LBP-90-38, 32 NRC 361 (1990)
- 10 C.F.R. 2.790
 - discovery of NRC Staff; LBP-90-43, 32 NRC 392 (1990)
 - limitations on release of documents by Staff; LBP-90-36, 32 NRC 269 (1990)
- 10 C.F.R. 2.1205(l)
 - applicability to hazardous materials; LBP-90-23, 32 NRC 11 (1990)
 - prior notice and hearings on special nuclear material licenses; LBP-90-23, 32 NRC 8 (1990)
 - waiver or exception to; LBP-90-23, 32 NRC 9 (1990)
- 10 C.F.R. 2.1209(k)
 - analysis of written filings to determine need for oral argument; LBP-90-41, 32 NRC 385 (1990)
- 10 C.F.R. 2.1215(a)
 - rights of nonlawyer representative of an organization; LBP-90-24, 32 NRC 15 (1990)
- 10 C.F.R. 2.1231(a)(1)
 - staff obligation to serve a party or establish a local public document room; LBP-90-27, 32 NRC 42 (1990)
- 10 C.F.R. 2.1231(b)
 - authority of presiding officer to prescribe means for completing a record; LBP-90-27, 32 NRC 41 (1990)
 - inclusion of DOE documents in hearing file on materials license amendment; LBP-90-33, 32 NRC 250 (1990)
 - inclusion of licensee documents from a related proceeding in material license amendment hearing file; LBP-90-33, 32 NRC 250 (1990)
 - incorporation of documents in a public document room into a hearing file; LBP-90-27, 32 NRC 42 (1990)
- 10 C.F.R. 2.1231(c)
 - Staff obligation to update hearing file; LBP-90-34, 32 NRC 254 (1990)
- 10 C.F.R. 2.1233
 - analysis of written filings to determine need for oral argument; LBP-90-41, 32 NRC 385 (1990)
 - completion of hearing file in informal proceedings; LBP-90-33, 32 NRC 247 (1990)
 - evidence not in the hearing file in informal proceedings; LBP-90-33, 32 NRC 248 n.4 (1990)
- 10 C.F.R. 2.1233(c)
 - deficiency or omission in special nuclear materials license; LBP-90-45, 32 NRC 453 (1990)
 - latitude of presiding officer in Subpart L proceedings; LBP-90-45, 32 NRC 454 (1990)
- 10 C.F.R. 2.1235
 - analysis of written filings to determine need for oral argument; LBP-90-41, 32 NRC 385 (1990)
- 10 C.F.R. 2.1237(b)
 - burden on proponent of motion to certify; LBP-90-23, 32 NRC 9 (1990)
- 10 C.F.R. 2.1239(a)
 - litigability of challenges to procedural regulations affecting issuance of special nuclear material licenses; LBP-90-23, 32 NRC 9 (1990)
- 10 C.F.R. 2.1239(b)
 - ground for exception to regulations; LBP-90-23, 32 NRC 9 (1990)
 - standard for directed certification of challenged regulations; LBP-90-23, 32 NRC 9 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. 2.1263
 - authority to issue a temporary stay; LBP-90-30, 32 NRC 98 (1990); LBP-90-35, 32 NRC 262 (1990)
 - ground for temporary stay of licensee's use of plutonium, americium, and neptunium; LBP-90-38, 32 NRC 360 (1990)
 - purpose of grant of stay of Staff licensing action; LBP-90-35, 32 NRC 262 (1990)
 - treatment of request for stay pending hearing as request for temporary stay; LBP-90-35, 32 NRC 261(1990)
- 10 C.F.R. Part 2, Appendix A, VIII(b)(4)
 - amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. Part 2, Appendix C
 - amount of civil penalty; LBP-90-43, 32 NRC 391 (1990)
 - noncompliance with legally binding requirements as basis for enforcement action; DD-90-5, 32 NRC 111 (1990)
 - regulations applicable to low-power testing; ALAB-940, 32 NRC 235 (1990)
- 10 C.F.R. Part 2, Appendix C, II
 - formal enforcement sanctions; ALAB-940, 32 NRC 237 n.33 (1990)
- 10 C.F.R. Part 2, Appendix C, V.H
 - administrative enforcement mechanisms; ALAB-940, 32 NRC 237 n.33 (1990)
- 10 C.F.R. Part 2, Appendix C, V.H(3)
 - purpose of confirmatory action letters; ALAB-940, 32 NRC 237 (1990)
- 10 C.F.R. Part 20
 - HEPA filtration requirements for research reactor; LBP-90-30, 32 NRC 102 (1990)
 - standard for release of radioactive gases during normal operation; DD-90-4, 32 NRC 48, 53 (1990)
- 10 C.F.R. 20.1(c)
 - ALARA standard for radioactive releases from research reactor; LBP-90-30, 32 NRC 98 (1990)
 - ALARA standard for releases of neptunium or plutonium; LBP-90-35, 32 NRC 263 (1990)
- 10 C.F.R. 20.105
 - limits on neptunium or plutonium releases; LBP-90-35, 32 NRC 263 (1990)
- 10 C.F.R. 20.106
 - limits on neptunium or plutonium releases; LBP-90-35, 32 NRC 263 (1990)
 - limits on radioactive releases from research reactor; LBP-90-30, 32 NRC 98 (1990)
- 10 C.F.R. Part 30
 - emergency preparedness requirements for possession of plutonium-241; LBP-90-38, 32 NRC 363 n.9 (1990); LBP-90-45, 32 NRC 452 n.5 (1990)
- 10 C.F.R. 30.32(h)
 - applicability of decommissioning regulations to possession of radiation in an unsealed form; LBP-90-45, 32 NRC 456 (1990)
- 10 C.F.R. 30.32(i)
 - applicability where license was granted before effective date of regulation; LBP-90-38, 32 NRC 364 (1990)
- 10 C.F.R. 30.32(j)(1)
 - amounts of americium for which emergency plans are required; LBP-90-35, 32 NRC 264, 265 (1990)
 - applicability to possessors of unsealed radioactive sources; LBP-90-27, 32 NRC 41, 42 n.2 (1990)
 - evaluation of dose effects or emergency planning requirements for possession of radiation in an unsealed form; LBP-90-45, 32 NRC 455-56 (1990)
- 10 C.F.R. 30.33(a)(2)
 - equipment and facility standards for byproduct material licenses; LBP-90-30, 32 NRC 98 (1990)
 - standards of protection required to obtain byproduct materials licenses; LBP-90-35, 32 NRC 263 (1990)
- 10 C.F.R. 30.35(c)
 - applicability where application was filed before regulation was enacted; LBP-90-45, 32 NRC 459 (1990)
- 10 C.F.R. 30.72
 - amounts of americium for which emergency plans are required; LBP-90-35, 32 NRC 264 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. Part 40
 - emergency preparedness requirements for possession of plutonium-241; LBP-90-38, 32 NRC 363 n.9 (1990); LBP-90-45, 32 NRC 452 n.5 (1990)
 - perpetual care of UMTRCA Title I sites; DPRM-90-2, 32 NRC 324 (1990)
 - purpose of exclusion of UMTRCA Title I sites; DPRM-90-2, 32 NRC 322 (1990)
- 10 C.F.R. Part 40, Appendix A
 - extension to byproduct material not subject to licensing; DPRM-90-2, 32 NRC 320, 324 (1990)
- 10 C.F.R. Part 50
 - amendment of emergency planning zone size requirements; DPRM-90-1, 32 NRC 286 (1990)
 - amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. 50.2
 - revocation of definition of "electric utility"; DPRM-90-3, 32 NRC 328 (1990)
 - purpose of decommissioning; CLI-90-8, 32 NRC (1990)
- 10 C.F.R. 50.4
 - definition of "decommissioning"; DD-90-8, 32 NRC 491 (1990)
- 10 C.F.R. 50.9(a)
 - license revocation of ground that information provided to Commission was not complete and accurate in all material respects; LBP-90-26, 32 NRC 34 (1990)
- 10 C.F.R. 50.12
 - standard for grant of exemptions from regulations; DD-90-8, 32 NRC 491 (1990)
- 10 C.F.R. 50.12(a)(2)(ii), (iii)
 - exemption from onsite primary property damage insurance requirement; DD-90-8, 32 NRC 488, 490-91 (1990)
- 10 C.F.R. 50.33(f)
 - amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
 - financial qualifications for construction of production facility; LBP-90-26, 32 NRC 37, 38 (1990)
 - financial qualifications of applicant to construct proposed facility in such a way as to ensure adequate protection of common defense and security; LBP-90-26, 32 NRC 33 (1990)
 - method for ensuring that licensees with financial problems continue to comply with regulatory requirements; DPRM-90-3, 32 NRC 330 (1990)
 - rulemaking process applied to financial qualifications rule; DPRM-90-3, 32 NRC 330 (1990)
- 10 C.F.R. 50.36
 - content of technical specifications; LBP-90-25, 32 NRC 27 (1990)
 - interpretation of matters that must be included in technical specifications; LBP-90-25, 32 NRC 23 (1990)
 - removal of information from technical specifications; LBP-90-25, 32 NRC 25 (1990)
- 10 C.F.R. 50.40(b)
 - amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. 50.47(a)(1)
 - adequacy of decontamination facilities as part of reasonable assurance standard; ALAB-942, 32 NRC 425 n.97 (1990)
 - scope of emergency exercise; ALAB-941, 32 NRC 352 (1990)
- 10 C.F.R. 50.47(a)(2)
 - basis for NRC findings on adequacy of emergency planning; DD-90-4, 32 NRC 54 (1990)
 - scope of emergency exercise; ALAB-941, 32 NRC 352 (1990)
 - weight given to FEMA views on adequacy of emergency planning; CLI-90-10, 32 NRC 222 (1990)
- 10 C.F.R. 50.47(b)
 - Seabrook emergency preparedness training, adequacy of; DD-90-5, 32 NRC 113 (1990)
 - Seabrook personnel knowledge and performance of duties, adequacy of; DD-90-5, 32 NRC 112 (1990)
- 10 C.F.R. 50.47(b)(4)
 - responsibility for establishing emergency action levels; ALAB-942, 32 NRC 419 n.77 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. 50.47(b)(5)
 - adequacy of early notification and clear instruction of the general public; ALAB-942, 32 NRC 422 (1990)
 - early notification and instruction requirements in emergency planning; ALAB-936, 32 NRC 79 (1990)
 - emergency warning system for Seabrook, adequacy of; ALAB-935, 32 NRC 62 (1990)
- 10 C.F.R. 50.47(b)(10)
 - protective action recommendation decision criteria; ALAB-942, 32 NRC 415, 417 (1990)
- 10 C.F.R. 50.47(b)(14)
 - scope of emergency exercise; ALAB-941, 32 NRC 352 (1990)
- 10 C.F.R. 50.47(c)(1)
 - best-efforts presumption; ALAB-942, 32 NRC 431 n.130 (1990)
 - license suspension for inadequacies in protective action recommendation generation; ALAB-942, 32 NRC 422 (1990)
 - standard for license suspension relative to emergency planning deficiencies; ALAB-937, 32 NRC 152 (1990)
 - standard for rescission of operating license authorization based on emergency planning deficiencies; ALAB-939, 32 NRC 180 (1990)
- 10 C.F.R. 50.47(c)(1)(iii)
 - applicability of realism/best efforts rule to school teachers; ALAB-937, 32 NRC 148, 149 (1990)
 - assumption of best-efforts response by state and local governments in an emergency; ALAB-936, 32 NRC 82 n.17 (1990)
- 10 C.F.R. 50.47(c)(2)
 - amendment of emergency planning zone size requirements; DPRM-90-1, 32 NRC 286 (1990)
 - site-specific factors in emergency plans; DPRM-90-1, 32 NRC 312 (1990)
- 10 C.F.R. 50.47(d)
 - definition of low-power license; ALAB-940, 32 NRC 229 n.1 (1990)
 - emergency preparedness requirements for low-power operations; DPRM-90-1, 32 NRC 314 (1990)
- 10 C.F.R. 50.54(f)
 - adequacy of LILCO response to information requests; DD-90-8, 32 NRC 494 (1990)
 - NRC authority to obtain financial information from licensees; DPRM-90-3, 32 NRC 330 (1990)
- 10 C.F.R. 50.54(w)(1)
 - exemption from onsite primary property damage insurance requirement; DD-90-8, 32 NRC 473, 488, 492 (1990)
 - purpose of insurance requirement; DD-90-8, 32 NRC 489-90 (1990)
- 10 C.F.R. 50.55(e)
 - failure to report violations as basis for enforcement action; DD-90-5, 32 NRC 111 (1990)
- 10 C.F.R. 50.56
 - purpose of preoperational testing; ALAB-940, 32 NRC 238 (1990)
- 10 C.F.R. 50.57(a)(4)
 - amendment to reinstate financial qualifications requirements; DPRM-90-3, 32 NRC 328 (1990)
- 10 C.F.R. 50.57(c)
 - low-power testing during pendency of full-power operating licensing proceeding; ALAB-940, 32 NRC 234 (1990)
 - purpose of low-power testing; ALAB-940, 32 NRC 119 n.1 (1990)
 - regulatory scheme when low-power testing is conducted under a low-power license; ALAB-940, 32 NRC 236-37 (1990)
 - standard for grant of low-power testing license; ALAB-940, 32 NRC 229 (1990)
- 10 C.F.R. 50.59
 - Commission approval of defueling operations; DD-90-8, 32 NRC 479 (1990)
 - compliance with review requirements at Shoreham; DD-90-8, 32 NRC 494 (1990)
 - unreviewed safety questions in Shoreham defueling; DD-90-8, 32 NRC 485, 494 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. 50.72, and 50.73
failure to report violations as basis for enforcement action; DD-90-5, 32 NRC 111 (1990)
- 10 C.F.R. 50.75
relationship of insurance requirement to overall decommissioning; DD-90-8, 32 NRC 491 (1990)
- 10 C.F.R. 50.80
transfer of operating licenses; DD-90-8, 32 NRC 478 (1990)
- 10 C.F.R. 50.82
definition of "decommissioning"; DD-90-8, 32 NRC 491 (1990)
NRC approval of decommissioning plans; CLI-90-8, 32 NRC 207 (1990)
relationship of insurance requirement to overall decommissioning; DD-90-8, 32 NRC 491 (1990)
termination of operating licenses; DD-90-8, 32 NRC 478 (1990)
- 10 C.F.R. 50.92(c)
challenges to license amendments involving administrative matters that raise no significant hazards consideration; LBP-90-25, 32 NRC 23 (1990)
no significant hazards consideration applied to removal of cycle-specific operating limits; LBP-90-39, 32 NRC 369 (1990)
- 10 C.F.R. Part 50, Appendix A, GDC 62
capacity of Shoreham spent fuel pool for defueling purposes; DD-90-8, 32 NRC 484 (1990)
- 10 C.F.R. Part 50, Appendix B
adequacy of management and administrative controls as demonstrated during low-power testing; ALAB-940, 32 NRC 242 (1990)
- 10 C.F.R. Part 50, Appendix C
financial qualifications for construction of production facility; LBP-90-26, 32 NRC 37, 38 (1990)
- 10 C.F.R. Part 50, Appendix E
emergency action levels for in-plant measurements for which emergencies should be developed; DPRM-90-1, 32 NRC 295 (1990)
- 10 C.F.R. Part 50, Appendix E, IV
Seabrook personnel knowledge and performance of duties, adequacy of; DD-90-5, 32 NRC 112 (1990)
- 10 C.F.R. Part 50, Appendix E, IV.C
classes of emergency action levels; ALAB-942, 32 NRC 419 n.77 (1990)
- 10 C.F.R. Part 50, Appendix E, IV.D
early notification and instruction requirements in emergency planning; ALAB-936, 32 NRC 79 (1990)
- 10 C.F.R. Part 50, Appendix E, IV.D.3
adequacy of early notification and clear instruction of the general public; ALAB-942, 32 NRC 422 (1990)
alert signal activation and EBS broadcast, timing requirements for; ALAB-935, 32 NRC 70 (1990)
design objective of prompt public notification system; ALAB-935, 32 NRC 63, 69 n.46 (1990)
design objectives for coverage and completion of initial notification of the public of an emergency; ALAB-936, 32 NRC 79 (1990)
fifteen-minute initial notification requirement; ALAB-941, 32 NRC 346, 349 n.26 (1990)
fifteen-minute requirement for early notification of radiological emergency; ALAB-942, 32 NRC 423 (1990)
interpretation of capability; ALAB-935, 32 NRC 63 (1990)
timing requirements, interpretation of; ALAB-935, 32 NRC 67, 68 (1990)
- 10 C.F.R. Part 50, Appendix E, IV.F
Seabrook emergency preparedness training, adequacy of; DD-90-5, 32 NRC 113 (1990)
- 10 C.F.R. Part 50, Appendix E, IV.F.1
American Red Cross nonparticipation in emergency exercise; ALAB-941, 32 NRC 349 (1990)
definition of low-power license; ALAB-940, 32 NRC 229 n.1 (1990)
scope of emergency exercise of alert and notification system; ALAB-941, 32 NRC 345 (1990)
two-year requirement for conduct of full-participation emergency exercise; ALAB-941, 32 NRC 345 n.6 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. Part 50, Appendix E, IV.F.1 n.4
scope of full-participation emergency exercise; ALAB-941, 32 NRC 345 n.6, 351 (1990)
- 10 C.F.R. Part 50, Appendix E, IV.F.6
applicability of exemption from emergency exercise participation to American Red Cross; ALAB-941, 32 NRC 350 (1990)
- 10 C.F.R. Part 50, Appendix I
standard for release of radioactive gases during normal operation; DD-90-4, 32 NRC 48, 51, 52 (1990)
- 10 C.F.R. Part 50, Appendix K
requirements for emergency core cooling systems; DD-90-4, 32 NRC 52 (1990)
- 10 C.F.R. Part 51
environmental review requirements for defueling operations; DD-90-8, 32 NRC 476, 478, 482, 487, 495 (1990)
- 10 C.F.R. 51.22(c)(14)(v)
applicability to possessors of unsealed radioactive sources; LBP-90-27, 32 NRC 41 (1990)
exemption of license amendment from requirement for an environmental assessment; LBP-90-27, 32 NRC 42 n.2 (1990)
exemptions from environmental assessment requirement; LBP-90-34, 32 NRC 256 (1990)
- 10 C.F.R. 51.95(b)
environmental impact statement or environmental review requirements for decommissioning; DD-90-8, 32 NRC 478, 482 (1990)
- 10 C.F.R. 51.101
alternatives under NEPA relative to decommissioning; DD-90-8, 32 NRC 492 (1990)
EIS requirement for portion of decommission action; DD-90-8, 32 NRC 489 (1990)
- 10 C.F.R. 52.79(d)
emergency planning prior to facility construction; DPRM-90-1, 32 NRC 315-16 (1990)
- 10 C.F.R. Part 55
training of licensee staff for defueled operation only; DD-90-8, 32 NRC 474, 493 (1990)
- 10 C.F.R. Part 70
amendment of emergency planning zone size requirements; DPRM-90-1, 32 NRC 286 (1990)
emergency preparedness requirements for possession of plutonium-241; LBP-90-38, 32 NRC 363 n.9 (1990); LBP-90-45, 32 NRC 452 n.5 (1990)
- 10 C.F.R. 70.22(a)(4)
emergency plan or evaluation and disclosure needs for Pu-241; LBP-90-35, 32 NRC 264 (1990)
ground for temporary stay of licensee's use of plutonium, americium, and neptunium; LBP-90-38, 32 NRC 361 (1990)
licensee responsibility to disclose isotopic content of plutonium; LBP-90-35, 32 NRC 262 (1990)
- 10 C.F.R. 70.22(h)
applicability of decommissioning regulations to possession of radiation in an unsealed form; LBP-90-45, 32 NRC 456 (1990)
- 10 C.F.R. 70.22(i)
emergency plan or evaluation and disclosure needs for Pu-241; LBP-90-35, 32 NRC 264 (1990)
evaluation of dose effects or emergency planning requirements for materials license amendment; LBP-90-45, 32 NRC 455, 457 (1990)
- 10 C.F.R. 70.22(j)(1)
amounts of plutonium for which emergency plans are required; LBP-90-35, 32 NRC 263 n.2 (1990)
- 10 C.F.R. 70.23(a)(3)
equipment and facility standards for special nuclear material licenses; LBP-90-30, 32 NRC 98 (1990)
standards of protection required to obtain special nuclear materials materials licenses; LBP-90-35, 32 NRC 263 (1990)
- 10 C.F.R. 70.25(c)
applicability where application was filed before regulation was enacted; LBP-90-45, 32 NRC 459 (1990)

LEGAL CITATIONS INDEX REGULATIONS

- 10 C.F.R. Part 71, Table A-2
 - biological effectiveness of plutonium-241; LBP-90-38, 32 NRC 363 (1990); LBP-90-45, 32 NRC 452 (1990)
- 40 C.F.R. 1502.14
 - rule of reason in considerations of alternatives to proposed action; CLI-90-8, 32 NRC 206 (1990)
- 40 C.F.R. Part 61
 - limits on nuclear power plant discharges; DD-90-4, 32 NRC 45 (1990)
- 40 C.F.R. Part 190
 - limits on nuclear power plant discharges; DD-90-4, 32 NRC 45 (1990)
- 47 C.F.R. 73.901-.962
 - definition and purpose of emergency broadcast system; ALAB-936, 32 NRC 79 (1990)

LEGAL CITATIONS INDEX STATUTES

- Atomic Energy Act, 11e(2), 42 U.S.C. §2014e(2)
approval of Illinois state generic program for regulation of byproduct material; CLI-90-11, 32 NRC 334 (1990)
definition of byproduct material; CLI-90-9, 32 NRC 212 (1990)
- Atomic Energy Act, 81, 42 U.S.C. §2111
management of byproduct material not subject to licensing; DPRM-90-2, 32 NRC 320, 324 (1990)
- Atomic Energy Act, 101, 42 U.S.C. §2131
licensing requirements for conduct of low-power testing; ALAB-940, 32 NRC 234-36 (1990)
- Atomic Energy Act, 108
NRC approval of licensee decision not to operate nuclear power plant; CLI-90-8, 32 NRC 207 (1990)
- Atomic Energy Act, 182a
NRC authority to obtain financial information from licensees; DPRM-90-3, 32 NRC 330 (1990)
- Atomic Energy Act, 186(a), 42 U.S.C. 2236(a)
applicability to revocation of licenses; LBP-90-26, 32 NRC 36 (1990)
grounds for revocation of licenses; LBP-90-26, 32 NRC 36, 38 (1990)
- Atomic Energy Act, 186(c)
NRC approval of licensee decision not to operate nuclear power plant; CLI-90-8, 32 NRC 207 (1990)
- Atomic Energy Act, 188
NRC approval of licensee decision not to operate nuclear power plant; CLI-90-8, 32 NRC 207 (1990)
- Atomic Energy Act, 189, 42 U.S.C. §2239
hearing rights on low-power testing; ALAB-940, 32 NRC 232 (1990)
- Atomic Energy Act, 189a
hearing rights on changes to cycle-specific parameters and fuel information; LBP-90-25, 32 NRC 26 (1990)
hearing rights on low-power testing; ALAB-940, 32 NRC 234-35, 238-39 (1990)
- Atomic Energy Act, 274b, c, 42 U.S.C. 2021b, c
transfer of NRC regulatory authority to states; CLI-90-9, 32 NRC 212 (1990)
- Atomic Energy Act, 274d, 42 U.S.C. §2021d(2)
finding necessary for transfer of Commission authority to states; CLI-90-9, 32 NRC 212, 214 (1990)
- Atomic Energy Act, 274j, 42 U.S.C. §2021j(1)
NRC authority to suspend or terminate agreements with states; CLI-90-9, 32 NRC 212 (1990)
- Atomic Energy Act, 274o, 42 U.S.C. §2021o(2)
state authority to adopt alternative standards for regulation of byproduct material; CLI-90-9, 32 NRC 212 (1990)
- Atomic Energy Act, 274o, 42 U.S.C. §2021o(3)(A)
hearing rights on state implementation of alternative regulations for byproduct material; CLI-90-9, 32 NRC 215 (1990)
- Massachusetts Civil Defense Act, St. 1950, c. 639, §20
obligation of school teachers to comply with Governor's directives during an emergency; ALAB-937, 32 NRC 150 (1990)
- National Environmental Policy Act, 42 U.S.C. §4321
rule of reason against which environmental contentions are judged; ALAB-938, 32 NRC 158 (1990)

LEGAL CITATIONS INDEX

STATUTES

- National Environmental Policy Act, 42 U.S.C. 4332(2)(C)
consideration of alternatives in environmental impact statement; CLI-90-8, 32 NRC 206 (1990)
- National Environmental Policy Act, 102(2)
environmental review requirements for defueling operations; DD-90-8, 32 NRC 478, 482 (1990)
- New York Public Authorities Law § 1020-h(9), 1020-t (McKinney Supp. 1990)
prohibition on operation of Shoreham by Long Island Power Authority; CLI-90-8, 32 NRC 205 (1990)
- Solid Waste Disposal Act, 42 U.S.C. 6901 et seq.
management of byproduct material not subject to licensing; DPRM-90-2, 32 NRC 320 (1990)

SUBJECT INDEX

ACCIDENTS, LOSS OF COOLANT

adequacy of notification system for warning the public of; DD-90-4, 32 NRC 45 (1990)

See also Chernobyl Accident

ADJUDICATORY PROCEEDINGS

availability of information; LBP-90-36, 32 NRC 267 (1990)

ADVANCED LIFE SUPPORT PATIENTS

evacuation of; LBP-90-44, 32 NRC 433 (1990)

AGREEMENT

See Settlement Agreement

AMENDMENTS

See Materials License Amendments; Operating License Amendments

AMERICAN RED CROSS

participation in emergency exercises; ALAB-941, 32 NRC 337 (1990)

AMERICIUM

amounts requiring emergency planning; LBP-90-35, 32 NRC 259 (1990)

disclosure of curie content of; LBP-90-45, 32 NRC 449 (1990)

APPEAL BOARDS

advisory opinions; ALAB-936, 32 NRC 75 (1990)

APPEALS

dismissal for failure to brief issues properly; ALAB-942, 32 NRC 395 (1990)

entitlement of intervenors who have withdrawn; ALAB-934, 32 NRC 1 (1990)

finality of decision for purpose of; ALAB-941, 32 NRC 337 (1990)

of disposition of another intervenor's contentions; ALAB-942, 32 NRC 395 (1990)

APPELLATE DECISIONS

effect of immediate effectiveness review on; ALAB-937, 32 NRC 135 (1990)

effect on license authorization; ALAB-942, 32 NRC 395 (1990)

ATOMIC ENERGY ACT

content of technical specifications; LBP-90-25, 32 NRC 21 (1990)

hearing rights on low-power testing; ALAB-940, 32 NRC 225 (1990)

hearing rights on operating license amendment; LBP-90-25, 32 NRC 21 (1990)

hearing rights on state site-specific alternatives to regulation of byproduct material; CLI-90-9, 32 NRC 210 (1990); CLI-90-11, 32 NRC 333 (1990)

resumed operation as an alternative to decommissioning; CLI-90-8, 32 NRC 201 (1990)

revocation of licenses for postlicensing failures; LBP-90-26, 32 NRC 30 (1990)

BIAS

adjudicatory board, party's disenchantment with prior board rulings as basis for claim of; ALAB-936, 32 NRC 75 (1990)

BOARDS

See Appeal Boards; Licensing Boards

BORATION

loss of ability to reduce modes; LBP-90-32, 32 NRC 181 (1990)

BURDEN OF PROOF

to justify waiver of regulations; LBP-90-23, 32 NRC 7 (1990)

SUBJECT INDEX

BYPRODUCT MATERIAL

state standards for regulation of; CLI-90-9, 32 NRC 210 (1990); CLI-90-11, 32 NRC 333 (1990)

BYPRODUCT MATERIALS LICENSES

content of applications for; LBP-90-30, 32 NRC 95 (1990)

CERTIFICATION

See Directed Certification

CHECK VALVES

preventive maintenance at Seabrook; DD-90-5, 32 NRC 109 (1990)

CHERNOBYL ACCIDENT

emergency planning lessons learned; DPRM-90-1, 32 NRC 281 (1990)

CIVIL PENALTIES

appropriateness; LBP-90-42, 32 NRC 387 (1990); LBP-90-43, 32 NRC 390 (1990)

fire protection violations; DD-90-7, 32 NRC 273 (1990)

hearing request for reconsideration of; LBP-90-31, 32 NRC 107 (1990)

COMMISSION

See Nuclear Regulatory Commission

CONSTRUCTION PERMIT APPLICATION

withdrawal of; LBP-90-37, 32 NRC 270 (1990)

CONTENTIONS

appealability of dismissal of; ALAB-941, 32 NRC 337 (1990)

based on factual underpinning in a document that has been essentially repudiated by the source of that document, admissibility of; ALAB-938, 32 NRC 154 (1990)

basis and specificity requirements for admission of; ALAB-938, 32 NRC 154 (1990); ALAB-941, 32 NRC 337 (1990); ALAB-942, 32 NRC 395 (1990)

environmental, rule of reason applied to; CLI-90-7, 32 NRC 129 (1990)

merits determinations at admission stage; ALAB-938, 32 NRC 154 (1990)

purpose of specificity requirement; ALAB-942, 32 NRC 395 (1990)

supplementation, five-factor test applied to; ALAB-938, 32 NRC 154 (1990)

COOLANT

See Reactor Coolant

CORE

See Reactor Core

CROSS-EXAMINATION

by intervenors; ALAB-942, 32 NRC 395 (1990)

DECISIONS

published, completeness of; ALAB-938, 32 NRC 154 (1990)

See also Appellate Decisions

DECOMMISSIONING

Commission approval of plan; CLI-90-8, 32 NRC 201 (1990)

consideration of alternatives under NEPA; DD-90-8, 32 NRC 469 (1990)

environmental review of; DD-90-8, 32 NRC 469 (1990)

methods; CLI-90-8, 32 NRC 201 (1990)

resumed operation as alternative to; CLI-90-8, 32 NRC 201 (1990)

DECONTAMINATION

regulatory guidance on; ALAB-942, 32 NRC 395 (1990)

DEFINITIONS

byproduct material; CLI-90-9, 32 NRC 210 (1990)

full-power license; ALAB-940, 32 NRC 225 (1990)

low-power license; ALAB-940, 32 NRC 225 (1990)

material fact; LBP-90-44, 32 NRC 433 (1990)

DEFUELING

insurance requirements during; DD-90-8, 32 NRC 469 (1990)

SUBJECT INDEX

DEPARTMENT OF LABOR PROCEEDING

effect of pendency of, on dismissal of intervenor for changed circumstances relevant to standing; LBP-90-24, 32 NRC 12 (1990)

DIRECTED CERTIFICATION

obligation of parties to seek; ALAB-942, 32 NRC 395 (1990)
of request for waiver of regulations, denial for failure to make prima facie showing; LBP-90-23, 32 NRC 7 (1990)

DISCOVERY

improper use to flesh out vague contentions; ALAB-942, 32 NRC 395 (1990)
of NRC Staff; LBP-90-43, 32 NRC 390 (1990)

DISMISSAL OF PARTIES

based on changed circumstances relevant to standing; LBP-90-24, 32 NRC 12 (1990)
for nonparticipation on remanded issues; ALAB-934, 32 NRC 1 (1990)
from one major segment of a proceeding, effect on its participation in other segments; ALAB-934, 32 NRC 1 (1990)
treatment of subsequent submissions by dismissed party; ALAB-939, 32 NRC 165 (1990)

DOCUMENTS

test of relevance and materiality; LBP-90-34, 32 NRC 253 (1990)

EMERGENCY BROADCAST SYSTEM

emergency exercise of; ALAB-941, 32 NRC 337 (1990)
licensee responsibility for notification of; ALAB-936, 32 NRC 75 (1990)

EMERGENCY EXERCISES

alert and notification system testing; ALAB-941, 32 NRC 337 (1990)
American Red Cross participation in; ALAB-941, 32 NRC 337 (1990)
response personnel and resources to be mobilized; ALAB-941, 32 NRC 337 (1990)
school and related personnel participation; ALAB-941, 32 NRC 337 (1990)
scope deficiency, cure for; ALAB-941, 32 NRC 337 (1990)
scope of litigable issues; ALAB-941, 32 NRC 337 (1990)
state and local government participation in; ALAB-941, 32 NRC 337 (1990)
time limit on; ALAB-941, 32 NRC 337 (1990)

EMERGENCY LIGHTING

adequacy at Palo Verde; DD-90-7, 32 NRC 273 (1990)

EMERGENCY NOTIFICATION

See Notification

EMERGENCY PLANNING

adequate protective measures; DPRM-90-1, 32 NRC 281 (1990)
americium possession requiring; LBP-90-35, 32 NRC 259 (1990)
evacuation of advanced life support patients; LBP-90-44, 32 NRC 433 (1990)
final findings on siren system design prior to licensing board finding of adequacy of; ALAB-941, 32 NRC 337 (1990)
for licenses to possess radioactive materials in unsealed form; LBP-90-27, 32 NRC 40 (1990)
implementing procedures for sheltering measures; ALAB-939, 32 NRC 165 (1990)
interpretation of initial notification requirement; ALAB-935, 32 NRC 57 (1990)
lessons learned from Chernobyl accident; DPRM-90-1, 32 NRC 281 (1990)
preconstruction; DPRM-90-1, 32 NRC 281 (1990)
public notification requirements; ALAB-935, 32 NRC 57 (1990)
regulatory guidance on monitoring and decontamination; ALAB-942, 32 NRC 395 (1990)
regulatory guidance; ALAB-942, 32 NRC 395 (1990)
timeliness of alerting and notification process; ALAB-942, 32 NRC 395 (1990)
weight of FEMA views on; CLI-90-10, 32 NRC 218 (1990)

EMERGENCY PLANNING ZONES

boundaries drawn to conform to political jurisdiction rather than strict radius; ALAB-935, 32 NRC 57 (1990)

SUBJECT INDEX

- extension of; DPRM-90-1, 32 NRC 281 (1990)
- protection of people outside of; DPRM-90-1, 32 NRC 281 (1990)
- EMERGENCY PLANS**
 - content of notification and public information requirements; ALAB-935, 32 NRC 57 (1990); ALAB-936, 32 NRC 75 (1990)
 - deficiencies in content; ALAB-942, 32 NRC 395 (1990)
 - discrepancy between plan and implementing procedures as basis for request for stay of operating license; DD-90-5, 32 NRC 109 (1990)
 - evacuation contingency measures; ALAB-942, 32 NRC 395 (1990)
 - evacuation decisions, responsibility for; DD-90-4, 32 NRC 45 (1990)
 - fifteen-minute notification requirement; ALAB-941, 32 NRC 337 (1990)
 - fundamental flaw; ALAB-941, 32 NRC 337 (1990); ALAB-942, 32 NRC 395 (1990)
 - monitoring capacity; ALAB-942, 32 NRC 395 (1990); DPRM-90-1, 32 NRC 281 (1990)
 - protective measures content; ALAB-942, 32 NRC 395 (1990)
 - utility-sponsored, presumption of best-efforts response to; ALAB-936, 32 NRC 75 (1990)
 - utility-sponsored, realism rule applied to; ALAB-937, 32 NRC 135 (1990)
 - utility-sponsored, teacher role abandonment and adequacy of; ALAB-937, 32 NRC 135 (1990)
- EMERGENCY PREPAREDNESS**
 - prior to fuel loading or low-power operations; DPRM-90-1, 32 NRC 281 (1990)
 - training program, deficiencies in as basis for stay request; DD-90-5, 32 NRC 109 (1990)
 - utility funding of local community efforts; DPRM-90-1, 32 NRC 281 (1990)
- EMERGENCY WARNING SYSTEMS**
 - components of; ALAB-935, 32 NRC 57 (1990)
 - timing requirements for; ALAB-935, 32 NRC 57 (1990)
- ENFORCEMENT ACTIONS**
 - notice and hearing procedures; ALAB-940, 32 NRC 225 (1990)
- ENFORCEMENT PROCEEDINGS**
 - scope of; ALAB-940, 32 NRC 225 (1990)
 - termination of, licensing board authority to approve based on settlement agreement; LBP-90-28, 32 NRC 85 (1990)
 - See also Show-Cause Proceedings
- ENVIRONMENTAL IMPACT STATEMENT**
 - for defueling and destaffing a nuclear facility, need for; CLI-90-8, 32 NRC 201 (1990)
- ENVIRONMENTAL REVIEW**
 - of decommissioning; DD-90-8, 32 NRC 469 (1990)
- EQUIPMENT**
 - tagging and isolation procedure at Seabrook, adequacy of; DD-90-5, 32 NRC 109 (1990)
- ESSENTIAL SERVICE WATER SYSTEM**
 - failure to return redundant trains to operable status; DD-90-6, 32 NRC 195 (1990)
- EVACUATION**
 - advanced life support patients; LBP-90-44, 32 NRC 433 (1990)
 - contingency measures; ALAB-942, 32 NRC 395 (1990)
 - responsibility for decisionmaking; DD-90-4, 32 NRC 45 (1990)
 - schoolchildren and day-care centers; LBP-90-40, 32 NRC 376 (1990)
 - shadow phenomenon; DPRM-90-1, 32 NRC 281 (1990)
 - time limit on; ALAB-942, 32 NRC 395 (1990)
- EVALUATION**
 - special populations; ALAB-941, 32 NRC 337 (1990)
- EVIDENCE**
 - not in hearing file; LBP-90-33, 32 NRC 245 (1990)
 - reliance on documents not admitted into the record; ALAB-937, 32 NRC 135 (1990)

SUBJECT INDEX

FEDERAL EMERGENCY MANAGEMENT AGENCY

- completion of final findings on siren system design; ALAB-941, 32 NRC 337 (1990)
- views on notification requirements; ALAB-935, 32 NRC 57 (1990)
- weight given to views on adequacy of emergency planning; CLI-90-10, 32 NRC 218 (1990)

FINALITY

- of decisions for purpose of appeal; ALAB-941, 32 NRC 337 (1990)

FINANCIAL QUALIFICATIONS

- applicability to materials license amendments; LBP-90-45, 32 NRC 449 (1990)
- material false statements on, as basis for revocation of license; LBP-90-26, 32 NRC 30 (1990)
- reinstatement in operating license hearings; DPRM-90-3, 32 NRC 326 (1990)

FINDINGS OF FACT AND CONCLUSIONS OF LAW

- on another intervenor's contentions; ALAB-942, 32 NRC 395 (1990)

FIRE PROTECTION

- adequacy at Palo Verde; DD-90-7, 32 NRC 273 (1990)
- for licenses to possess radioactive materials in unsealed form; LBP-90-27, 32 NRC 40 (1990)

FIRES

- HEPA filter usefulness; LBP-90-35, 32 NRC 259 (1990)
- plutonium, adequacy of resources for fighting; LBP-90-38, 32 NRC 359 (1990)
- plutonium, prevention of; LBP-90-41, 32 NRC 380 (1990)

FUNDING

- emergency preparedness efforts by local communities; DPRM-90-1, 32 NRC 281 (1990)

GLOVE BOX

- design of; LBP-90-30, 32 NRC 95 (1990)
- single-failure criterion; LBP-90-41, 32 NRC 380 (1990)

GROUNDWATER

- radioactive releases to; DD-90-4, 32 NRC 45 (1990)

HEARING FILE

- inclusion of documents in public document room in; LBP-90-27, 32 NRC 40 (1990)
- motion for completion of; LBP-90-33, 32 NRC 245 (1990)
- presiding officer's authority over; LBP-90-27, 32 NRC 40 (1990)
- Staff responsibility for; LBP-90-33, 32 NRC 245 (1990); LBP-90-34, 32 NRC 253 (1990)

HEARING REQUESTS

- for reconsideration of civil penalty; LBP-90-31, 32 NRC 107 (1990)

HEARING RIGHTS

- low-power testing; ALAB-940, 32 NRC 225 (1990)
- operating license amendment; LBP-90-25, 32 NRC 21 (1990); LBP-90-39, 32 NRC 368 (1990)
- state standards for regulation of byproduct material; CLI-90-9, 32 NRC 210 (1990); CLI-90-11, 32 NRC 333 (1990)

HEARINGS

- enforcement actions; ALAB-940, 32 NRC 225 (1990)

HEPA FILTERS

- credit in a fire; LBP-90-35, 32 NRC 259 (1990)
- DOP testing of; LBP-90-30, 32 NRC 95 (1990); LBP-90-35, 32 NRC 259 (1990); LBP-90-41, 32 NRC 380 (1990)

ILLINOIS

- standards for regulation of byproduct material; CLI-90-9, 32 NRC 210 (1990); CLI-90-11, 32 NRC 333 (1990)

IMMEDIATE EFFECTIVENESS REVIEW

- effect on appeal board decisions; ALAB-937, 32 NRC 135 (1990)
- of decisions authorizing operating license issuance, requirement for; ALAB-934, 32 NRC 1 (1990)

INFORMAL PROCEEDINGS

- responsibility to update hearing file; LBP-90-34, 32 NRC 253 (1990)
- See also Subpart L Proceedings

SUBJECT INDEX

INSTITUTE FOR NUCLEAR POWER OPERATIONS

reports of noncompliances at Seabrook as basis for request for extension of stay of operating license;
DD-90-5, 32 NRC 109 (1990)

INSURANCE

purpose of requirements for nuclear power plants; DD-90-8, 32 NRC 469 (1990)

INTERPRETATION

adequate protective measures; DPRM-90-1, 32 NRC 281 (1990)
scope of full-participation exercise; ALAB-941, 32 NRC 337 (1990)

INTERVENORS

burden of going forward; LBP-90-45, 32 NRC 449 (1990)
cross-examination by; ALAB-942, 32 NRC 395 (1990)
dismissal as a party based on changed circumstances; LBP-90-24, 32 NRC 12 (1990)
withdrawn, entitlement to appeal; ALAB-934, 32 NRC 1 (1990)

INTERVENTION

amendment of petitions; LBP-90-29, 32 NRC 89 (1990)
in operating license amendment proceedings, showing necessary to establish; LBP-90-29, 32 NRC 89
(1990)
organizational, affidavit requirement to establish; LBP-90-29, 32 NRC 89 (1990)
organizational, showing necessary for; LBP-90-29, 32 NRC 89 (1990)

JURISDICTION

multiple-board licensing proceedings; ALAB-942, 32 NRC 395 (1990)

LICENSEES

responsibilities for operation of a licensed facility; DD-90-8, 32 NRC 469 (1990)

LICENSES

for possession of material being cleaned up; DPRM-90-2, 32 NRC 317 (1990)
See also Byproduct Materials Licenses; Materials Licenses; Operating Licenses; Revocation of Licenses;
Special Nuclear Materials Licenses

LICENSING BOARDS

authority to approve settlements; LBP-90-46, 32 NRC 463 (1990)
authority to approve termination of enforcement proceeding on basis of settlement agreement;
LBP-90-28, 32 NRC 85 (1990)
authority to declare sua sponte issues; LBP-90-32, 32 NRC 181 (1990)
error in dismissing teacher role abandonment contention; ALAB-937, 32 NRC 135 (1990)

LIGHTING

See Emergency Lighting

MAINTENANCE

at Seabrook, unapproved technical manuals used in; DD-90-5, 32 NRC 109 (1990)
inoperable equipment; DD-90-8, 32 NRC 469 (1990)

MANAGEMENT

allegations of problems at Seabrook; DD-90-5, 32 NRC 109 (1990)

MATERIAL FACT

definition of; LBP-90-44, 32 NRC 433 (1990)

MATERIAL FALSE STATEMENTS

as basis for revocation of license; LBP-90-26, 32 NRC 30 (1990)

MATERIALS LICENSE AMENDMENT PROCEEDING

hearing file contents; LBP-90-33, 32 NRC 245 (1990)

MATERIALS LICENSE AMENDMENTS

issuance during pendency of a proceeding; LBP-90-23, 32 NRC 7 (1990)

MATERIALS LICENSES

defects, remedies of; LBP-90-45, 32 NRC 449 (1990)

MILL TAILINGS

onsite disposal; CLI-90-9, 32 NRC 210 (1990)

SUBJECT INDEX

MONITORING

of Seabrook activities, programs, and supervisors, adequacy of; DD-90-5, 32 NRC 109 (1990)
See also Radiological Monitoring

MOTION TO STRIKE

denial of; LBP-90-36, 32 NRC 267 (1990)

NATIONAL ENVIRONMENTAL POLICY ACT

consideration of alternatives to decommissioning; DD-90-8, 32 NRC 469 (1990)
environmental review of decommissioning; DD-90-8, 32 NRC 469 (1990)
resumed operation as an alternative to decommissioning; CLI-90-8, 32 NRC 201 (1990)
rule of reason applied to consideration of remote and speculative events; ALAB-938, 32 NRC 154 (1990)
rule of reason applied to environmental contentions; CLI-90-7, 32 NRC 129 (1990)
rule of reason in consideration of alternatives; CLI-90-8, 32 NRC 201 (1990)

NEPTUNIUM

handling of; LBP-90-30, 32 NRC 95 (1990)

NO SIGNIFICANT HAZARDS REPORT

significance of errors in; LBP-90-32, 32 NRC 181 (1990)

NONCOMPLIANCES

industry reports of, as basis for request for extension of stay of Seabrook operating license; DD-90-5, 32 NRC 109 (1990)

NOTICE

of enforcement actions; ALAB-940, 32 NRC 225 (1990)

NOTICE AND COMMENT

assessment of state site-specific alternatives to regulation of byproduct material; CLI-90-9, 32 NRC 210 (1990)

NOTIFICATION

emergency, content of emergency plan requirements on; ALAB-936, 32 NRC 75 (1990)
emergency, realism rule applied to; ALAB-936, 32 NRC 75 (1990)
fifteen-minute requirement for emergencies; ALAB-941, 32 NRC 337 (1990)
interpretation of 15-minute requirement; ALAB-935, 32 NRC 57 (1990)
of public of radiological emergency; ALAB-935, 32 NRC 57 (1990)
timeliness of process; ALAB-942, 32 NRC 395 (1990)

NRC EMPLOYEES

improprieties by; DD-90-7, 32 NRC 273 (1990)

NRC INSPECTORS

retaliation against; DD-90-7, 32 NRC 273 (1990)

NRC STAFF

discovery of; LBP-90-43, 32 NRC 390 (1990)
responsibility for hearing file; LBP-90-33, 32 NRC 245 (1990)
responsibility to update hearing file in Subpart L proceedings; LBP-90-34, 32 NRC 253 (1990)

NUCLEAR POWER PLANTS

staffing of plants in defueled condition; DD-90-8, 32 NRC 469 (1990)

NUCLEAR REGULATION COMMISSION

UMTRCA Title I responsibilities; DPRM-90-2, 32 NRC 317 (1990)
authority to direct a licensee to operate a license facility; CLI-90-8, 32 NRC 201 (1990)
authority to direct a licensee to operate a licensed facility; DD-90-8, 32 NRC 469 (1990)
concurrent role in DOE's remedial program; DPRM-90-2, 32 NRC 317 (1990)

NUREG-0396

radioactivity rainout; DPRM-90-1, 32 NRC 281 (1990)

NUREG-0654

evacuation contingency measures; ALAB-942, 32 NRC 395 (1990)
monitoring and decontamination; ALAB-942, 32 NRC 395 (1990)
spontaneous evacuation outside EPZ; DPRM-90-1, 32 NRC 281 (1990)

SUBJECT INDEX

- NUREG-1150
 - methodologies for determining EPZ size; DPRM-90-1, 32 NRC 281 (1990)
- OPERATING LICENSE AMENDMENT PROCEEDING
 - standing to intervene in; LBP-90-29, 32 NRC 89 (1990)
- OPERATING LICENSE AMENDMENTS
 - hearing rights on; LBP-90-39, 32 NRC 368 (1990)
- OPERATING LICENSE PROCEEDINGS
 - issues for consideration in; ALAB-940, 32 NRC 225 (1990)
 - reinstatement of financial qualifications; DPRM-90-3, 32 NRC 326 (1990)
 - relitigation of issues in separate phases of same proceeding; ALAB-942, 32 NRC 395 (1990)
- OPERATING LICENSES
 - effect of appellate decision on authorization for; ALAB-942, 32 NRC 395 (1990)
 - effect of private agreement on licensee's responsibilities; DD-90-8, 32 NRC 469 (1990)
 - emergency exercise within 2 years of issuance; ALAB-941, 32 NRC 337 (1990)
- OPERATING LICENSES, FULL-POWER
 - authority for low-power testing under; ALAB-940, 32 NRC 225 (1990)
 - definition of; ALAB-940, 32 NRC 225 (1990)
- OPERATING LICENSES, LOW-POWER
 - definition of; ALAB-940, 32 NRC 225 (1990)
 - materiality to full-power license; ALAB-940, 32 NRC 225 (1990)
 - standard for grant of; ALAB-940, 32 NRC 225 (1990)
- OPERATIONS, LOW-POWER
 - emergency preparedness requirements; DPRM-90-1, 32 NRC 281 (1990)
- OPINIONS
 - advisory, reliance on reasoning of; ALAB-936, 32 NRC 75 (1990)
- PART 70 LICENSE
 - disclosure of plutonium-241 and americium; LBP-90-45, 32 NRC 449 (1990)
- PENALTIES
 - See Civil Penalties
- PIPING
 - at Seabrook, material condition of; DD-90-5, 32 NRC 109 (1990)
- PLUTONIUM
 - handling of; LBP-90-30, 32 NRC 95 (1990)
 - isotopes, accounting for; LBP-90-35, 32 NRC 259 (1990); LBP-90-41, 32 NRC 380 (1990)
- PLUTONIUM-241
 - disclosure of curie content of; LBP-90-45, 32 NRC 449 (1990)
 - disclosure of licensed amount; LBP-90-38, 32 NRC 359 (1990)
 - emergency plan requirements for possession of; LBP-90-38, 32 NRC 359 (1990)
 - relative biological effectiveness; LBP-90-45, 32 NRC 449 (1990)
- PRESIDING OFFICER
 - authority over hearing file; LBP-90-27, 32 NRC 40 (1990)
- PROOF
 - See Burden of Proof
- PROTECTIVE ACTIONS
 - range of, for emergency planning; ALAB-942, 32 NRC 395 (1990)
- PUBLIC DOCUMENT ROOM
 - inclusion of document from, in hearing file of Subpart proceeding; LBP-90-27, 32 NRC 40 (1990)
- QUALITY ASSURANCE
 - violations, reopening a record on; ALAB-940, 32 NRC 225 (1990)
- RADIOACTIVE RELEASES
 - atmospheric venting of operating emissions; DD-90-4, 32 NRC 45 (1990)
 - containment of fission gases during radiological emergency; DD-90-4, 32 NRC 45 (1990)

SUBJECT INDEX

- to groundwater; DD-90-4, 32 NRC 45 (1990)
- unencapsulated radionuclides; LBP-90-35, 32 NRC 259 (1990); LBP-90-41, 32 NRC 380 (1990)
- RADIOACTIVITY**
 - rainout; DPRM-90-1, 32 NRC 281 (1990)
- RADIOLOGICAL MONITORING**
 - capacity required in emergency planning; ALAB-942, 32 NRC 395 (1990)
 - regulatory guidance on; ALAB-942, 32 NRC 395 (1990)
 - independent systems operated by local communities; DPRM-90-1, 32 NRC 281 (1990)
- RADIONUCLIDES**
 - unencapsulated, release of; LBP-90-35, 32 NRC 259 (1990); LBP-90-41, 32 NRC 380 (1990)
- REACTOR COOLANT**
 - loop, outage time; LBP-90-32, 32 NRC 181 (1990)
- REACTOR CORE**
 - cycle-specific operating limits; LBP-90-39, 32 NRC 368 (1990)
- REACTOR OPERATION**
 - cycle-specific parameter limits; LBP-90-39, 32 NRC 368 (1990)
- REALISM RULE**
 - applicability to teacher role abandonment; ALAB-937, 32 NRC 135 (1990)
 - application to pre-emergency conduct of state and local governments; ALAB-937, 32 NRC 135 (1990)
- RECEPTION CENTERS**
 - activation for emergency exercises; ALAB-941, 32 NRC 337 (1990)
- RECONSIDERATION**
 - obligation of parties concerning requests for; ALAB-942, 32 NRC 395 (1990)
- RECORD**
 - See Reopening a Record
- RED CROSS**
 - See American Red Cross
- REGULATIONS**
 - compliance with regulatory guides as presumptive evidence of compliance with; LBP-90-30, 32 NRC 95 (1990)
 - effective date; LBP-90-45, 32 NRC 449 (1990)
 - insurance requirements for nuclear power plants; DD-90-8, 32 NRC 469 (1990)
 - interpretation of 10 C.F.R. 50.47(a); DPRM-90-1, 32 NRC 281 (1990)
 - interpretation of 10 C.F.R. 52.79(d); DPRM-90-1, 32 NRC 281 (1990)
 - interpretation of 10 C.F.R. Part 40; DPRM-90-2, 32 NRC 317 (1990)
 - interpretation of 10 C.F.R. Part 50, Appendix E; ALAB-941, 32 NRC 337 (1990)
 - interpretation of Part 50, Appendix guidance on warning systems; ALAB-935, 32 NRC 57 (1990)
 - waiver of, burden of proof to justify; LBP-90-23, 32 NRC 7 (1990)
 - waiver of, prima facie showing required for grant of; LBP-90-23, 32 NRC 7 (1990)
 - See also Rules of Practice
- REGULATORY GUIDANCE**
 - compliance with as presumptive evidence of compliance with regulations; LBP-90-30, 32 NRC 95 (1990)
 - emergency planning; ALAB-942, 32 NRC 395 (1990)
 - emergency planning zone size; DPRM-90-1, 32 NRC 281 (1990)
 - monitoring and decontamination; ALAB-942, 32 NRC 395 (1990)
 - more demanding than regulations; ALAB-935, 32 NRC 57 (1990)
 - significant contaminants; LBP-90-45, 32 NRC 449 (1990)
- RELATIVE BIOLOGICAL EFFECTIVENESS**
 - plutonium-241; LBP-90-45, 32 NRC 449 (1990)
 - plutonium-241; LBP-90-38, 32 NRC 359 (1990)
- REMANDED ISSUES**
 - appeal rights of intervenor who fails to participate on; ALAB-934, 32 NRC 1 (1990)

SUBJECT INDEX

REOPENING A RECORD

- burden on movant; ALAB-936, 32 NRC 75 (1990); ALAB-940, 32 NRC 225 (1990); CLI-90-10, 32 NRC 218 (1990)
- criteria for; ALAB-936, 32 NRC 75 (1990); ALAB-940, 32 NRC 225 (1990)
- quality assurance violations; ALAB-940, 32 NRC 225 (1990)
- satisfaction of requirements; ALAB-940, 32 NRC 225 (1990); CLI-90-10, 32 NRC 218 (1990)
- significant safety issue; CLI-90-10, 32 NRC 218 (1990); ALAB-940, 32 NRC 225 (1990)
- timeliness; CLI-90-10, 32 NRC 218 (1990)
- timeliness considerations where motion does not address significant safety or environmental issues; ALAB-936, 32 NRC 75 (1990)

REVIEW

See Environmental Review; Immediate Effectiveness Review

REVOCAION OF LICENSES

- for postlicensing failures; LBP-90-26, 32 NRC 30 (1990)

RULEMAKING

- appropriateness for dealing with financial problems of individual licensees; DPRM-90-3, 32 NRC 326 (1990)

RULES OF PRACTICE

- admissibility of contentions based on factual underpinning in a document that has been essentially repudiated by the source of that document; ALAB-938, 32 NRC 154 (1990)
- amendment of intervention petitions; LBP-90-29, 32 NRC 89 (1990)
- appealability of dismissal of contentions; ALAB-941, 32 NRC 337 (1990)
- appellate decisions and license authorization; ALAB-942, 32 NRC 395 (1990)
- basis and specificity requirements for admission of contentions; ALAB-938, 32 NRC 154 (1990); ALAB-941, 32 NRC 337 (1990); ALAB-942, 32 NRC 395 (1990)
- burden of proof to justify waiver of regulations; LBP-90-23, 32 NRC 7 (1990)
- burden on intervenors seeking license revocation; LBP-90-45, 32 NRC 449 (1990)
- completeness of published decisions; ALAB-938, 32 NRC 154 (1990)
- completion of hearing file; LBP-90-33, 32 NRC 245 (1990)
- criteria for reopening a record; ALAB-940, 32 NRC 225 (1990)
- cross-examination by intervenors; ALAB-942, 32 NRC 395 (1990)
- directed certification; ALAB-942, 32 NRC 395 (1990)
- dismissal of appeal for failure to brief issues properly; ALAB-942, 32 NRC 395 (1990)
- dismissal of organizational intervenor based on changed circumstances; LBP-90-24, 32 NRC 12 (1990)
- dismissal of parties; ALAB-939, 32 NRC 165 (1990)
- effect of dismissal of party from one major segment of a proceeding on its participation in other segments; ALAB-934, 32 NRC 1 (1990)
- emergency exercise contentions; ALAB-941, 32 NRC 337 (1990)
- evidence not in hearing file in Subpart L proceedings; LBP-90-33, 32 NRC 245 (1990)
- five-factor test applied to supplementation of contentions; ALAB-938, 32 NRC 154 (1990)
- hearing rights as ground for waiver of 10 C.F.R. 2.1205(i); LBP-90-23, 32 NRC 7 (1990)
- immediate effectiveness review, effect on appeal board decisions; ALAB-937, 32 NRC 135 (1990)
- intervention by a group or organization, showing necessary for; LBP-90-29, 32 NRC 89 (1990)
- licensing board authority to approve termination of enforcement proceeding on basis of settlement agreement; LBP-90-28, 32 NRC 85 (1990)
- McGuire rule; LBP-90-34, 32 NRC 253 (1990); LBP-90-36, 32 NRC 267 (1990)
- merits determinations at contention admission stage; ALAB-938, 32 NRC 154 (1990)
- multiple-board proceedings; ALAB-942, 32 NRC 395 (1990)
- obligation of party to request reconsideration of ruling; ALAB-942, 32 NRC 395 (1990)
- participation in other proceedings as basis for standing to intervene; LBP-90-29, 32 NRC 89 (1990)
- purpose of specificity requirement for contentions; ALAB-942, 32 NRC 395 (1990)
- reliance on documents not admitted into the record; ALAB-937, 32 NRC 135 (1990)
- relitigation of issues in separate phases of same proceeding; ALAB-942, 32 NRC 395 (1990)

SUBJECT INDEX

- remedied of license defects in informal proceedings; LBP-90-45, 32 NRC 449 (1990)
- reopening a record, burden on sponsors of motion; ALAB-936, 32 NRC 75 (1990)
- reopening a record, criteria for; ALAB-936, 32 NRC 75 (1990); CLI-90-10, 32 NRC 218 (1990)
- responsibilities of parties; LBP-90-36, 32 NRC 267 (1990)
- settlement of proceedings; LBP-90-46, 32 NRC 463 (1990)
- showing necessary to establish standing in operating license amendment proceedings; LBP-90-29, 32 NRC 89 (1990)
- Staff responsibility to update hearing file in Subpart L proceedings; LBP-90-34, 32 NRC 253 (1990)
- standing to intervene in operating license amendment proceeding; LBP-90-29, 32 NRC 89 (1990)
- sua sponte adoption of issues of dismissed intervenor; LBP-90-24, 32 NRC 12 (1990)
- Subpart L, authority to issue temporary stay; LBP-90-30, 32 NRC 95 (1990)
- Subpart L, hearing file, inclusion of documents in public document room in; LBP-90-27, 32 NRC 40 (1990)
- Subpart L, presiding officer's authority over hearing file; LBP-90-27, 32 NRC 40 (1990)
- summary disposition of pleadings; LBP-90-26, 32 NRC 30 (1990); LBP-90-44, 32 NRC 433 (1990)
- temporary stay; LBP-90-35, 32 NRC 259 (1990); LBP-90-38, 32 NRC 359 (1990); LBP-90-41, 32 NRC 380 (1990)
- timeliness considerations where motion to reopen does not address significant safety or environmental issues; ALAB-936, 32 NRC 75 (1990)
- validity of license, demonstration of; LBP-90-45, 32 NRC 449 (1990)
- SAFETY ISSUES**
 - reopening a record; ALAB-940, 32 NRC 225 (1990); CLI-90-10, 32 NRC 218 (1990)
- SANCTIONS**
 - dismissal of intervenor for nonparticipation on remanded issues; ALAB-934, 32 NRC 1 (1990)
- SCHOOL TEACHERS**
 - realism rule applied to; ALAB-937, 32 NRC 135 (1990)
 - role abandonment during radiological emergencies, licensing board error in dismissal of contention on; ALAB-937, 32 NRC 135 (1990)
- SETTLEMENT AGREEMENT**
 - as basis for termination of enforcement proceeding; LBP-90-28, 32 NRC 85 (1990)
 - licensing board authority to approve; LBP-90-46, 32 NRC 463 (1990)
- SHELTERING**
 - implementing procedures for; ALAB-939, 32 NRC 165 (1990)
- SHOW-CAUSE PROCEEDINGS**
 - licensing board authority to approve settlement of; LBP-90-46, 32 NRC 463 (1990)
 - scope of; DD-90-7, 32 NRC 273 (1990)
 - standard for institution of; DD-90-7, 32 NRC 273 (1990)
 - See also Enforcement Proceedings
- SINGLE-FAILURE CRITERION**
 - glove boxes; LBP-90-41, 32 NRC 380 (1990)
- SIREN ALERTING SYSTEM**
 - emergency exercise of; ALAB-941, 32 NRC 337 (1990)
- SPECIAL NUCLEAR MATERIALS**
 - accounting for; LBP-90-35, 32 NRC 259 (1990)
 - curie content of; LBP-90-35, 32 NRC 259 (1990)
 - disclosure of licensed amounts; LBP-90-38, 32 NRC 359 (1990); LBP-90-45, 32 NRC 449 (1990)
 - emergency plan requirements; LBP-90-35, 32 NRC 259 (1990); LBP-90-38, 32 NRC 359 (1990)
 - emergency planning or fire prevention; LBP-90-27, 32 NRC 40 (1990)
- SPECIAL NUCLEAR MATERIALS LICENSES**
 - content of applications for; LBP-90-30, 32 NRC 95 (1990)
 - issuance during pendency of special materials cases; LBP-90-23, 32 NRC 7 (1990)
- SPENT FUEL STORAGE**
 - insurance requirements for; DD-90-8, 32 NRC 469 (1990)

SUBJECT INDEX

STANDING

- discretionary, test for; LBP-90-24, 32 NRC 12 (1990)
- participation in other proceedings as basis for; LBP-90-29, 32 NRC 89 (1990)

STATE AND LOCAL GOVERNMENTS

- participation in emergency exercises; ALAB-941, 32 NRC 337 (1990)

STAY

- of operating license, discrepancy between emergency plan and emergency plan implementing procedures as basis for request for; DD-90-5, 32 NRC 109 (1990)
- of operating license, lack of employee knowledge of job descriptions as basis for request for; DD-90-5, 32 NRC 109 (1990)
- right to reply to; LBP-90-38, 32 NRC 359 (1990)
- success on the merits; LBP-90-35, 32 NRC 259 (1990)
- temporary; LBP-90-35, 32 NRC 259 (1990); LBP-90-41, 32 NRC 380 (1990)
- temporary, authority to issue; LBP-90-30, 32 NRC 95 (1990)

SUA SPONTE ISSUES

- adoption of issues of dismissed intervenor as; LBP-90-24, 32 NRC 12 (1990)
- licensing board authority to declare; LBP-90-32, 32 NRC 181 (1990)

SUBPART L PROCEEDINGS

- remedied of license defects; LBP-90-45, 32 NRC 449 (1990)
- See also Informal Proceedings

SUMMARY DISPOSITION

- limitations on use of; LBP-90-26, 32 NRC 30 (1990)
- standard for; LBP-90-44, 32 NRC 433 (1990)

SURVEILLANCE

- inoperable equipment; DD-90-8, 32 NRC 469 (1990)

TECHNICAL SPECIFICATIONS

- allegations of violation of, at Perry plant; DD-90-6, 32 NRC 195 (1990)
- amendment of; LBP-90-29, 32 NRC 89 (1990)
- change in mode reduction requirement; LBP-90-32, 32 NRC 181 (1990)
- content of; LBP-90-25, 32 NRC 21 (1990)
- removal of cycle-specific core operating limits; LBP-90-39, 32 NRC 368 (1990)

TESTING

- HEPA filters; LBP-90-35, 32 NRC 259 (1990); LBP-90-41, 32 NRC 380 (1990)
- low-power, as a precondition to grant of a full-power license; ALAB-940, 32 NRC 225 (1990)
- low-power, need for license for; ALAB-940, 32 NRC 225 (1990)
- low-power, purpose of; ALAB-940, 32 NRC 225 (1990)

UNRESOLVED SAFETY ISSUES

- defueled nuclear plant; DD-90-8, 32 NRC 469 (1990)

URANIUM MILL TAILINGS

- license for possession of material being cleaned up; DPRM-90-2, 32 NRC 317 (1990)

URANIUM MILL TAILINGS RADIATION CONTROL ACT

- compliance with EPA regulations; DPRM-90-2, 32 NRC 317 (1990)
- license for possession of material being cleaned up; DPRM-90-2, 32 NRC 317 (1990)
- remediation of vicinity properties; DPRM-90-2, 32 NRC 317 (1990)
- Title I program; DPRM-90-2, 32 NRC 317 (1990)

UTILITIES

- funding of emergency preparedness efforts by local communities; DPRM-90-1, 32 NRC 281 (1990)

VALVES

- See Check Valves

VIOLATIONS

- appropriateness of penalty; LBP-90-42, 32 NRC 387 (1990); LBP-90-43, 32 NRC 390 (1990)
- collective classification of Severity Levels IV and V as Severity Level III; LBP-90-42, 32 NRC 387 (1990); LBP-90-43, 32 NRC 390 (1990)

SUBJECT INDEX

emergency lighting and fire protection at PVNGS; DD-90-7, 32 NRC 273 (1990)

quality assurance; ALAB-940, 32 NRC 225 (1990)

WAIVER

of regulations, burden of proof to justify; LBP-90-23, 32 NRC 7 (1990)

of regulations, prima facie showing required for grant of; LBP-90-23, 32 NRC 7 (1990)

FACILITY INDEX

- CARROLL COUNTY NUCLEAR STATION, Units 1 and 2; Docket Nos. 50-599-ESR, 50-600-ESR
CONSTRUCTION PERMIT WITHDRAWAL; October 31, 1990; ORDER APPROVING
WITHDRAWAL AND TERMINATING PROCEEDING; LBP-90-37, 32 NRC 270 (1990)
- PALO VERDE NUCLEAR GENERATING STATION, Units 1, 2, and 3; Docket Nos. 50-528, 50-529,
50-530
REQUEST FOR ACTION; October 31, 1990; PARTIAL DIRECTOR'S DECISION UNDER 10
C.F.R. § 2.206; DD-90-7, 32 NRC 273 (1990)
- PERRY NUCLEAR POWER PLANT, Unit 1; Docket No. 50-440
REQUEST FOR ACTION; September 25, 1990; DIRECTOR'S DECISION UNDER 10 C.F.R.
§ 2.206; DD-90-6, 32 NRC 195 (1990)
- PERRY NUCLEAR POWER PLANT, Unit 1; Docket No. 50-440-OLA-2
OPERATING LICENSE AMENDMENT; July 23, 1990; MEMORANDUM AND ORDER (Denying
Staff's and Licensee's Motions for Reconsideration); LBP-90-25, 32 NRC 21 (1990)
OPERATING LICENSE AMENDMENT; November 1, 1990; INITIAL DECISION (Approving
License Amendment); LBP-90-39, 32 NRC 368 (1990)
- QUAD CITIES NUCLEAR POWER STATION; Docket Nos. 50-254-OM, 50-265-OM
ENFORCEMENT; August 1, 1990; MEMORANDUM AND ORDER (Approving Settlement
Agreement and Terminating Proceedings); LBP-90-28, 32 NRC 85 (1990)
- SEABROOK STATION, Unit 1; Docket No. 50-443
REQUEST FOR ACTION; August 31, 1990; DIRECTOR'S DECISION UNDER 10 C.F.R. § 2.206;
DD-90-4, 32 NRC 45 (1990); DD-90-5, 32 NRC 109 (1990)
- SEABROOK STATION, Units 1 and 2; Docket Nos. 50-443-OL, 50-444-OL
OPERATING LICENSE; July 9, 1990; DECISION; ALAB-934, 32 NRC 1 (1990)
OPERATING LICENSE; August 20, 1990; DECISION; ALAB-935, 32 NRC 57 (1990)
OPERATING LICENSE; August 20, 1990; DECISION; ALAB-936, 32 NRC 75 (1990)
OPERATING LICENSE; September 18, 1990; DECISION; ALAB-937, 32 NRC 135 (1990)
OPERATING LICENSE; September 28, 1990; MEMORANDUM AND ORDER REGARDING
REFERRED QUESTIONS; ALAB-939, 32 NRC 165 (1990)
OPERATING LICENSE; October 26, 1990; ORDER; CLI-90-10, 32 NRC 218 (1990)
OPERATING LICENSE; November 21, 1990; DECISION; ALAB-941, 32 NRC 337 (1990)
OPERATING LICENSE; December 21, 1990; DECISION; ALAB-942, 32 NRC 395 (1990)
- SEABROOK STATION, Units 1 and 2; Docket Nos. 50-443-OL-1, 50-444-OL-1
OPERATING LICENSE; October 18, 1990; MEMORANDUM AND ORDER; ALAB-940, 32 NRC
225 (1990)
- SEABROOK STATION, Units 1 and 2; Docket Nos. 50-443-OL-R, 50-444-OL-R
OPERATING LICENSE REMAND; December 18, 1990; MEMORANDUM AND ORDER (Summary
Disposition Motion); LBP-90-44, 32 NRC 433 (1990)
- SEABROOK STATION, Units 1 and 2; Docket Nos. 50-443-OLR-3, 50-444-OLR-3
OPERATING LICENSE REMAND; November 7, 1990; MEMORANDUM AND ORDER (Denying
Licensee's Motion for Summary Disposition of Issues Remanded in ALAB-937); LBP-90-40, 32
NRC 376 (1990)

FACILITY INDEX

- SHOREHAM NUCLEAR POWER STATION, Unit 1; Docket No. 50-322
OPERATING LICENSE AMENDMENT; October 17, 1990; MEMORANDUM AND ORDER;
CLI-90-8, 32 NRC 201 (1990)
REQUEST FOR ACTION; December 20, 1990; DIRECTOR'S DECISION UNDER 10 C.F.R.
§2.206; DD-90-8, 32 NRC 469 (1990)
- TURKEY POINT NUCLEAR GENERATING PLANT, Units 3 and 4; Docket Nos. 50-250-OLA-5,
50-251-OLA-5
OPERATING LICENSE AMENDMENT; July 18, 1990; MEMORANDUM AND ORDER (Motion to
Dismiss); LBP-90-24, 32 NRC 12 (1990)
OPERATING LICENSE AMENDMENT; September 25, 1990; MEMORANDUM AND ORDER
(Consideration of Possible Sua Sponte Issues); LBP-90-32, 32 NRC 181 (1990)
- VERMONT YANKEE NUCLEAR POWER STATION; Docket No. 50-271-OLA
OPERATING LICENSE AMENDMENT; September 21, 1990; MEMORANDUM AND ORDER;
CLI-90-7, 32 NRC 129 (1990)
LICENSE AMENDMENT; September 21, 1990; NOTICE; ALAB-938, 32 NRC 154 (1990)
- VOGTLE ELECTRIC GENERATING PLANT, Units 1 and 2; Docket Nos. 50-424-OLA, 50-425-OLA
OPERATING LICENSE AMENDMENT; August 16, 1990; MEMORANDUM AND ORDER
(Intervention Petition); LBP-90-29, 32 NRC 89 (1990)