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November 1987

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This report includes the issuances received during the specified period from the Commission (CLI), the Atomic Safety and Licensing Appeal Boards (ALAB), the Atomic Safety and Licensing Boards (LBP), the Administrative Law Judge (ALJ), the Directors' Decisions (DD), and the Denials 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.

U.S. NUCLEAR REGULATORY COMMISSION

Prepared by the
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U.S. Nuclear Regulatory Commission
Washington, DC 20555
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Cite as 26 NRC 383 (1987) CLI-87-12

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

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Thomas M. Roberts
Frederick M. Bernthal
Kenneth M. Carr
Kenneth C. Rogers

In the Matter of

Docket No. 50-322-OL-3
(Emergency Planning)

LONG ISLAND LIGHTING
COMPANY
(Shoreham Nuclear Power Station,
Unit 1)

November 5, 1987

The Commission reverses ALAB-832, 23 NRC 135 (1986), insofar as it allowed the admission of two contentions for evidentiary hearing on whether the Shoreham Plume Exposure Pathway Emergency Planning Zone should be expanded by a few miles to: (1) provide an adequate base for the expansion of emergency response efforts beyond the EPZ in very severe accidents; and (2) minimize the occurrence and effects of spontaneous evacuation from outside the EPZ. The Commission affirms the ALAB-832 remand to the Licensing Board for further consideration of evacuation plans for hospitals in the Shoreham EPZ.

EMERGENCY PLAN: EMERGENCY PLANNING ZONES (SIZE)

The NRC/EPA task force report (NUREG-0396), which formed the basis for the "EPZ" concept in NRC's emergency planning regulations, 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. EPZ shape and size can be somewhat different than the 10-mile circular radius implies without compromising emergency planning goals,

as evidenced by the following statement in the report: "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." *See* 10 C.F.R. § 50.47(c)(2) (1987).

EMERGENCY PLAN: EMERGENCY PLANNING ZONES (SIZE)

Nothing in NUREG-0396 or in any part of 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. In particular, the NUREG-0396 analysis indicates that "adequate protective measures" in the context of emergency planning is not a precisely defined concept.

EMERGENCY PLAN: CONTENT (PROTECTIVE MEASURES)

NRC 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, those requirements are designed 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. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22, 30 (1986).

EMERGENCY PLAN: EMERGENCY PLANNING ZONES (SIZE)

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. Given these circumstances, it is entirely reasonable and appropriate for the Commission to hold that the rule precludes adjustments on safety grounds to the size of an EPZ that is "about 10 miles in radius." In the Commission's view, 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.

EMERGENCY PLANNING: EVACUATION TIME ESTIMATES

Even though sheltering will quite likely be the preferred protective action for EPZ hospitals in the event of a serious accident at Shoreham, evacuation should not be prejudiced by the failure to plan in advance. Appendix E to 10 C.F.R. Part 50 requires evacuation time estimates for the EPZ without exceptions for special facilities such as hospitals. Moreover, hospitals, as a kind of "special facility," are specifically mentioned in the principal guidance document in this field, NUREG-0654, and there is no suggestion in this guidance that hospitals are to be treated specially as exempt from the evacuation planning requirement that applies to other segments of the population within the EPZ.

EMERGENCY PLAN: CONTENT (PROTECTIVE MEASURES)

A Commission conclusion that NRC regulations require Applicant to fulfill the same emergency planning obligations for Shoreham with regard to hospital evacuation as those imposed by the Licensing Board in connection with other like segments of the EPZ, such as nursing/adult homes, does not necessarily mean that the applicant's emergency plan is inadequate with respect to hospitals. Under 10 C.F.R. § 50.47(c)(1), the Licensing Board could still approve the utility plan if it found that the deficiencies related to the hospitals were not significant for Shoreham.

MEMORANDUM AND ORDER

In ALAB-832, 23 NRC 135 (1986), the Shoreham Appeal Board reversed and remanded three issues, among others, to the Licensing Board: the Licensing Board's refusal to permit an evidentiary hearing on whether the Shoreham Plume Exposure Pathway Emergency Planning Zone (EPZ) should be expanded by a few miles to provide an adequate base for ad hoc emergency response efforts beyond the EPZ in very severe accidents (Contention 22.B); the Board's refusal to permit an evidentiary hearing on whether the EPZ should be expanded by a few miles to minimize the occurrence and effects of spontaneous evacuation from outside the EPZ (Contention 22.C); and the Board's approval of the applicant's provisions for hospital evacuation. In an Order dated September 19, 1986 (unpublished), the Commission took review of these three issues and requested briefs from the parties.

On review, Long Island Lighting Company (LILCO) and the Staff support the Licensing Board's decisions on these issues and oppose the Appeal Board's decision. The Intervenors take the opposite view.

We conclude on the EPZ issues that while the decision of the Appeal Board is a reasonable one in light of the available, but limited, adjudicatory precedent, additional Commission guidance is needed. After careful review of the history of our regulations, we conclude that Contentions 22.B and 22.C constitute challenges to these regulations. Since Intervenors have declined to cast their contentions in the alternative as challenges to the regulations under 10 C.F.R. § 2.758, litigation of these issues must be disallowed. As for hospital evacuation, we agree with the Appeal Board that LILCO's plans do not fully satisfy NRC's emergency planning regulations.

I. EPZ SIZE

A. Background

Section 50.47(c)(2) of 10 C.F.R. provides that, generally, the EPZ for power reactors shall be "about 10 miles" in radius, with the exact boundaries to be determined "in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries." LILCO's plume EPZ is about 10 miles in radius.

In Contention 22, a four-part, ten-page (double-spaced) contention, Intervenors argued that the proposed LILCO plume EPZ was not large enough, for several reasons.[1] In subpart B, it was argued that a myriad of local conditions mandated a larger plume EPZ because, in a severe accident, LILCO would not be able to adequately extend emergency response efforts outside the 10-mile area on an ad hoc basis.

In subpart C, Intervenors argued that local conditions demanded an EPZ larger than 10 miles, most importantly because massive spontaneous evacuation by those outside the EPZ would have two disastrous effects: first, residents of the eastern end of Long Island would spontaneously evacuate through the EPZ to avoid being trapped, either passing through contaminated areas or impeding evacuation from inside the EPZ; and second, spontaneous evacuation from west of the EPZ would impede evacuation of the EPZ.

The Licensing Board denied admission of these contentions on the ground that they challenged the Commission's generic determination of EPZ size, as

[1] The text of Contentions 22.B and C is set forth in the Appendix (not published) to this Memorandum and Order.

manifested in 10 C.F.R. § 50.47(c)(2).[2] In dismissing Contention 22.B, the Licensing Board noted the Commission's explanation of the 1980 amendments to the emergency planning rules, where the Commission stated that "[t]hese distances are considered large enough to provide a response base that would support activity outside the planning zone should this ever be needed." Special Prehearing Conference Order, Aug. 19, 1983, at 10, *quoting* 45 Fed. Reg. 55,409, col. 2 (Aug. 19, 1980). The Board also explained that, contrary to the Commission's generic determination, Contention 22.B

> asserts, [in essence], that advance planning, as opposed to *ad hoc* planning, is required beyond the 10-mile EPZ because of the eight alleged "distinguishing characteristics." To the extent that this contention asserts that *ad hoc* emergency response would be impossible, it must be rejected as a challenge to § 50.47(c)(2). To the extent that it challenges the LILCO plan in specific matters, *viz.* transient population, inadequate roads, adverse weather, etc., these concerns have already been asserted in other contentions which we have admitted.

Order Ruling on Objections to Special Prehearing Conference Order, Sept. 30, 1983, at 4. The Licensing Board rejected Contention 22.C for much the same reasons.

In ALAB-832, the Appeal Board reversed the Board's disallowance of these contentions, reasoning that "these contentions do not appear to seek anything more than that to which section 50.47(c)(2) entitles intervenors: a determination of the 'exact size and configuration' of the EPZ based upon, *inter alia*, local conditions."[3] On the ground that one set of facts might support more than one contention, the Appeal Board also rejected the Licensing Board's reasoning that because Intervenors were being permitted to challenge the overall adequacy of the plan to deal with spontaneous evacuation, the disallowance of Contention 22.B had no effect on Intervenors' ability to litigate the safety matters at issue. *Id.*, 23 NRC at 148.

In taking review of the rulings on Contention 22.B, the Commission asked:

> (1) whether . . . the admission of Contention 22.B impermissibly challenges the generic rulemaking finding that a 10-mile EPZ will provide an adequate basis for satisfactory *ad hoc* emergency response beyond 10 miles should this be required (*see* 45 Fed. Reg. 55,406, col. 2) (August 19, 1980);[4] and,

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[2] Special Prehearing Conference Order, Aug. 19, 1983 (unpublished); Order Ruling on Objections to Special Prehearing Conference Order, Sept. 30, 1983 (unpublished).

[3] 23 NRC at 148. However, the Appeal Board rejected Intervenors' argument that the only legitimate limits on the size of the EPZ are those limits dictated by local conditions. Instead, noted the Appeal Board, the regulations permit consideration only of "minor adjustments (such as a mile or two) . . . ." *Id.* at 149 n.41. *Cf. id.* at 148 n.37.

[4] Commission Order dated Sept. 19, 1986, at 2. As noted above, the Commission stated in the cited *Federal Register* notice that "these distances are considered large enough to provide a response base that would support activity outside the planning zone should this ever be needed." *Id.*

(2) in the context of Contention 22.C: (a) [whether] there is a logical connection between plume EPZ size and the ability to resolve problems associated with possible spontaneous evacuation, and (b) [whether] the regulations contemplate that the possibility of spontaneous evacuation is a "local condition" which should result in adjustments to an EPZ.

B. Parties' Arguments Before the Commission

1. Intervenor Arguments

Intervenors assert that the contentions, far from challenging the regulations, merely seek to enforce them. Thus, Intervenors argue, the Appeal Board correctly acknowledged the importance of the generic considerations that led to the choice of the 10-mile guideline,[5] but most importantly recognized that "[n]otwithstanding these generic considerations, . . . section 50.47(c)(2) goes on to direct that the 'exact size and configuration' of the plume EPZ 'shall be determined in relation to local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries.' "[6]

Intervenors offer two main arguments on the interpretation of this regulation. First they argue that while spontaneous evacuation and lack of local government cooperation aren't listed in the regulations as local conditions, the conditions listed are exemplary rather than exclusive. Second, Intervenors emphasize that "the determination of the exact size and configuration of the EPZ must be made 'in relation to *local emergency response needs and capabilities* as they are affected by . . .' " local conditions. Brief at 13 (emphasis in Brief). The concept of "local emergency response needs and capabilities," they continue, encompasses LILCO's alleged failure to plan for spontaneous evacuation, an evacuation that will result directly from listed conditions such as the land characteristics of Long Island.[7]

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[5] Those generic considerations are that "(1) projected doses from most accidents would not exceed Federal [PAG] dose levels beyond that distance from the facility and (2) detailed planning within 10 miles would provide a substantial base for expansion of response efforts if this became necessary." ALAB-832, 23 NRC at 145, *citing* NUREG-0396 and NUREG-0654.

[6] 23 NRC at 145. In their Reply Brief, Intervenors charge that LILCO and the Staff offer arguments to the Commission on EPZ size that largely address questions other than those that the Commission chose to review. Reply Brief at 3. Intervenors claim that they don't respond to these improperly offered arguments, and that the Commission should not consider them. However, they continue, if the Commission intends to consider these improper arguments, then it should offer Intervenors an opportunity to respond. In fact, however, Intervenors devote nearly two pages of their fourteen-page response to these LILCO/Staff arguments. *See* Reply Brief at 6-7.

[7] Intervenors add that the legitimacy of Contention 22.C is confirmed by the Brenner Licensing Board's statement that it would consider the effect of local conditions on EPZ size. The Brenner Board stated that whether or not contentions were submitted on the issue, it would investigate whether, "because of the geography of Long Island, evacuation planning within an approximate 10-mile EPZ may not be adequate because of the impacts of persons outside and to the east of the EPZ choosing to evacuate and having to do so by coming through the EPZ." LBP-82-19, 15 NRC 601, 618-19 (1982). LILCO claims that this issue was litigated in the form of Contentions 23.D (evacuation is an ineffective protective action because LILCO hasn't considered the extent of spontaneous

(Continued)

Rejecting charges that they challenge the regulations by seeking a 20-mile EPZ, or one that is "dramatically enlarged," Intervenors assert that what they seek is only what the regulations demand, i.e., an EPZ based on local conditions, whatever the size.[8]

The Licensing Board had agreed with the Staff and LILCO that litigation of Contention 22.B required Intervenors to obtain a § 2.758 exception to the rule prohibiting challenges to the regulations, something Intervenors never sought. But, say Intervenors, Commission precedent includes cases requiring no exception for challenges to the 10-mile EPZ, cases relied on by the Appeal Board as well as Intervenors.[9] Even if LILCO, the Staff, and the Licensing Board are correct that only minor adjustments are permitted, Intervenors add, they were precluded from litigating for these adjustments. Reply Brief at 6.

Finally, while claiming that the Commission did not take review of the Appeal Board holding in ALAB-832 that a utility-only emergency response is a "local condition" to be considered in determining EPZ size, Intervenors assert in response to a LILCO argument that the Appeal Board correctly decided this question.

2. *Staff and LILCO Arguments*

The Staff and LILCO oppose the admission of Contentions 22.B and C mainly on the ground that the contentions challenge the generic findings underlying the Commission's determination that a 10-mile EPZ for power reactors is adequate to protect the public. The Staff and LILCO contest the Appeal Board's conclusion that Contention 22.B was aimed at determining the exact size and shape of the EPZ based on local conditions. Rather, they claim, it is a direct

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evacuation that will occur) and 23.H (LILCO has failed to provide for blockades to prevent spontaneous evacuees from entering contaminated areas of the EPZ, thus potentially harming them and impeding evacuation from the EPZ). Reply Brief at 9. The Licensing Board found for LILCO on both of these questions.

[8] Both LILCO and Intervenors cite a Commission decision in *San Onofre* to support their positions. *Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 NRC 528, 533 (1983). Intervenors point to the Commission's description there of the emergency planning regulations as requirements for "'core planning with sufficient planning flexibility to develop a reasonable *ad hoc* response to those very serious low probability accidents that could affect the general public.'" Reply Brief at 5. All they seek, say Intervenors, is a chance to explore *whether* the "core planning" proposed by LILCO "is in fact 'sufficient' and has sufficient 'flexibility' to permit the 'develop[ment of] a reasonable *ad hoc* response.'" *Id.*

[9] The cases cited are *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), LBP-84-37, 20 NRC 933, 979-89 (1984), *aff'd*, ALAB-813, 22 NRC 59 (1985), and *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), LBP-85-14, 21 NRC 1219, 1236 (1985), *aff'd in relevant part*, ALAB-836, 23 NRC 479, 492-500, *Commission review declined*, July 24, 1986.

In our view, these cases provide only marginal support for Intervenors. In neither case was the propriety of admitting the contentions challenged before the Appeal Board. Moreover, the pertinent contention in *Limerick* was couched in the alternative, asserting that to prevent conditions outside and adjacent to the EPZ boundary from impeding evacuation from within the EPZ, it was necessary *either* to expand the EPZ or to provide additional traffic control outside the EPZ. In contrast, Contentions 22.B and 22.C assert that the only way to comply with the NRC's requirements is to expand the EPZ. Thus, *Limerick* does not directly support Intervenors' position.

challenge to the Commission's determination that a 10-mile EPZ in all cases *would* provide a substantial base for ad hoc expansion of any emergency response. Staff Brief at 12; LILCO Brief at 3-4. As to Contention 22.C, the Staff and LILCO make three main points: first, that the contention challenges the generic determinations in § 50.47; second, that the local conditions cited by Intervenors are not the type contemplated by the regulation; and third, that Intervenors' concerns were litigated before the Licensing Board in the context of other contentions.[10]

The Staff and LILCO contend that the rules contemplate clearly drawn EPZs, with minor deviations from the 10-mile radius where dictated by geographic factors. To support these propositions, the Staff further argues that the Commission decided in its 1980 rulemaking that:

> Predetermined protective actions are needed for EPZs; . . . it is those within this zone for whom predetermined protective actions are needed in order to prevent exposure to airborne radionuclides; such predetermined actions are not needed for those outside this zone.[11]

Further, LILCO notes the conclusion of the NUREG-0396 task force relied upon by the Commission in the rulemaking:

> "[I]t was the consensus of the Task Force that emergency plans could be based upon a generic distance out of 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. [Thus], the size of the EPZs 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."[12]

Thus, LILCO argues, while obviously there are both generic and site-specific components to § 50.47(c)(2), the site-specific component is merely a fine-tuning mechanism such that "it makes sense to depart from a perfect circle in order to run the boundary down a prominent highway so that people will know clearly where the boundary is, and . . . to avoid bisecting a discrete population." LILCO Reply Brief at 2.

To bolster the position that only geographical conditions were to be considered, and then lead to minor adjustments, if any, LILCO cites the NRC Staff's presentation to the Commission in 1980, where the Staff explained that the factors to be considered were " 'narrowed to a relatively small range,' " e.g., a

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[10] Intervenors note that the Appeal Board rejected this argument, and assert that the Commission "decided not to review" the Appeal Board ruling. Reply Brief at 11.

[11] Staff Brief at 15, *citing* 45 Fed. Reg. 55,406 (Aug. 19, 1980), and NRC Policy Statement on "Planning Basis for Responses to Nuclear Power Accidents," 44 Fed. Reg. 61,123 (Oct. 23, 1979).

[12] LILCO Brief at 12-13 n.17, *quoting* NUREG-0396 at 16, III-7, 8.

" 'major population center' crossing the 10-mile boundary and 'abnormal topographical situations, a very peculiar river valley.' " LILCO Brief at 5 n.6. Even in these "abnormal" situations, Staff's intent was to adjust EPZ boundaries " 'by small amounts.' " *Id.*

The Staff adds that "the cure for any EPZ-related problem arising from events taking place outside the EPZ is not to expand the zone, but to factor those matters into the planning for the protective actions to be taken for those within the 10-mile zone." *Id.* LILCO agrees, stating that the record shows that providing accurate, consistent information to the public will minimize spontaneous evacuation, and that this is the remedy contemplated by the regulations. LILCO Brief at 10, *citing Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-82-70, 16 NRC 756, 779 (1982).

Further, even if spontaneous evacuation is to be considered a local condition, they submit, it isn't the *type* of local condition that can cause adjustments in EPZ size, because the conditions contemplated in the regulation are those unique conditions existing around each plant, as opposed to those that might arise at the time of an accident at any plant. Staff Brief at 15-16; LILCO Brief at 12.

Continuing, they argue that Contention 22.C challenges the regulations in two ways. First, it posits nongeographic conditions, e.g., spontaneous evacuation and the utility-only nature of the response organization. Staff Brief, n.8; LILCO Brief at 4-5, 14. Second, the contention argues for more than minor adjustments to EPZ size based on these "conditions." Thus LILCO contrasts the 10-mile generic finding (in NUREG-0396 and in the Commission's 1980 preamble to the rule) with Contention 22.C's implicit call for a dramatic EPZ expansion, i.e., an expansion "to the west to encompass those persons who may be involved in protective actions" and to the east to include "East End residents" (which could include those 50 miles from the plant) who may have "the perception that they would be trapped if the wind blew to the east."

For such a challenge to the rules, Intervenors allegedly should have sought permission under § 2.758 to litigate the contention, something that was suggested to Intervenors early in the proceeding.

The Staff and LILCO also deny that there is any logical connection between plume EPZ size and the ability to deal with spontaneous evacuation. LILCO argues that "no matter where the boundary is drawn, there will always be people outside it who then become part of a new hypothesized 'shadow,' " a problem earlier recognized by a *TMI* Licensing Board. LILCO Brief at 10, *quoting Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), LBP-81-59, 14 NRC 1211, 1553 (1981). Thus, says LILCO, with the use of

Intervenors' theories to determine EPZ boundaries, "the EPZ spreads out like oil on water till it runs out of people." *Id.*[13]

Finally, LILCO and the Staff note that the Licensing Board specifically considered potential problems associated with spontaneous evacuation by those outside the EPZ, rejecting several Intervenor assertions:

- that spontaneous evacuation would prevent the evacuation of those inside the EPZ (Contentions 23.A-C);[14]
- that spontaneous evacuation of those outside the EPZ would significantly and adversely affect evacuation times from within the EPZ (Contentions 65, 23.D and 23.H);[15]
- that spontaneous evacuees from outside the EPZ might harm themselves by entering contaminated areas, and might impede evacuation from within the EPZ (Contention 23.H);[16] and
- that LILCO had drawn the EPZ boundary improperly such that it bisected discrete populations and jurisdictions (Contention 22.D).

LILCO Brief at 14.

C. Commission Decision

Resolution of this issue requires that we examine carefully the history of the EPZ concept. The EPZ concept in NRC's emergency planning regulations derives from the report of an NRC/EPA task force on emergency planning, NUREG-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 ("Report"). The Report's conclusions on EPZ size were based on analyses of both design-basis and serious Class 9

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[13] Aside from the lack of a local connection, says LILCO, Intervenors' proposal has two other important defects. First, it would force LILCO to use limited planning resources for people who generally will not need them. Second, it makes impossible the task of the planner trying to decide on EPZ boundaries:

> First, the Intervenors claim that the emergency planner must predict how much spontaneous evacuation (that is, how many people and how far away) there will be in an emergency of unknown nature sometime in the future. This task is impossible. (Intervenors would use public opinion polls for this purpose, but the record shows that opinion polls cannot predict actual emergency behavior.) . . . Even assuming the planner can predict the extent of spontaneous evacuation, he then has to have a criterion for where to draw the line. (Opinion polls, for example, will show fewer spontaneous evacuations as distance from the plant increases; at what point on this decreasing function does one end the EPZ?) There is no such criterion in NRC regulations or guidance. . . .

LILCO Brief at 11.

[14] *See* LILCO Answer at 3-4, *citing* PID I, 21 NRC at 804, 806-09 ("LILCO has given reasonable consideration to the possible impacts of shadow evacuation on evacuation traffic arising from within the EPZ," "excess evacuation poses no barrier to evacuation of all or part of the EPZ").

[15] Staff Brief at 14, *citing* 21 NRC at 801-09. *Cf.* LILCO Brief at 12 (*citing* Contention 65).

[16] The Board found that "those who evacuate unnecessarily because of fear of radiation would also have strong motivation not to enter the EPZ," and that LILCO's plans for EPZ perimeter control were reasonable. PID, 21 NRC at 804.

accident consequences using analytical techniques and information available at that time.[17]

For design-basis/loss-of-coolant accidents (DBA/LOCA), the Report concluded, among other things, that for most plants the 25-rem (thyroid) and 5-rem (whole-body) EPA protective action guides[18] 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 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. The Report further concluded 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 RSS. After reviewing the potential consequences associated with these types of accidents, it was the concensus [*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 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.

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[17] A Class 9 accident is an accident considered to be so low in probability as not to require specific additional provisions in the design of a reactor facility. Such accidents would involve sequences of successive failures more severe than those postulated for the purpose of establishing the design basis for protective systems and engineered safety features. (Class 9 event sequences include those leading to total core melt and consequent degradation of the containment boundary and those leading to gross fuel clad failure or partial melt with independent failures of the containment boundary). NUREG-0396 at 26.

[18] Protective action guides are units of radiation dose which, if projected to be received by an individual, would warrant protective action. *See Manual of Protective Action Guides and Protective Actions for Nuclear Incidents*, EPA-520/1-75-001 (September 1975).

A reading of the Report 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 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 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. In particular, the task force's analysis indicates that "adequate protective measures" in the context of emergency planning is not a precisely defined concept. Earlier in this proceeding we explained the concept of "adequate protective measures" in our emergency planning regulations in 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.

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.

Given these circumstances, 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. The Appeal Board has in effect also treated the rule as imposing a cutoff, which the Appeal Board places at somewhere more than 10 miles but certainly less than 20. The Appeal Board's approach is not much different from simply reading 50.47(b)(2) as requiring an EPZ "about 20 miles in radius" and then taking the position we adopt, i.e., refusing to accept contentions that would enlarge an EPZ that meets the criterion. But the rule says 10, not 20. The "outward creep" the Appeal Board would allow seems in the end to have no logical limits, as LILCO and the Staff argue.

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 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.[19]

II. HOSPITAL EVACUATION

A. Background

Two hospitals, and perhaps a third as well, are located within the Shoreham 10-mile EPZ. The LILCO plan lists several hospitals outside the EPZ to which

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[19] Under 10 C.F.R. § 2.758 the safety sufficiency of a 10-mile EPZ may still be challenged based on a showing that there are special circumstances for the particular site that were not considered in the emergency planning rulemaking. Intervenors, who are fully familiar with our rules in this regard, have chosen not to cast their contentions in the alternative as rule challenges under § 2.758. Over 4 years have now elapsed since the submission of emergency planning issues for litigation, and a recasting of Contentions 22.B and 22.C as rule challenges would be untimely in the extreme.

Nevertheless, whether there are special circumstances at Shoreham that were not envisioned in the rulemaking and that would make it inappropriate to apply the 10-mile EPZ rule to Shoreham can still be considered as part of the NRC Staff's review of uncontested issues. To be sure that no important safety issue has been overlooked in this case, we request NRC Staff to review this issue and to report to the Commission on it prior to any licensing above 5% power.

hospital evacuees might be sent. But the Licensing Board found that LILCO had not obtained letters of agreement with hospitals outside the EPZ concerning transfer of patients, had not provided for transportation for evacuation of EPZ hospital patients until individuals in other "special facilities" (e.g., nursing homes and nursery schools) were evacuated, had not calculated evacuation times for two of the three EPZ hospitals, and had not predetermined the circumstances under which EPZ hospital patients would be evacuated.

Nevertheless, the Licensing Board concluded that the LILCO plan was adequate. In the Board's view, arrangements for the relocation of patients to hospitals outside the EPZ could be made while the emergency was in progress. This was considered adequate because the hospitals are close to the outer edge of the EPZ, where the likelihood of receiving doses requiring evacuation is small, sheltering is the preferred emergency response in any event because of the risks attendant upon the movement of patients, and the EPZ hospitals were constructed so as to be particularly suitable for sheltering.

The Appeal Board reversed. It characterized the LILCO arrangements as ad hoc, and found that contrary to the regulations' requirement for EPZ evacuation time estimates, LILCO had not provided time estimates for each EPZ hospital. The Appeal Board also noted the Licensing Board's contrasting treatment of hospitals and nursing homes. While the Licensing Board found no deficiency in LILCO's failure to obtain agreements with hospitals for relocation of hospital patients, it found deficient LILCO's failure to sufficiently identify and to include letters of agreement with facilities outside the EPZ for accommodating EPZ nursing home residents. The Appeal Board was puzzled by the Licensing Board's contrasting treatment of these two areas.

In taking review, the Commission asked whether the regulations, including § 50.47(c)(1), "require evacuation plans for hospitals in the EPZ even though sheltering would be the preferred option in most circumstances."

B. Parties' Arguments Before the Commission

1. LILCO and Staff Arguments

LILCO argues before the Commission that NRC's emergency planning regulations do not require evacuation plans for hospitals. LILCO argues that the hallmark of the Commission's emergency planning requirements is flexibility, recognizing the appropriateness of different approaches at different sites and for different potential accident sequences. The key regulation, says LILCO, is 10 C.F.R. § 50.47(b)(10), which requires "[a] range of protective actions . . . for the plume exposure pathway EPZ . . . ." This range of protective actions, LILCO continues, in practice includes sheltering and evacuation.

While conceding that its plan doesn't have all of the detail contemplated by NUREG-0654, LILCO argues that the standards of NUREG-0654 do not constitute *requirements*, but rather are *suggestions*. LILCO then lists some of those NUREG-0654 "suggestions," e.g., that plans "shall include . . . means for protecting [hospital patients], . . . means of relocation, . . . time estimates for evacuation, . . . an estimate of the [hospital] population . . . [which] 'shall usually be done on an institution-by-institution basis, [and] the means of transportation . . . [for the hospital population].'" Brief at 19-20. LILCO concludes from these passages that "none of these provisions requires every licensee to maintain a detailed plan for both sheltering and evacuation of every facility and population group in the EPZ." LILCO finds support for its position in the EPA Manual of Protective Action Guides, which "expressly acknowledges the need in certain circumstances to apply different criteria in establishing appropriate protective action for special populations such as hospital patients." *Id.* at 20. Thus, LILCO concludes, "the regulations and guidance 'explicitly' allow different treatment for different groups such as hospital patients."

LILCO's next argument on the hospital evacuation issue, and the only argument offered by the Staff on this issue, is that even if the regulations generally require evacuation plans, the Shoreham plan is not *significantly* deficient in this regard, and thus, under § 50.47(c)(1), the Commission is not compelled to deny the issuance of a license. Both LILCO and the Staff support this argument by pointing to the Licensing Board's findings on the distance of the hospitals from the plant (over 9 miles), on the heavy masonry construction of the hospital buildings leading to 0.2 shielding factors (i.e., the dose inside the buildings would be 20% of the dose outside), on the danger of evacuation for patients, on the low probability of accidents that would require evacuation for those more than 9 miles from the plant, and on the existing arrangements for eventual evacuation of the hospitals.

Finally, LILCO argues, it has developed reasonable evacuation plans for the hospitals. Evacuation vehicles first would complete their nursing/adult home runs, and then report to hospitals on an "as needed" basis, as determined by hospital administrators upon balancing information including that on weather, projected doses, and the risk of transporting patients. Moreover, LILCO argues, the Appeal Board was mistaken that LILCO had not adequately calculated evacuation times for hospitals, since the Licensing Board specifically found that the hospitals could be evacuated within 9 hours.[20]

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[20] The Licensing Board found that:

> [A]mbulances would not completely evacuate the Suffolk County Infirmary until some 8 hours, 50 minutes after the initial notification. . . . The evacuation of hospitals *could well take similar amounts of time* at least with regard to ambulances. . . . [With regard to ambulettes], the hospitals are in a similar position [to the Suffolk County Infirmary, for which ambulette evacuation will take 4 hours, 40 minutes].

LBP-85-12, 21 NRC at 845-46 (emphasis added).

2. *Intervenor Arguments*

Intervenors argue that "LILCO's failure to plan for evacuation of hospital patients is total," with vehicle arrangements "expressly acknowledge[d]" in the plan as ad hoc, and provisions for evacuation only "if" vehicles become available." Brief at 15. These aspects of the plan allegedly violate the regulations and NUREG-0654 by failing, for example, to identify relocation centers for hospitals (an alleged violation of NUREG-0654 §§ II.A.3, J.10.d, and J.10.h), by failing to provide evacuation time estimates for each facility (an alleged violation of Appendix E to 10 C.F.R. Part 50), and by failing to plan routes or procedures for hospital evacuation (an alleged violation of both § 50.47(b)(10) and EPA Protective Action Guidelines).

Intervenors support the Appeal Board's view that the improbability of ever needing to use any given protective action is irrelevant under the NRC's emergency planning rules because those rules are based on an assumption that a serious accident might well occur. Brief at 19-20, *citing Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 713 (1985), *review declined*, CLI-86-5, 23 NRC 125 (1986). Moreover, Intervenors assert that LILCO's allegedly "complete failure" to plan for hospitals can never be viewed, using § 50.47(c)(1), as insignificant.[21]

C. Commission Decision

We agree with the Appeal Board's reasoning on this issue. Even though sheltering will quite likely be the preferred protective action for EPZ hospitals in the event of a serious accident, evacuation should not be prejudiced by the failure to plan in advance. Appendix E to 10 C.F.R. Part 50 requires evacuation time estimates for the EPZ without exceptions for special facilities such as hospitals. Clearly, evacuation plans for hospitals must at least be developed in sufficient detail to provide a basis for these estimates. Moreover, hospitals, as a kind of "special facility," are specifically mentioned in the principal guidance document in this field, NUREG-0654, and there is no suggestion in this guidance that hospitals are to be treated specially as exempt from the evacuation planning requirement that applies to other segments of the population within the EPZ.

We therefore conclude, in agreement with the Appeal Board, that the regulations require the Applicant to fulfill the same planning obligations with regard to hospital evacuation as the Licensing Board imposed in connection with other like segments of the EPZ, such as nursing/adult homes. This conclusion does not

[21] In response to LILCO's Brief, Intervenors claim that the Commission should disregard many of LILCO's arguments because they are outside the scope of the Commission's review questions, particularly insofar as LILCO attempts to show that there is adequate planning and preparedness for hospital evacuation.

necessarily end the inquiry as to whether LILCO's Emergency Plan is adequate with respect to these hospitals. Under § 50.47(c)(1), the Licensing Board could still approve the LILCO plan if it found that the deficiencies related to the hospitals were not significant for Shoreham. In fact, the Licensing Board did identify factors that may have relevance to this question, such as distance from the plant and construction characteristics of the hospitals. However, it is not clear to us that this was a matter adequately presented to or considered by the Licensing Board, since the Licensing Board did not specifically discuss § 50.47(c)(1). On remand, LILCO and Staff are free to raise the issue for appropriate resolution.

III. SUMMARY

In summary, we take two actions. First, we reverse the Appeal Board's decision in ALAB-832 insofar as it admits Contentions 22.B and 22.C for hearing. However, the NRC Staff is to advise us prior to issuance of any license for operation above 5% power whether there are special circumstances at Shoreham that were not envisioned in the emergency planning rulemaking, and that would make it inappropriate to apply to Shoreham the generic decision that an EPZ of about 10 miles is adequate for emergency planning purposes. Second, we uphold the Appeal Board's decision in ALAB-832 that the proceeding must be remanded to the Licensing Board for further consideration of the evacuation plans for hospitals in the EPZ.

It is so ORDERED.

For the Commission*

SAMUEL J. CHILK
Secretary of the Commission

Dated at Washington, D.C.,
this 5th day of November 1987.

[The appendix has been omitted from this publication but can be found in the Public Document Room, 1717 H Street, NW, Washington, DC 20555.]

*Commissioners Bernthal and Rogers were not present for the affirmation of this order. If they had been present they would have approved it.

Cite as 26 NRC 400 (1987) CLI-87-13

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Lando W. Zech, Jr., Chairman
Thomas M. Roberts
Frederick M. Bernthal
Kenneth M. Carr
Kenneth C. Rogers

In the Matter of

Docket Nos. 50-443-OL-1
50-444-OL-1
(Onsite Emergency Planning and Safety Issues)

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

November 25, 1987

The Commission lifts its stay on issuance of a low-power operating license for Seabrook in the event such a license is authorized and dismisses as unripe all other pending motions seeking to stay low-power operations. The Commission also denies a request for an evidentiary hearing on summary review of the sufficiency of the Applicants' utility plan.

EMERGENCY PLAN: UTILITY PLAN AS SUBSTITUTE

In requiring Applicants to submit their utility emergency plan for summary review, the Commission did not open the door to an evidentiary prehearing on emergency planning issues. On summary review the Commission intended that the plan need demonstrate only that adequate emergency planning was not foreclosed.

EMERGENCY PLAN: UTILITY PLAN AS SUBSTITUTE

The Commission refers to the standards for submittal of a utility emergency plan that were elaborated in CLI-87-3, 25 NRC 875 (1987) and reemphasizes that a utility plan must include measures to compensate for the absence of state and local governmental planning and that it necessarily must be a good-faith submittal.

EMERGENCY PLAN: LOW-POWER LICENSE

The Commission's rules provide that a full evidentiary hearing on the offsite emergency plan is available before full-power operations, but is not required before low-power operations. 10 C.F.R. § 50.47.

EMERGENCY PLAN: UTILITY PLAN AS SUBSTITUTE

On summary review, the Commission finds that the disputes about the adequacy of the Seabrook utility plan are, as was the case with Shoreham, litigation and political disputes. While the outcome of those disputes is uncertain, the Commission cannot conclude on the basis of the papers before it that they are categorically unresolvable.

EMERGENCY PLAN: LOW-POWER LICENSE (SUMMARY REVIEW OF UTILITY PLAN)

The Commission concludes that the other issues raised by Intervenors go beyond the summary review intended here. Those issues may be legitimate questions to be raised at the full-power hearings on the emergency plans.

EMERGENCY PLAN: LOW-POWER LICENSE (SUMMARY REVIEW OF UTILITY PLAN)

For its threshold determination, the Commission does not need certain information deleted by Applicants from the utility emergency plan. Deleted information that Staff and FEMA deem necessary for full-power review of the plan must be provided by the Licensees before low-power operation. Also, Applicants should state for the record their willingness to provide the detailed information to the other parties if necessary under appropriate protective orders.

EMERGENCY PLAN: LOW-POWER LICENSE (SUMMARY REVIEW OF UTILITY PLAN)

The Commission's decision to lift the stay on low-power operations is dictated by the Applicants' good-faith submittal of a utility emergency plan and in no way results from or depends on the recently published revision of the Commission's emergency planning regulations. 52 Fed. Reg. 42,078 (1987).

MEMORANDUM AND ORDER

(Lifting the Order Staying the Director of Nuclear Reactor Regulation from Authorizing Low-Power Operations Due to the Lack of an Emergency Plan for Massachusetts)

By this Memorandum and Order the Commission grants Applicants' September 21, 1987 motion to vacate the stay entered in the Commission's order of January 9, 1987 (unpublished). The January 9 order barred the Director of Nuclear Reactor Regulation from issuing a low-power license for Seabrook in the event issuance of such a license was otherwise authorized so that the Commission might consider whether, as a matter of law or policy, low-power operations should proceed absent the submittal of an emergency plan for that portion of the plume exposure emergency planning zone that lies within the Commonwealth of Massachusetts.[1]

This order lifting the stay does not itself authorize a low-power license for Seabrook, as we explain more fully below. Also, consistent with its instant decision, the Commission denies the remaining pending portion of the Request of Attorney General James M. Shannon, Seacoast Anti-Pollution League (SAPL), New England Coalition on Nuclear Pollution, and Town of Hampton for Briefing Schedule and Hearing on Applicants' Utility Plan, dated September 21, 1987, in which the named parties sought among other things an evidentiary hearing on the sufficiency of the Applicants' utility plan before low-power operations would be authorized for the Seabrook facility. Finally, the Commission dismisses as unripe all other motions seeking to stay low-power operations that are pending before it; these motions may be refiled should a low-power license be authorized in the future.

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[1] By subsequent orders the stay was continued in force until the Applicants shall have submitted a bona fide utility plan. *See* CLI-87-2, 25 NRC 267 (1987), and CLI-87-3, 25 NRC 875 (1987).

BACKGROUND

Both matters that we here address — the motion to vacate the stay and the request for an evidentiary hearing on summary review — arose from the Applicants' submittal, under cover of a letter dated September 18, 1987, of their utility emergency plan for Massachusetts. Such a plan for Seabrook had been required by the Commission as a matter of regulatory policy on April 9, 1987. CLI-87-2, 25 NRC at 270. In setting this requirement the Commission did not open the door to an evidentiary prehearing on emergency planning issues, but stated that on summary review the plan need demonstrate only that adequate emergency planning was not foreclosed, i.e., that it was "in the realm of the possible." On June 11, 1987, rejecting an earlier submittal by the Applicants, the Commission elaborated in CLI-87-3 on the standards for such a plan. The Commission emphasized that the plan must be a utility plan including measures to compensate for the absence of state and local governmental planning and that it necessarily must be a good-faith submittal.

EVIDENTIARY HEARING DENIED

As should have been clear from the Commission's order in CLI-87-2, all that the Commission intended need occur with respect to a utility plan submittal before low-power operations at Seabrook was summary review. The Commission's policy decision to require submittal of a bona fide plan before low-power operations was not intended to effect an exception to the Commission's rules which provide that a full evidentiary hearing on the offsite emergency plan is available before full-power operations, but is not required before low power. 10 C.F.R. § 50.47. Accordingly, the motion for a hearing is denied.[2]

VACATION OF STAY

On review of the positions of the parties[3] on both the sufficiency of the submittal and the motion to vacate the stay and on its own review of the Applicants' utility plan, the Commission accepts and agrees in essential respects with the analysis of the NRC Staff which supports the motion to vacate the stay. The Staff's analysis closely followed the Commission's guidance in CLI-87-3 and, based on the recitations in its affidavit describing its summary review, concludes that the Applicants' utility plan appears to constitute a bona fide utility

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[2] Also denied are the various repetitions of this request incorporated by the parties into other legal papers.

[3] The Commission grants the motions to permit late filing by the Town of Newbury and SAPL, which were unopposed.

plan for those portions of the emergency planning zone that are located in the Commonwealth of Massachusetts. *See* NRC Staff's Response to Applicants' Motion for Vacation of Stay, Oct. 20, 1987.

As the Staff stated, the utility plan addresses the sixteen planning standards by which emergency plans are judged (*see* 10 C.F.R. § 50.47(b) and NUREG-0654); has compensating measures for the lack of state and local government participation; has been submitted to the Federal Emergency Management Agency (FEMA) and the NRC for review; and appears to be intended for implementation. Staff's Response at 7-11.

Our summary review of the utility plan, and the record before us, convinces us that adequate emergency planning for the Massachusetts portion of the emergency planning zone is "in the realm of the possible" or, stated conversely, we are satisfied that the Massachusetts emergency planning issues are not "categorically unresolvable." CLI-87-2, 25 NRC at 270. In CLI-87-2, the Commission, after analyzing its prior decision in *Shoreham*, CLI-83-17, 17 NRC 1032 (1983), and the decision in *Cuomo v. NRC*, 772 F.2d 972 (D.C. Cir. 1983) dismissed as moot (March 12, 1987), contrasted the situation where emergency planning issues are "categorically unresolvable" with more typical situations where there are litigation and political disputes about emergency planning whose outcome is speculative. As we said in the decision,

> [T]he disputes that fueled the controversy in *Shoreham* were, by their nature, litigation and political disputes. And, as noted by the U.S. Court of Appeals for the District of Columbia Circuit, we observed in regard to Shoreham, "the outcome of litigation and political conflicts frequently surrounding the grant of a final license is particularly speculative." *Cuomo v. NRC*, 772 F.2d 972, 976 (D.C. Cir. 1985). The emergency planning uncertainty at Shoreham could have changed favorably or adversely at any time as viewpoints changed or as accommodations were reached. This is characteristic of many matters in litigation, and the Commission properly declined to regard the existence of such litigation as a factor precluding issuance of a low-power license.

CLI-87-2, 25 NRC at 270. We find here that the disputes about the adequacy of the Seabrook utility plan are, as was the case with Shoreham, litigation and political disputes. While the outcome of those disputes is uncertain, we cannot conclude on the basis of the papers now before us that they are categorically unresolvable. We necessarily find, therefore, that adequate emergency planning for the Massachusetts portion of the emergency planning zone is within the realm of the possible. Because the policy concerns that caused us to impose our stay have now been satisfied, that stay is hereby vacated.

The various Intervenors in this proceeding have raised a number of issues in their responses that we do not here address in detail. Those issues may turn out to be legitimate questions for the full-power hearings on the emergency plans, and as such they will be addressed in the first instance by the Atomic Safety and

Licensing Board. Suffice it for now for us to find that the issues raised reach a level of detailed review that goes beyond the inquiry that we intended as a condition for lifting the stay of low-power operation.

This is not to say that the Commission is unconcerned about the extent of the deletions of information from the plan. While the Commission can well understand why the Applicants might wish to withhold individuals' names and phone numbers, given the emotionally charged atmosphere that surrounds this particular plant, that concern must eventually give way to the needs of the Staff and FEMA to review the emergency plans. However, the Commission does not believe that it needs to have that information in its possession to satisfy itself that the utility plan satisfies the policy concerns that we set out in CLI-87-3. Those concerns have been satisfied for the reasons set forth in this order. We find that the plan is bona fide and in the realm of the possible. That decision does not require us to evaluate every detail of the proposed plan. Such an evaluation will be made in the full-power proceedings. Nevertheless, as a condition of low-power operation, the Licensees must provide to the Staff and FEMA any of the deleted information that the Staff and FEMA deem necessary for the detailed full-power review of the emergency plan. Until such information is provided, no low-power license shall issue. Also prior to low power, Applicants should clearly state for the record their willingness to provide the detailed information to the other parties to the proceeding, if necessary under appropriate protective orders from the Licensing Board. The Commission is confident that the Licensing Board can fashion appropriate orders and procedures to allow full litigation of contested issues without unnecessarily violating personal privacy.

POSTURE OF THE PROCEEDING

As the parties are aware, the Appeal Board's October 1, 1987 decision on review of the Licensing Board's March 25, 1987 partial initial decision authorizing low-power operations[4] may have disturbed the legal footing of authorization for low-power operations. As directed by the Appeal Board,[5] the Licensing Board shall expeditiously determine whether considering the issues that it is hearing on remand, it is appropriate to renew at this time its authorization of low power or whether low-power operations must await further decisions. The Appeal Board shall also consider whether any matter of which it has jurisdiction should be resolved before low power.[6] The Commission ratifies the Appeal Board's order that any decision by the Licensing Board *prior to*

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[4] *See* ALAB-875, 26 NRC 251 (1987), *aff'g in part and remanding in part*, LBP-87-10, 25 NRC 177 (1987).

[5] *See* ALAB-875, 26 NRC at 276.

[6] The Commission here notes that it appears that certain issues relating to Newburyport sirens and the environmental qualification of coaxial cable may be before the Appeal Board.

completion of the remand, if it authorizes low power, shall not become effective for a period of 10 days following the date of its service to enable any dissatisfied party to seek agency appellate relief.

Consonant with the foregoing discussion, the Commission lifts its stay of low-power operations. The conditions regarding the providing of emergency planning information to FEMA, NRC Staff, and the parties must be satisfied before any low-power license can be authorized. Moreover, because no order currently in force authorizes low-power operations at Seabrook and because the voluminous motions and related papers before us are in some respects outdated, the motions and supplemental motions seeking a Commission stay of such operations are dismissed. Should low power be authorized in the future, opposing parties are free to file updated stay motions.

We wish to emphasize that our decision today is dictated by the fact that the Applicants have made a good-faith submittal of a utility emergency plan. Our decision in no way results from or depends on the recently published revision of the Commission's emergency planning regulations. 52 Fed. Reg. 42,078 (Nov. 3, 1987; effective date Dec. 3, 1987). Our decision would be the same whether the old or the new supplemental emergency planning rules applied.

Commissioner Rogers disapproved in part, and his additional views are attached.

It is so ORDERED.

For the Commission

SAMUEL J. CHILK
Secretary of the Commission

Dated at Washington, D.C.,
this 25th day of November 1987.

ADDITIONAL VIEWS OF COMMISSIONER ROGERS

The majority has indicated that it requires the submission of information deleted in the utility plan to the Staff and FEMA, and under protective order to the other parties prior to the issuance of any low-power license.

I am of the opinion that the information withheld from the plan should be furnished to the Commission prior to the lifting of the stay, so that we can assure ourselves that the utility plan does indeed satisfy the policy concerns set out in CLI-87-3.

Atomic Safety and Licensing Appeal Boards Issuances

ATOMIC SAFETY AND LICENSING APPEAL PANEL

Alan S. Rosenthal, Chairman
Dr. W. Reed Johnson
Thomas S. Moore
Christine N. Kohl
Howard A. Wilber

APPEAL BOARDS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

Alan S. Rosenthal, Chairman
Dr. W. Reed Johnson
Howard A. Wilber

In the Matter of

Docket Nos. 50-250-OLA-1
50-251-OLA-1
(Vessel Flux Reduction)

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

November 4, 1987

The Appeal Board in this operating license amendment proceeding affirms, on sua sponte review, the licensing board's order (LBP-87-21, 25 NRC 958 (1987)) granting the applicant's motion to relinquish jurisdiction and terminate the proceeding.

TECHNICAL ISSUE DISCUSSED

Acceptance criteria for the capability of the emergency core cooling system in response to a loss-of-coolant accident.

MEMORANDUM AND ORDER

1. This is a proceeding on the application of the Florida Power & Light Company for amendments to the operating licenses for Units 3 and 4 of its

Turkey Point nuclear power facility. In ALAB-846,[1] we affirmed on sua sponte review the Licensing Board's resolution in the applicant's favor of Contention (d), submitted by joint intervenors Center for Nuclear Responsibility and Joette Lorion.[2] We did not pass upon, however, the Board's earlier grant of the applicant's motion for summary disposition of Contention (b),[3] the only other contention of the joint intervenors that was admitted for litigation. As we explained, in the same decision in which it acted upon Contention (d) the Board announced its intention to retain jurisdiction over Contention (b) pending the receipt of further information from the NRC staff.[4] In that circumstance, it appeared appropriate to withhold appellate review in connection with Contention (b) to abide the event of the final action taken on it below.[5]

On June 23, 1987, having received the desired information from the staff and concluded that there was no reason to withdraw the prior summary disposition of Contention (b), the Licensing Board granted the applicant's motion to relinquish jurisdiction and to terminate the proceeding.[6] No appeal having been taken from that action, it now is before us for sua sponte review.

2. The requested license amendments were directed to the facility's technical specifications concerned with the limits on the temperature of the fuel assemblies in the reactor core. The applicant desired the revision of those technical specifications to accomplish two objectives: (1) the reduction of the neutron flux at the reactor pressure vessel wall, which in turn would mitigate vessel embrittlement and therefore the consequences of pressurized thermal shock; and (2) the removal of restrictions on facility operation that had been imposed prior to the time at which the applicant replaced the facility's steam generators, which had a significant number of plugged tubes.[7]

One of the acceptance criteria for facility emergency core cooling systems stipulates that, in the event of a loss-of-coolant accident, the "calculated maximum fuel element cladding temperature shall not exceed 2200°F."[8] To establish that the proposed amendments were consistent with the observance of that criterion, the applicant employed a computer model for the purpose of predicting the peak cladding temperature on the fuel rods.[9] In Contention (b), the intervenors

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[1] 24 NRC 459 (1986).

[2] *See* LBP-86-23, 24 NRC 108 (1986).

[3] *See* LBP-85-29, 22 NRC 300, 310-20 (1985).

[4] *See* LBP-86-23, 24 NRC at 129-30. Inasmuch as the grant of summary disposition on Contention (b) had been interlocutory, the Licensing Board remained empowered to retain jurisdiction over the contention at the time it issued LBP-86-23.

[5] *See* ALAB-846, 24 NRC at 411 n.6.

[6] *See* LBP-87-21, 25 NRC 958.

[7] Although prompted by the number of plugged tubes in the former steam generators, the restrictions apparently were not automatically lifted when those generators were replaced.

[8] 10 C.F.R. 50.46(b)(1).

[9] The peak cladding temperature is the highest temperature to be found on the surface of any of the fuel rods in the reactor core.

questioned whether the chosen computer model would provide a sufficiently precise prediction to ensure that the 2200°F limit would not be exceeded.

In granting the applicant's motion for summary disposition of the contention, the Licensing Board determined that the intervenors had not raised a genuine issue of material fact respecting the adequacy of the computer model.[10] Thereafter, however, the staff informed the Board that that model required additions and corrections.[11] The staff went on to state that it expected that, after the necessary adjustments were made, the computer model would still support the conclusion that the 2200°F limit would not be exceeded.[12] Nevertheless, the staff felt it necessary to consider taking some unspecified action with respect to the interim and continued operation of facilities such as Turkey Point.[13]

As above noted, this development induced the Licensing Board to retain jurisdiction over Contention (b) to await further word from the staff. That word came in the form of a Board Notification issued on October 23, 1986.[14] The Board was told that the required changes in the computer model had not resulted in a calculated cladding temperature in excess of the 2200°F limit.[15]

We have examined the explanation given by the Board for its acceptance of the staff's present conclusion on the matter.[16] That examination satisfies us that the explanation is not flawed and provides a sufficient basis for the Board's adherence to its previous grant of summary disposition of Contention (b).

The Licensing Board's June 23, 1987 memorandum and order terminating this proceeding is *affirmed*.

It is so ORDERED.

FOR THE APPEAL BOARD

C. Jean Shoemaker
Secretary to the
Appeal Board

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[10] *See* LBP-85-29, 22 NRC at 316.
[11] *See* LBP-86-23, 24 NRC at 130.
[12] *Ibid.*
[13] *Ibid.*
[14] *See* LBP-87-21, 25 NRC at 959.
[15] *Id.* at 961.
[16] *Id.* at 960-64.

Cite as 26 NRC 410 (1987) ALAB-879

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Administrative Judges:

Alan S. Rosenthal, Chairman
Howard A. Wilber

In the Matter of

Docket Nos. 50-443-OL-1
50-444-OL-1
(Onsite Emergency Planning and Safety Issues)

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

November 20, 1987

The Appeal Board in the onsite emergency planning and safety phase of this operating license proceeding affirms the Licensing Board's rejection of the intervenors' motions to reopen the record and to admit two late-filed contentions concerning the adequacy of two siren systems designed to provide offsite public notification of a radiological emergency at the Seabrook site.

EMERGENCY PLAN: NOTIFICATION REQUIREMENTS

The Commission's regulations require emergency response plans to include, *inter alia*, a means to provide early notification and clear instructions to the populace within the plume exposure pathway emergency planning zone. 10 C.F.R. 50.47(b)(5).

RULES OF PRACTICE: REOPENING OF RECORD (SIGNIFICANT SAFETY ISSUE)

To prevail on a motion to reopen a record, a movant must show, *inter alia*, that a significant safety issue is involved. 10 C.F.R. 2.734(a)(2). A contention that raises an entirely new issue and is filed after the record has been closed can be accepted for litigation only if it *both* (1) meets the reopening criteria set forth in 10 C.F.R. 2.734(a) and (2) survives a balancing of the five factors that, by virtue of 10 C.F.R. 2.714(a)(1), control the admission of any late-filed contention.

RULES OF PRACTICE: REOPENING OF RECORD (SATISFACTION OF REQUIREMENTS; BURDEN ON MOVANT)

The movant has the burden to establish, prior to reopening the record, that the standards for reopening are met. The movant is not entitled to engage in discovery in an effort to produce evidence that will support a motion to reopen. Rather, the issue in each case is whether the available information meets the standards for reopening, i.e., timely raises a significant safety issue which might have affected a licensing board's decision, such that the record should be reopened and discovery initiated. *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit No. 1), CLI-85-7, 21 NRC 1104, 1106 (1985).

TECHNICAL ISSUES DISCUSSED

Emergency notification sirens;
Siren testing;
Siren sound pressure level criteria;
Ambient background sound pressure level measurements;
Octave band.

APPEARANCES

Allan R. Fierce, Boston, Massachusetts, for the intervenor James M. Shannon, Attorney General of Massachusetts.

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

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

Edwin J. Reis and **Gregory Alan Berry** for the Nuclear Regulatory Commission staff.

DECISION

The Commission's regulations require radiological emergency response planning to include, *inter alia*, means "to provide early notification and clear instruction to the populace within the plume exposure pathway emergency planning zone [EPZ]."[1] In the case of the Seabrook nuclear power facility, this requirement is being met in large measure by the installation of sirens in both the New Hampshire and the Massachusetts portions of the EPZ.

In ALAB-875,[2] we determined all but two of the questions that were raised on the intervenors' appeals from the Licensing Board's March 25, 1987 partial initial decision in the onsite emergency planning and safety issues phase of the proceeding on the Seabrook operating license application.[3] The questions retained for later disposition concerned the correctness of the Board's rejection in separate interlocutory orders of two contentions, filed after that phase of the evidentiary record had closed, that focused upon the adequacy of the sound levels of the sirens installed in East Kingston, New Hampshire, and Merrimac, Massachusetts.[4] In each instance, one assigned basis for the rejection was the Board's belief that the proponent of the contention had failed to show in the accompanying motion to reopen the record, as required by the Commission's Rules of Practice, that a significant safety issue was involved.[5]

For reasons alluded to in ALAB-875,[6] we thought it might prove possible to resolve the crucial differences among the parties on the siren matters without

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[1] 10 C.F.R. 50.47(b)(5).

[2] 26 NRC 251 (1987).

[3] *See* LBP-87-10, 25 NRC 177.

[4] *See* Licensing Board Memoranda and Orders (March 23 and 25, 1987) (unpublished). The East Kingston contention was sponsored by the intervenor Seacoast Anti-Pollution League and the Merrimac contention by the intervenor Attorney General of Massachusetts.

There is no dispute among the parties that those contentions had to be advanced in the onsite emergency planning phase of the proceeding. Even though the sirens are designed to provide offsite public notification of a radiological emergency, the Commission deems the arrangements for such notification to be within the ambit of onsite emergency planning. *See* Statement of Consideration accompanying 10 C.F.R. 50.47(d), 47 Fed. Reg. 30,232, 30,234 (1982).

[5] Such a showing (among others) is an absolute condition precedent to the reopening of a closed record. *See* 10 C.F.R. 2.734(a)(2).

[6] *See* 26 NRC at 273-75.

the necessity of deciding whether, as a matter of law, the contentions in question were improperly rejected at the threshold.[7] Because the exploration of that possibility was still in progress at the time our review of all of the other appellate issues had reached fruition, we concluded that the appropriate course was to render our decision on those issues without additional delay and to reserve jurisdiction over the siren questions pending our further order.[8]

As will be seen, our endeavor to obtain a settlement of the siren questions was not entirely successful. We thus have had to confront the challenges to the rejection of the East Kingston and Merrimac contentions. For the reasons set forth below, we conclude that they are without merit. More specifically, irrespective of whether consideration is given to information presented to us that was not before the Licensing Board, we are satisfied that the contentions do not raise safety questions of sufficient gravity to justify the reopening of a closed record to accommodate them.

A. East Kingston

As observed in ALAB-875, the controversy involving the adequacy of the four East Kingston sirens had its genesis in a test of those sirens performed last January.[9] According to an affidavit supplied by the Seacoast Anti-Pollution League (SAPL) in support of its motion to reopen the record to permit the admission of a contention directed to the applicants' siren system, the test brought to light a number of deficiencies.[10] Specifically, one or more of the sirens did not function at all during some phases of the test. And the functioning sirens assertedly did not uniformly fulfill their intended objective.

In addition to pointing to this development as demonstrating the shortcomings of the siren system, SAPL called attention to a January 1987 decision of the Rockingham County, New Hampshire Superior Court in a suit instituted by the Town of Rye, New Hampshire, against the lead applicant Public Service

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[7] In this connection, a contention that raises an entirely new issue and is filed after the record has been closed can be accepted for litigation only if it *both* (1) meets the reopening criteria set forth in 10 C.F.R. 2.734(a) and (2) survives a balancing of the five factors that, by virtue of 10 C.F.R. 2.714(a)(1), control the admission of any late-filed contention. With regard to the East Kingston contention, the Licensing Board discussed the section 2.714(a)(1) factors but, given its conclusion that not all of the reopening criteria were met, did not undertake to balance those factors. *See* March 23, 1987 Memorandum and Order. The Merrimac contention was rejected, however, on the basis of both the reopening criteria and a balancing of the section 2.714(a)(1) factors. *See* March 25, 1987 Memorandum and Order.

[8] *See* ALAB-875, 26 NRC at 275.

[9] *Id.* at 274.

[10] *See* Seacoast Anti-Pollution League's Contention and Motion to Admit Late-Filed Contention, Reopen the Record on On-Site Emergency Planning, and Condition the Issuance of a License Up to 5% of Rated Power on Applicants' Compliance with 10 C.F.R. § 50.47(b)(5) (February 6, 1987) [hereinafter SAPL's Contention and Motion], Affidavit of Frederick H. Anderson, Jr.

Company of New Hampshire.[11] In that decision, the court concluded that New Hampshire statutory law precluded the grant of licenses to the applicants to erect poles on state or town-maintained highways for purposes related solely to the siren system. On the strength of that conclusion, the court declared "null and void" all such licenses issued by either Rye or a New Hampshire state agency in connection with highways located in that municipality and nearby Hampton Falls (which had intervened in the litigation).[12] This declaration in turn led to an order directing the applicants to remove the poles erected under the aegis of those licenses.[13]

In its March 23 memorandum and order, the Licensing Board determined that neither the siren test nor the judicial decision gave rise to a significant safety issue.[14] With respect to the test, the Board relied on an NRC staff affidavit to the effect that it was not a reliable indicator of the capabilities of the sirens.[15] This was because (1) the proper procedures were not followed by the East Kingston officials in conducting the test, and (2) a buildup of ice and snow had adversely affected the operation of the sirens.[16] On the latter score, the affidavit noted that measures would be taken to avoid a repetition of such a buildup: e.g., an anti-icing agent would be applied to the sirens, which also would be reoriented to point in a southerly direction.[17]

Turning to the judicial decision, the Board observed that it had been appealed to the New Hampshire Supreme Court and, accordingly, had not taken effect.[18] Consequently, the Board reasoned, the decision lacked current safety significance. The Board added that, were the sirens to be subsequently removed on the strength of an affirmance of the decision, the Commission's regulations would bar reactor operation in the absence of alternative measures to provide the requisite reasonable assurance that the public health and safety would be protected in the event of an accident.[19]

In coming to grips with SAPL's challenge to the denial of its motion to reopen the record, we encounter no difficulty in agreeing with the Licensing Board that the concern engendered by the Superior Court's ruling is premature. SAPL does not dispute that the siren poles have not been removed and will continue to remain in place at least until the outcome of the pending appeal to the state

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[11] *See Town of Rye v. Public Service Co. of N.H.*, No. 86-E-34 (N.H. Super. Ct., Rockingham County, Jan. 22, 1987), attached to SAPL's Contention and Motion.
[12] *Id.* at 4.
[13] *Id.* at 6-7.
[14] *See* Memorandum and Order at 7-9.
[15] *See* NRC Staff Response to SAPL's Late-Filed Contention and Motion to Reopen the Record (February 26, 1987), Affidavit of William J. Lazarus.
[16] *Id.*, Affidavit at 2-4
[17] *Id.*, Affidavit at 4-5.
[18] *See* March 23, 1987 Memorandum and Order at 9.
[19] *Ibid.*

Supreme Court. That appeal was argued on October 7 and will be decided at some currently uncertain date.[20] We need not speculate on what the state Supreme Court is likely to determine on the pivotal issue of New Hampshire law -- a course fraught with considerable peril in any event. If the court overturns the result below, that will likely be the end of the matter. On the other hand, if the directive to remove the poles in question is affirmed, the applicants obviously will have to substitute for the sirens some other mechanism that will satisfy the regulatory requirement regarding "early notification and clear instruction to the populace within the" EPZ.[21] If SAPL believes that the substitute proposed by the applicants is insufficient to meet that requirement, it will have means at its disposal to put that belief before the Commission.[22]

On the matter of SAPL's concerns stemming from the January test of the East Kingston sirens, none of the interested parties disagreed with our suggestion at oral argument that the sensible course was to undertake another test during the coming winter.[23] Accordingly, as noted in ALAB-875, in a July 30, 1987 memorandum and order (unpublished) we directed those parties to endeavor to come to an agreement among themselves with regard to the "test procedures that should be utilized and the appropriate climatic conditions for the conduct of the test."[24] That endeavor proved only partially fruitful. In the staff's report on the outcome of the discussions in which it, SAPL, and the applicants took part, the staff advised us that agreement had been reached on all but three subjects.[25] In SAPL's view, contrary to that of the applicants and staff, the test should (1) include all sirens in the New Hampshire EPZ, rather than just those in East Kingston; (2) embrace the public address (and not merely the tone alert) function of those sirens located in the beach areas; and (3) be scheduled not more than five days in advance.[26]

It is manifest from the text of our July 30 memorandum and order that we had in mind a new test of the East Kingston sirens alone. The reason is readily apparent. Once again, the sole basis assigned for the claim of siren system inadequacy advanced in the SAPL contention was the outcome of the test of those sirens. And at no time during the course of the consideration of the contention either by the Licensing Board or by us has SAPL provided any information that might suggest an infirmity in the sirens located elsewhere in the EPZ. That being so, SAPL is scarcely in a position to insist that, as part of any

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[20] *See* Applicant's Response to Appeal Board Order of October 13, 1987: Supplemental Memorandum (October 30, 1987).

[21] *See supra* p. 412.

[22] *See, e.g.*, 10 C.F.R. 2.206.

[23] *See, e.g.*, App. Tr. 63-64, 116-18.

[24] 26 NRC at 274.

[25] *See* letter from Edwin J. Reis to the members of this Board (September 11, 1987).

[26] *Id.* at 2. *See also* Seacoast Anti-Pollution League's Memorandum Regarding Test of East Kingston Sirens (October 1, 1987).

settlement of the controversy surrounding the rejection of the SAPL contention, the test be extended to sirens beyond East Kingston. The same is true with respect to SAPL's argument that the test should encompass the public address function of the sirens in beach areas. East Kingston does not include beach areas and, therefore, its sirens will not be relied upon during a Seabrook emergency for public address functions.[27]

Thus, the first two points of disagreement must be resolved in favor of the applicants and staff. This does not mean, of course, that the sirens in other portions of the EPZ (both in New Hampshire and Massachusetts) will go untested. As the staff has informed us without contradiction, the Federal Emergency Management Agency (FEMA) has assumed by regulation the responsibility of determining the adequacy of the applicants' siren system as part of its review of the overall offsite emergency preparedness program for the facility.[28] It is inconceivable that FEMA would undertake to make a determination in that regard without an appropriate test of the sirens that are to serve as part of the emergency response effort.

That leaves for consideration SAPL's objection to the applicants' proposal that a specific date for the East Kingston siren test be set well in advance — indeed, in September the applicants and the staff settled upon January 30, 1988.[29] We think that there is substance to the objection. There is obviously no way of now forecasting with any degree of confidence the weather conditions that are likely to prevail several months hence. For all that was known when January 30 was selected, or is now known, on that date New Hampshire might be enjoying a spell of unseasonably temperate weather. If so, the test would scarcely serve its intended purpose (among others) of ascertaining how the sirens function in the more severe climatic conditions that customarily attend upon Northern New England winters.

In this connection, we are unpersuaded that, as the applicants maintain, it would not be possible to mobilize in the space of several days the personnel involved in the siren test and to provide adequate prior notice to the public.[30] After all, there are only four sirens to be tested in a relatively small community, with the consequence that a very limited number of observers and other participants will be required.[31] And while it may be true that, as both the applicants and staff stress, one cannot predict weather conditions with absolute

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[27] *See* NRC Staff's Response to Appeal Board Order of September 17, 1987 (September 25, 1987) at 2-3; Applicants' Memorandum Regarding Test of East Kingston Sirens (September 30, 1987) at 2.

[28] *See* NRC Staff Supplemental Response to Appeal Board Order of September 17, 1987 Regarding East Kingston Sirens (October 6, 1987) at 3 n.3; 44 C.F.R. 350.3(e). *See also Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1104-05 & n.45 (1983).

[29] *See* NRC Staff's Response to Appeal Board Order of September 17, 1987, at 3-4; Applicants' Memorandum Regarding Test of East Kingston Sirens at 1-2.

[30] *See* Applicants' Memorandum Regarding Test of East Kingston Sirens at 2-3.

[31] *See* letter of Edwin J. Reis, Attachment (Siren Activation Test Procedure — East Kingston) at 4, 6.

accuracy even four or five days in advance, it cannot be gainsaid that a prediction in that time frame is likely to be much closer to the mark than a conjecture in September regarding what the weather will be like on a particular day in late January.

Notwithstanding these considerations, we cannot conclude that the action of the applicants and staff in already determining the date for the test gives rise to a significant safety issue requiring the reopening of the record to entertain the SAPL contention. This being so, we lack the legal predicate for ordering the applicants and the staff to reconsider what appears to us to have been a premature selection of a test date. The most that we can do is to urge such reconsideration in the interest of increasing the likelihood (albeit not providing any assurance) that the test will prove to be a reliable indicator of the ability of the sirens to operate in inclement weather. In this regard, we think there is much to be said for the counterproposal that SAPL placed on the table during the settlement discussions mandated by our July 30 order. Underlying that proposal are the dual considerations that the test should take place in January or early February and, in accordance with East Kingston's desire, on a Saturday. SAPL would have it that, if on a particular Monday during that period the five-day weather forecast called for the appropriate inclement conditions at the end of the week, the test be then scheduled for the following Saturday. Should this procedure not lead to the scheduling of a test for some Saturday prior to February 13, the test would be set for that date irrespective of predicted weather conditions.[32]

B. Merrimac

The Attorney General's concerns respecting the adequacy of the sirens serving the Town of Merrimac rest on a quite different footing. Specifically, through his late contention, the Attorney General seeks to litigate whether the sound pressure produced by those sirens will satisfy the acceptability standard established by the NRC and FEMA jointly.[33] For lightly populated areas such as

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[32] *See* letter of Edwin J. Reis at 2.

Having advised the staff that his client would abide by any agreement entered into by SAPL on the subject, counsel for the Attorney General did not participate in the settlement discussions pertaining to the test of the East Kingston sirens. *See* ALAB-875, 26 NRC at 275 n.100. Nonetheless, through new counsel, the Attorney General later interposed objections to the proposed test procedures that had not been advanced by SAPL. *Ibid.* Even though not required to do so in the circumstances, we have examined those objections (as well as the Attorney General's comments on SAPL's concerns). Only one of the Attorney General's points appears to have some substance: there may well be justification for assigning additional observers to certain areas where the siren coverage might be insufficient. But that consideration similarly does not warrant a reopening of the record to accept the SAPL contention. Moreover, we see no reason why the Attorney General himself could not arrange for the additional observers thought to be necessary.

[33] *See* NUREG-0654/FEMA-REP-1 (Revision 1), "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980) [hereinafter NUREG-0654], Appendix 3 at 3-10 to 3-11; FEMA-REP-10, "Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants" (November 1985) [hereinafter FEMA-REP-10] at E-8.

Merrimac, that standard can be met in one of two ways. The utility may show that, throughout the area they are called upon to cover, the sirens will provide (either individually or collectively) a sound pressure level of at least 60 decibels C (dBC).[34] Alternatively, the utility may demonstrate that, even though less than 60 dBC, the expected sound pressure level will exceed the average measured daytime ambient (background) sound pressure levels by, preferably, at least 10 decibels (dB).[35]

It is not disputed that, in certain portions of the territory covered by them, the Merrimac sirens fall short of meeting the 60 dBC coverage criterion.[36] Therefore, to comply with the NRC/FEMA standard, in those areas the sirens must meet the alternative criterion.

In determining that the Attorney General had not established that a significant safety issue existed regarding the adequacy of the Merrimac sirens, the Licensing Board relied on the results of a March 10, 1987 set of measurements of the ambient sound pressure levels, which the applicants had commissioned.[37] Taken in conjunction with the assumption (not challenged by the Attorney General) that the siren coverage was at least 50 dBC, those results reflected the existence of the 10 dB differential.[38]

In performing these measurements, the applicants' consultant had utilized a one-third octave band; i.e., it had collected sound coming within that frequency range.[39] For his part, the Attorney General was of the opinion that a full octave band should have been employed by the applicants' consultant. Acting on that opinion, the Attorney General had provided the Board with the results of measurements taken by his consultant that took account of the sound falling within that broader range.[40] Those results suggested that, assuming siren coverage of exactly 50 dBC, in some areas the differential between ambient and siren sound pressure levels was less than 10 dB.[41] The Licensing Board declined, however,

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[34] The pressure level of sound is measured relative to a small reference pressure and is reported in units called decibels (dB). These measurements can be weighted by different filter circuits in the measuring equipment. One such measurement is weighted by so-called "filter C" and is referred to as decibels C, or dBC. *See Mechanical Engineer's Reference Book*, at 15-19 to 15-21 (A. Parrish, 11th ed. 1973).

As will be seen, the record in this case reflects that the pressure level of ambient sound was expressed in terms of "dB" while the sound pressure level of sirens was expressed in terms of "dBC." No party has suggested that the difference in usage is significant here.

[35] The NRC/FEMA guidance refers to the 10 dB differential as a "target" in the design of the siren system. *See* NUREG-0654, Appendix 3 at 3-8.

[36] *See, e.g.*, Applicants' Response to "Contention of Attorney General Francis X. Bellotti and Motion to Admit Late-Filed Contention . . ." and Alternative Motion for Summary Disposition (January 22, 1987), Affidavit of James A. MacDonald, Attachment (letter of Robert S. Berens to James A. MacDonald (July 7, 1986)).

[37] *See* March 25, 1987 Memorandum and Order at 5-6, 14.

[38] *See* Applicants' Answer to Motion of Attorney General James M. Shannon to Reconsider Late-Filed Contention with Revised Basis and to Reopen the Record (March 13, 1987), Affidavit of Anthony M. Callendrello.

[39] *Ibid.*

[40] *See* Motion of Attorney General James M. Shannon to Reconsider Late-Filed Contention with Revised Basis and to Reopen the Record (March 3, 1987), Affidavit of Brion Koning.

[41] *Id.*, Affidavit at 3.

to attach any weight to this consideration.[42] As it understood the FEMA guidance on the methodology for taking measurements of ambient sound pressure levels, the use of a one-third octave band is acceptable.[43]

On his appeal to us from the disposition below of the Merrimac siren issue, the Attorney General insisted that, given the fact that demonstrated compliance with the NRC/FEMA acceptability standard appeared to hinge upon what frequency range was selected for measurement purposes, the record should have been reopened to explore further that matter. At oral argument, however, he expressly conceded that the use of either a one-third or full octave band is acceptable.[44] Given that concession, we might well have brought our inquiry to an end. For it amounts to an acknowledgement that the use of the one-third octave band was sufficiently conservative for the purpose of ascertaining whether there was the necessary differential between ambient and siren sound pressure levels. And there is an at least tacit further acknowledgement by the Attorney General that, as the Licensing Board found, the existence of the differential was established by the results obtained from the measurement of ambient sound pressure levels in the one-third octave band.

But we were also informed at oral argument that the applicants had scheduled another set of measurements for later in the summer.[45] In that circumstance, it seemed prudent to await the outcome of those measurements before closing the door on this subject. Among other things, we thought it of possible significance that they would be taken in the summer, when presumably the ambient sound pressure levels are at their peak.[46] Accordingly, we instructed the applicants to furnish the results of the measurements when available, together with a description of the methodology employed.[47]

The measurements were taken on two days in late August in a total of nine Merrimac locations. At each location, the applicants' current consultant, Wyle Laboratories, collected the ambient sound for a fifteen-minute period in early to mid-afternoon over a one-third octave band. According to the applicants' report, with a single exception the measured sound pressure levels were below 40 dB and, thus, at least 10 dB below the assumed siren sound coverage of 50 dBC. The exception was a location at which the measured sound pressure level

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[42] *See* March 25, 1987 Memorandum and Order at 15-16.
[43] *Id.* at 14-15.
[44] App. Tr. 76.
[45] App. Tr. 79.
[46] Although apparently not a requirement, FEMA recommends that ambient sound pressure levels be measured during the summer. *See* FEMA-REP-10 at E-8; NRC Staff Response to Massachusetts Attorney General's Motion to Reopen Record and Consider Late-Filed Contention with Revised Basis (March 20, 1987) at 9-12.
[47] *See* ALAB-875, 26 NRC at 274.

was 41 dB. An analysis by Wyle indicated, however, that the actual siren sound coverage at that location would be in the neighborhood of 60 dBC.[48]

In short, the applicants' report maintained that the August measurements established that the 10 dB differential was met throughout the coverage area of the Merrimac sirens.[49] Responding to the report, the Attorney General took issue with two aspects of the methodology employed by the applicants' consultant.[50] In addition, he supplied the results of measurements taken in September at his instigation.[51]

As the Attorney General sees it, applicants' measurements should have been taken at each location at frequent intervals over a period of days. Further, he expressed disagreement with the reference standard (L_{90} exceedance level) employed by Wyle in determining what level of ambient sound should be deemed significant for reporting purposes.[52]

Our examination of the NRC and FEMA sound measurement guidance brought to our attention by the parties does not address either of these concerns.[53] In essence, both agencies leave it up to the taker of the measurements to determine, at least in the first instance, the appropriate time period and reference standard. As earlier noted, FEMA ultimately will be called upon to decide the adequacy of the Merrimac sirens.[54] In fulfilling this responsibility, it presumably will consider, *inter alia*, the methodology employed by the applicants in measuring ambient sound pressure levels. For present purposes, we need consider whether it clearly appears that the methodology was so crucially flawed that no good reason exists to await the outcome of the FEMA review. No such demonstration has been made. Indeed, the record establishes that, in taking its measurements last February, the Attorney General's own consultant utilized both a single thirty-minute period at each location and the same L_{90} reference standard selected by the applicants' consultant.[55] Even though the Attorney General may prefer essentially continuous measurement taking and the different

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[48] *See* letter from Thomas G. Dignan, Jr., to the members of this Board (September 17, 1987), Attachments (letter from John R. Stearns, Wyle Laboratories, to the lead applicant (September 4, 1987) and Report).

[49] *Id.*, Report at 3.

[50] *See* letter from Allan R. Fierce to the members of this Board (October 2, 1987).

[51] *See id.*, Affidavit of Gregory C. Tocci. *See also* letter from Allan R. Fierce to the members of this Board (October 23, 1987), Enclosure ("Ambient Sound Level Study [of] Merrimac, Massachusetts" (September 1987) [hereinafter Cavanaugh Tocci Final Report]).

[52] *See* October 2 letter of Allan R. Fierce at 2-3. Exceedance levels are expressed in terms of the letter "L" and a subscript number reflecting the percentage of the measurement interval during which the sound pressure was above the reported level. *See A. Peterson, Handbook of Noise Measurement*, at 57 (9th ed. 1980).

[53] *See generally* NUREG-0654; FEMA-REP-10; and FEMA-43, "Standard Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants" (September 1983).

[54] *See supra* p. 416.

[55] *See* Koning Affidavit at 2. We do not understand the Attorney General to maintain that the difference between a 15- and a 30-minute period is of significance. Rather, to repeat, his point is that measurements should be taken throughout the day. The September measurements taken by his consultant generally adopted that approach. *See* Tocci Affidavit at 5-6.

reference standard used by his consultant in its September measurements (the L_{50} exceedance level), it does not follow that the Wyle methodology is unacceptable or unreliable.[56]

The single remaining question then is whether the Attorney General's September measurements themselves cast doubt on the applicants' conclusion that the Merrimac sirens are adequate. Those measurements were taken by his consultant, Cavanaugh Tocci Associates, at four locations chosen because of the possibility of inadequate siren coverage.[57] As reflected by the data for the L_{50} measurements included in the consultant's final report, in three of those locations[58] the average daytime ambient sound pressure level exceeded 40 dB; in the remaining location,[59] the data established, the average level was below 40 dB.[60] On the basis of the preliminary report presaging these results,[61] we called upon the applicants to provide us with any available information regarding the siren sound pressure levels at all four locations.[62] In response, the applicants supplied an analysis by their consultant, Wyle, that assigned a siren sound pressure level to each location.[63]

A simple mathematical computation utilizing both the Wyle analysis and the data supplied by the Attorney General discloses that at three of the locations[64] a differential of at least 10 dB manifestly exists between the siren sound pressure level and the average daytime ambient sound pressure level (irrespective of which reference standard is invoked). But at the fourth location — South Pleasant Street — compliance with that acceptability criterion hinges upon which reference standard is utilized in determining what ambient sound should be reported. Using the L_{90} standard invoked by the applicants' and the Attorney General's consultants in their measurements early in the year, it turns out that the 10 dB differential is satisfied. On the other hand, the L_{50} standard now adopted by the Attorney General's consultant (but not by that of the applicants) produces a differential at South Pleasant Street of approximately 7 dB.[65]

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[56] The applicants' March 10 measurements had similarly been taken over a single 15-minute period with the same reference standard used for the August measurements. *See* Callendrello Affidavit, Attachment (letter of Robert S. Berens to the lead applicant (March 11, 1987) at 2). Yet the Attorney General's sole voiced objection to the utilized methodology related to the choice of a one-third, rather than a full, octave band. *See supra* pp. 918-19. At the time of the August measurements, the applicants had this additional reason to assume that the Attorney General regarded the 15-minute measurement period and the selected reference standard to be acceptable.

[57] *See* October 2 letter of Allan R. Fierce at 3. *See also* Cavanaugh Tocci Final Report at 1, 11-12.

[58] River Road, South Pleasant Street and High Street.

[59] Bear Hill Road.

[60] *See generally* Cavanaugh Tocci Final Report.

[61] *See* Tocci Affidavit at 11.

[62] *See* Order (October 13, 1987).

[63] *See* Applicants' Response to Appeal Board Order of October 13, 1987: Supplemental Memorandum, Affidavit of Louis C. Sutherland.

[64] River Road, High Street and Bear Hill Road.

[65] Cavanaugh Tocci Associates presented the results of its September measurements in terms of both the L_{90} and L_{50} standards.

There is nothing before us to support a FEMA preference for one standard over the other. Moreover, inasmuch as at one time or another, the consultants for both the Attorney General and the applicants used the L_{90} standard, it is beyond cavil that acoustic professionals on occasion resort to that standard. In this circumstance, we cannot conclude that the Attorney General's September measurements at the South Pleasant Street location give rise to an issue of such safety significance that a reopening of the record on the adequacy of the Merrimac sirens is mandated.[66]

In responding to the Wyle analysis, the Attorney General did not confine himself, however, to calling attention to the South Pleasant Street situation.[67] In addition, he asked leave to conduct discovery to determine whether infirmities existed in the Wyle analysis that led to the values assigned to the siren sound pressure levels at the four locations.[68] Controlling precedent stands in the way of granting that request. In advising an intervenor that it had "misconstrued the standards for reopening" a closed record in the *Three Mile Island Restart* proceeding, the Commission had this to say:

> The burden is on the movant to establish prior to reopening that the standards for reopening are met. The movant is not entitled to engage in discovery in order to support a motion to reopen. Rather, the issue in each case is whether the available information meets the standards for reopening, i.e., timely raises a significant safety issue which might have affected the Licensing Board's decision, such that the record should be reopened and discovery initiated.[69]

The following year, in the *Perry* proceeding, the Commission reiterated the "available information" requirement in the course of overturning our determination to conduct a brief evidentiary hearing to probe further the safety significance of an issue on which the reopening of the record was being sought.[70]

The Licensing Board's March 23 and 25, 1987, denials of the motions to reopen the record to allow the admission of late contentions on the adequacy of the East Kingston and Merrimac emergency notification sirens are *affirmed*. This Board still has before it, however, a recently filed motion of the Attorney

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[66] Our disinclination on this record to choose between the L_{90} and L_{50} reference standards does not, of course, preclude FEMA from making such a choice in its own evaluation of the acceptability of the Merrimac sirens.

[67] *See* Attorney General James M. Shannon's Reply to Applicants' October 30, 1987 Supplemental Memorandum in Response to Appeal Board Order of October 13, 1987 (November 13, 1987).

[68] *See* Motion of Attorney General James M. Shannon to Conduct Discovery Regarding How Siren Sound Levels Were Calculated for Merrimac by Louis C. Sutherland (November 13, 1987).

[69] *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit No. 1), CLI-85-7, 21 NRC 1104, 1106 (1985).

[70] *Cleveland Electric Illuminating Co.* (Perry Nuclear Power Plant, Units 1 and 2), CLI-86-7, 23 NRC 233, 235-36 (1986) (citing, in addition to *Three Mile Island, Louisiana Power & Light Co.* (Waterford Steam Electric Station, Unit 3), CLI-86-1, 23 NRC 1 (1986)).

General seeking a reopening of the record to permit a late contention addressed to the alleged removal of sirens in the City of Newburyport, Massachusetts.[71] Action on that motion is *deferred* to await the receipt of the responses to it.

It is so ORDERED.

FOR THE APPEAL BOARD

Eleanor E. Hagins
Secretary to the
Appeal Board

[71] *See* Contention of Attorney General James M. Shannon and Motion to Admit Late-Filed Contention and Reopen the Record (November 13, 1987).

Atomic Safety and Licensing Boards Issuances

LICENSING BOARDS

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Cite as 26 NRC 425 (1987) LBP-87-30

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Morton B. Margulies, Chairman
Dr. Jerry R. Kline
Mr. Frederick J. Shon

In the Matter of

Docket No. 50-322-OL-3
(ASLBP No. 86-539-07-OL)
(Emergency Planning)

LONG ISLAND LIGHTING COMPANY
(Shoreham Nuclear Power Station, Unit 1)

November 6, 1987

The Licensing Board grants Applicant's motion for summary disposition of Contention 92, which alleges, in part, that there is no New York State emergency plan to deal with an emergency at the Shoreham Nuclear Power Station and that Applicant's plan fails to provide for coordination of Applicant's emergency response with New York State, assuming such a response would occur. The Licensing Board finds that the contention, as written, is clearly true and does not raise any other unresolved health and safety issue. Therefore, the motion for summary disposition should be granted, under 10 C.F.R. § 2.749, because there is no genuine issue as to any material fact and Applicant is entitled to a decision as a matter of law.

MEMORANDUM AND ORDER
(Ruling on Applicant's Motion for Summary Disposition of Contention 92)

INTRODUCTION

On September 11, 1987, LILCO filed a motion pursuant to 10 C.F.R. § 2.749 for summary disposition of Contention 92, which alleges in part that there is no New York State emergency plan to deal with an emergency at Shoreham and that the LILCO plan fails to provide for coordination of Applicant's emergency response with New York State, assuming such a response would occur. The Licensing Board's prior disposition of Contention 92 in favor of Intervenors had been reversed and remanded by the Appeal Board.[1] In support of its motion, claiming that there is no genuine issue as to any material fact and that it is entitled to a decision as a matter of law, Applicant relies upon the existing evidentiary record and the law of the case.

In an answer submitted October 5, 1987, Intervenors request that the motion be denied. They assert that there are unresolved issues of material fact and that the requirements of § 2.749 are not met to grant LILCO's motion for summary disposition. They too believe that the subject issues can be decided based upon the law of the case and the existing evidentiary record.

The Staff, in a response dated October 5, 1987, agrees with Applicant that it is entitled to a decision as a matter of law and that LILCO's motion for summary disposition should be granted.

On October 20, 1987, Intervenors filed a response to the Staff response in support of the LILCO motion for summary disposition of Contention 92. They argue that, contrary to Staff's assertion, there are material facts in dispute with respect to Contention 92.

In this Memorandum and Order, the Licensing Board finds that the motion for summary disposition of Contention 92 should be granted because there is no genuine issue as to any material fact and Applicant is entitled to a decision as a matter of law.

BACKGROUND

The Licensing Board considered and decided Contention 92 as part of a grouping of contentions dealing with the ingestion pathway.[2] It found that no site-specific plans for Shoreham exist in the New York State plan. We further

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[1] ALAB-847, 24 NRC 412, 429-33 (1986).
[2] LBP-85-12, 21 NRC 644, 647, 875 (1985).

found that LILCO has the capability to perform the four specific tasks[3] that have been identified as State functions, although we did not expect that that is all that a state might do in a genuine emergency. We decided that the absence of commitment, resources, and decisionmaking capability and authority of the State, together with similar absences on the part of the County, constitutes a serious deficiency in the LILCO plan and concluded that public health and safety could not be protected as well by LILCO acting alone as it could if LILCO were acting in concert with the State of New York and the County. The Board decided that the State and County prevailed on Contention 92; the lack of State participation constituted a serious substantive deficiency in emergency preparedness at Shoreham.

The Licensing Board also heard as part of the grouping of ingestion pathway contentions, Contention 81, which alleges that the utility's plan contains insufficient procedures or means for implementing protective actions for the 50-mile ingestion exposure pathway.

The Board ruled in LILCO's favor on Contention 81. It found that LILCO's plans are adequate for management, monitoring, issuance of warnings, and means for implementation, through notification of producers and through purchase of possible contaminated food in the ingestion pathway EPZ.[4] The Licensing Board finding on Contention 81 remains intact. It was not disturbed on appeal.

Also relevant, as part of the legal authority issue, we heard and decided Contention 7, which alleges that the LILCO plan provides that various LILCO employees and contractors will be responsible for determining, making available to the public, and implementing protective action recommendations for the 50-mile ingestion exposure pathways, which activities under State and County law are unlawful for LILCO's employees and contractors to perform.

We found that the activities described in Contention 7 were prohibited by State law and that this defect in the LILCO plan was not eliminated by preemption or through Applicant's realism argument.[5] Although the Licensing Board's rulings on the legal authority issue were upheld by the Appeal Board,[6] they were reversed and remanded for further evidentiary hearing based on LILCO's realism argument.[7] The process has started for holding the hearing called for in CLI-86-13.

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[3] (1) Dose projection based on release data communicated to State officials; (2) ingestion pathway sampling in the 50-mile EPZ; (3) interdiction of contaminated foods; and (4) protective action recommendations. *Id.* at 883.
[4] *Id.* at 877.
[5] *Id.* at 895-912, 919.
[6] ALAB-818, 22 NRC 651, 673-76 (1985).
[7] CLI-86-13, 24 NRC 22 (1986).

POSITION OF THE PARTIES

Contention 92 on which LILCO requests summary disposition reads as follows:

> There is no New York State emergency plan to deal with an emergency at the Shoreham plant before this Board. (*See*, Attach. 1.4.2). In addition the LILCO Plan fails to provide for coordination of LILCO's emergency response with that of the State of New York (assuming *arguendo*, such a response would be forthcoming). (*See* FEMA Report at 1). In the absence of a State emergency plan for Shoreham, there can be no finding of compliance with 10 C.F.R. §§ 50.47(a)(2), 50.47(b), or NUREG-0654 §§ I.E, I.F, I.H or II.

(footnote omitted).

In support of its motion for summary disposition, LILCO argues that the Board's bases for ruling in favor of Intervenors on Contention 92 in its Partial Initial Decision have been specifically rejected by the Commission or the Appeal Board and that since the Board had resolved all disputed factual issues in LILCO's favor in its previous decision there is now no material fact in dispute on Contention 92 and LILCO is entitled to a decision in its favor as a matter of law.

The elements of LILCO's argument are complex and they require further elaboration. According to LILCO, the Board in its Partial Initial Decision refused to accept LILCO's plan for the ingestion pathway as an adequate interim compensating measure under the provisions of § 50.47(c) where there was a total absence of State emergency planning for Shoreham and no assurance existed that any coordinated response to an emergency from the State could be expected. This view of the regulations LILCO argues was reversed and remanded by the Appeal Board, which in turn based its opinion on the Commission's ruling in CLI-86-13 where the Commission determined, in the context of reviewing LILCO's overall proposal, that a utility plan prepared without any governmental cooperation might pass muster under 10 C.F.R. § 50.47(c). LILCO next argues that the Board's second ground for deciding Contention 92 was its belief that the public health and safety could not be protected as well by LILCO acting alone as it could if LILCO acted in concert with governmental authorities and that this ground was set aside by the Appeal Board on remand in favor of a reexamination of whether there are identifiable deficiencies in LILCO's ability to fulfill four State functions (which were identified by LILCO in hearing) so as to render the plan inadequate. As to that matter, LILCO asserts that the Board found in its Partial Initial Decision that LILCO could adequately perform the specified functions and that there are no other issues within the scope of this contention specifying other possible deficiencies regarding actions to be taken in the ingestion pathway. There being no further material issue of fact in dispute according to LILCO, it is entitled to summary disposition on Contention 92.

LILCO appended to its motion a "Statement of the Material Facts as to Which LILCO Contends There Is No Genuine Issue to Be Heard on Contention 92 (No New York State Emergency Plan)." LILCO's statement consists of five material facts which in abbreviated form assert: (1) The State and County would make a best-efforts response using the LILCO plan in an emergency; (2) the four specific functions performed by the State in an emergency are dose projection, ingestion pathway sampling, interdiction of contaminated foods, and issuance of protective action recommendations; (3) the four State functions have to do with the ingestion pathway and are performed in the aftermath of an accident; (4) the Applicant will perform the four State functions but will defer to decisions of the Governments if requested; and (5) the Applicant has the capability to perform the tasks that have been identified as State functions.

LILCO further asserts that coordination with the State is not a litigable issue because the Board's original ruling on Contention 92 was based on the absence of a State response altogether and not on the absence of coordination and because the issue of coordination is part of the realism issue and should not be duplicated under Contention 92.

The Governments filed an answer to LILCO's motion on October 5, 1987, in which they opposed summary disposition of Contention 92. The Governments base their opposition primarily on that portion of Contention 92 which asserts that LILCO's plan fails to provide for coordination of LILCO's emergency response with that of the State. In the Governments' view the evidentiary record is completely void of any demonstrated preparedness on the part of the State of New York, and this prohibits a finding that there will be an integrated or coordinated response or that the response to an emergency will be adequate.

As to the four State functions in emergency response that were proffered by LILCO in its defense against Contention 92, the Governments claim that LILCO cannot seek to prevail on Contention 92 based on its asserted capability to perform them because the New York Supreme Court and the Appellate Division thereof ruled in *Cuomo v. LILCO* that the functions to be performed by LILCO under its plan constitute illegal usurpation of the police power. Thus in the Governments' view, LILCO's capability to perform the specified State functions is irrelevant to the resolution of Contention 92.

Additionally, the Governments argue that, following the Appeal Board's remand in ALAB-847, there remain triable issues of material fact with regard to the adequacy of the LILCO plan to fulfill the four State functions. In addition to the asserted legal prohibition cited above, the Governments now assert that the four functions cited by LILCO are merely representative of the kinds of functions that New York State might perform in an emergency. Taking their cue from language used by the Board in its Partial Initial Decision ("we have a great deal of trouble accepting that that is all a State might do in an emergency.") Intervenors assert that Contention 92 raises issues broader

than the four State functions discussed in LILCO's motion. The primary issue they say concerns whether LILCO's plan provides for coordination of LILCO's emergency response with that of the State. Without stating specifically what else the State might do in an emergency, Intervenors rely on instructions from the Appeal Board that the Board should determine on remand whether and how the State's participation would make the plan better. Thus, say the Intervenors, there is an absence of evidence of record that New York State would participate in an emergency; that an *ad hoc* State response would comply with NRC regulations; or that it would be meaningful, coordinated, or integrated with LILCO's response. Absent evidence of record on the nature of a State response in an emergency, Intervenors assert that the Board may not reach a conclusion other than that there is no reasonable assurance that an integrated or coordinated emergency response that includes the State would occur. Intervenors support their position by citation to the Commission's decision in CLI-86-13 in which the Commission assumed that the Governments would respond to an emergency with their "best efforts" but was unwilling to assume that such efforts would be adequate without additional evidence. Further support according to Intervenors comes from the Board's decision on LILCO's motion for summary disposition issued September 17, 1987 (LBP-87-26, 26 NRC 201), wherein the Board found that the question of adequacy of Government response under the "best-efforts" assumption required further development of evidence before it could be resolved.

Intervenors acknowledge LILCO's argument that we should not duplicate our efforts and that the issues raised by Contention 92 are in some ways similar to the realism and legal authority issues for which evidentiary hearings are to be held. They continue to oppose summary disposition, however, on the basis that Contention 92 has been at issue since July 26, 1983; its admission was not opposed by LILCO; its allegations and issues raised have never changed. In Intervenors' view, LILCO's assertion of duplication is merely backdoor maneuvering seeking to oppose Contention 92's admission.

Intervenors oppose LILCO's claim that the four identified State functions apply primarily to the ingestion pathway. They cite two — dose projection and protective action recommendations — which they claim are primarily related to plume exposure EPZ activities. Thus these are not activities to be done in the aftermath of an accident when there would be little time pressure on their accomplishment, and in any event the Board has ruled that the timing and pressure under which a response must be made are irrelevant to the requirements imposed by NRC's regulations.

In sum, Intervenors claim that it is the coordination issue of Contention 92 that most clearly mandates denial of LILCO's motion. This is so, say the Intervenors, because in its interpretation of CLI-86-13 all four State functions have been found by this Board to involve factual disputes requiring denial of LILCO's motion for summary disposition of the legal authority issues. Inter-

venors assert that renewed scrutiny is required even for contentions that were previously resolved in LILCO's favor, such as Contention 81, because the situation confronting the Board was so changed by the Commission's decision in CLI-86-13.

The NRC Staff responded in support of LILCO's motion on October 5, 1987. In its response the Staff reviews CLI-86-13, ALAB-847, and the Partial Initial Decision and concludes that there are no material facts in dispute. According to Staff, our determinations under Contention 81 and the facts in the record provide an ample basis for the Board to find under § 50.47(c) that the LILCO plan constitutes adequate interim compensating action permitting a reasonable assurance finding, notwithstanding lack of literal compliance with 10 C.F.R. § 50.47(b)(10) and NUREG-0654. Intervenors found it necessary to respond to the Staff, but their discussion was unproductive to disposing of the issues.

DISCUSSION

A literal reading of Contention 92 reveals that it makes two factual assertions and two legal assertions. The Contention alleges as factual matters that no State emergency plan is before this Board and that no planned coordination between LILCO and the State is provided for. It alleges as legal matters that as a consequence there can be no compliance with specified portions of § 50.47 and portions of NUREG-0654. The contention has specificity only for the things alleged and not for any additional specific defects that Intervenors may wish to litigate by implication. LILCO, in its defense against Contention 92, specified in testimony four issues that it said the State normally performs and claimed, on the basis that it could perform them, that it was entitled to prevail under the provisions of § 50.47(c) which, among other things, would permit licensing where adequate interim compensating measures were taken for deficiencies found in an emergency plan. The Board was willing in its Partial Initial Decision to accept LILCO's demonstration, in essence, as a necessary one but could not find record support of sufficiency under a literal reading of the contention. We specifically expressed doubt as to whether the four matters raised by LILCO were exhaustive of State functions in a planned response to an emergency. (We note here in passing that NUREG-0654 specifies ninety-five elements as State responsibilities in emergency planning). We review this history to make clear that the four State functions that have become an issue in this contention arise from LILCO's litigation strategy and not from any specification of issues by the Intervenors in their contention nor from anything the Board directed.

We initially admitted Contention 92 for litigation simply because it has the requisite basis and specificity for admission under NRC regulations. The

specificity of the contention is not diminished because the matters alleged are broadly stated. The contention alleges, as comprehensive flaws, that no State plan is before the Board and that LILCO's plan fails to provide for coordination with the State in an emergency. There is no evidence that Intervenors ever intended to litigate possible specific deficiencies in the LILCO plan under this contention or to extend its reach beyond the allegations plainly stated. The evidence indeed is to the contrary because Intervenors did not do so in the hearing; they submitted other contentions alleging specific deficiencies in the plan, and their references to violations in the contention itself are broadly stated. For example, they allege that the violations they perceive include noncompliance with § 50.47(b) in its entirety even though that section contains sixteen specific requirements on a broad range of subjects. Similarly, Intervenors reference perceived violations of § I of NUREG-0654. That section, however, contains no specific planning requirements. That section states the underlying rationale and conceptual bases for the emergency planning requirements that are stated in detail in § II of NUREG-0654. Thus we are persuaded now as we were in our Partial Initial Decision that Contention 92 was intended to specify a global and conceptual deficiency in the plan which includes the full collection of State functions without specifying each of them one by one. The truth of Contention 92 can therefore be determined by a simple measure of whether a State plan for Shoreham exists and whether there is a planned coordination between LILCO and the State in the event of a radiological emergency at Shoreham.

By that standard, no party disputes and neither the Board nor the Commission expresses any doubt that the factual allegations of Contention 92 are true. Moreover, the legal allegations of the contention are also recognized by the Appeal Board as literally true. The Appeal Board stated in ALAB-847: "We agree with the Licensing Board that, in terms, LILCO cannot satisfy section 50.47(b) or conform to the guidance in NUREG-0654." 24 NRC at 431. Thus there are no material facts in dispute on Contention 92, and under the ruling of CLI-86-13, summary disposition is required as a matter of law.

The foregoing conclusion is not at variance with the Appeal Board decision in ALAB-847 which instructed us on remand to "reexamine whether there are identifiable deficiencies . . . to fulfill the four state functions so as to render the LILCO plan inadequate." *Id.* at 432. We have conducted such a review ourselves and find no basis in the record or in the parties' responses to this motion for altering our previous conclusion that LILCO has the capability to perform the four State functions that it identified in the hearing. No party has argued, and the Board does not believe, that any possible insufficiencies in LILCO's plan result solely from either (i) LILCO's inability to do things not required by regulations, or (ii) the State's capacity to provide a level of safety beyond that considered adequate. The only insufficiencies alleged by Intervenors are their perceived lack of LILCO's legal authority to perform the four functions and their view that a

broader inquiry into State emergency response function is now required by the Commission's decision in CLI-86-13. However, we have provided for adequate inquiry into the legal authority question in our decision denying LILCO's motion for summary disposition of the ten legal authority contentions. Intervenors are not persuasive that a broader inquiry into State function is required since the Appeal Board has ruled that review of the four State functions proffered by LILCO is adequate. If we were required by ALAB-847 to inquire into how the participation of the State would make the plan better, we conclude that that issue is encompassed within the issues that will be addressed as a result of our decision denying summary disposition of the ten legal authority contentions.

Intervenors argue that our interpretation of CLI-86-13 in our decision denying summary disposition of the ten legal authority contentions requires us to take a consistent position here. In our previous decision, we concluded that summary disposition of those contentions must be denied because there existed unresolved issues of fact related to the nature and adequacy of government response under the Commission's best-efforts assumption. We agree that Contention 92 could be viewed as raising the same issues, particularly regarding the four State functions. The issue of the adequacy of government response is, however, new to the case because of the Commission's decision in CLI-86-13. Our previous decision provides an adequate mechanism for inquiry into the new issue of adequacy of government response. Subsequent to that decision we afforded the parties the opportunity to advise us on the proper specification of issues for trial. Those matters have not yet been decided. We are persuaded by the foregoing considerations of the validity of LILCO's argument that we should not duplicate our inquiries under Contention 92. Intervenors' arguments to the contrary were generalized and unpersuasive, and they acknowledged that the four State function issues were also raised within the scope of the ten legal authority contentions. We therefore conclude that any issues related to the adequacy of government performance that arguably might be included within the scope of Contention 92 can be consolidated within the scope of issues remaining for trial without prejudice to any party. We conclude that summary disposition of Contention 92 would not be inconsistent with our previous action dealing with the ten legal authority contentions.

The essence of the dispute on Contention 92 is legal rather than factual. In our Partial Initial Decision we found that the truth of Contention 92 had adverse consequences to the acceptance of LILCO's plan. The Commission, however, has decided with finality the legal effect of the absence of a State emergency plan for Shoreham. The Commission has ruled that LILCO's plan can serve as an adequate interim compensating action under § 50.47(c) even in the total absence of State planning; that the State and local governments can be expected to participate in an emergency response with their best efforts even though that response is unplanned; that the standard of equivalent protection employed by

the Board in its Partial Initial Decision was too stringent; and that a more flexible interpretation permitting LILCO to demonstrate that it can achieve results that are generally comparable to what could be achieved with State and County participation should be employed. With those interpretations by the Commission, the Board concludes that the truth of Contention 92 does not require a finding adverse to LILCO.

The Board has considered the five material facts as to which LILCO claims there is no genuine issue and the Intervenors' response. We conclude that LILCO's facts are supported by the record and that they have not been adequately controverted by Intervenors. The Governments argue generally that LILCO's facts are not material to the resolution of Contention 92 and they specifically challenge LILCO's assertion in its statement of uncontested facts (number three) that the four State functions have to do primarily with the ingestion pathway. That assertion is contrary to the record, however, because the parties litigated this contention as part of a cluster of ingestion pathway contentions, and the entire record of this case was assembled without dispute among the parties that the functions of State and local government were apportioned in a manner that assigns responsibility for the 10-mile EPZ primarily to local government and responsibility for the ingestion pathway primarily to the State. Intervenors' response therefore does not raise a material issue on Contention 92.

The Board concludes that Contention 92 has served its purpose of establishing on the record that no State emergency plan for Shoreham is before this Board and that there is no provision for planned coordination between LILCO and the State. The Contention as written is clearly true and, according to our interpretation of the Commission's decision in CLI-86-13, does not raise any other unresolved health and safety issue, and summary disposition is required. Applicant's motion is therefore granted.

ORDER

Based upon all of the foregoing, it is hereby ordered that Applicant's motion for summary disposition of Contention 92 is granted.

THE ATOMIC SAFETY AND
LICENSING BOARD

Morton B. Margulies, Chairman
ADMINISTRATIVE LAW JUDGE

Jerry R. Kline
ADMINISTRATIVE JUDGE

Frederick J. Shon
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland,
this 6th day of November 1987.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judge:

Charles Bechhoefer

In the Matter of **Docket No. 55-60755**
(ASLBP No. 87-551-02-SP)

ALFRED J. MORABITO
(Senior Operator License for Beaver Valley Power Station, Unit 1)

November 24, 1987

In an informal proceeding involving an Applicant's appeal of the denial of his senior operator's license, the Presiding Officer authorizes an oral presentation, outlines procedures for the presentation, and sets forth matters for both the Applicant and the NRC Staff to address at the presentation.

MEMORANDUM AND ORDER
(Need for Further Information and Requirement for Oral Presentation)

I have reviewed the claims set forth in Mr. Morabito's Specification of Claims, dated July 31, 1987, including the attached appendices; the response of the NRC Staff, dated October 9, 1987; and Mr. Morabito's reply, dated November 7, 1987. In response to the Staff's Motion for Opportunity to Respond to Rebuttal Filed by Mr. Morabito, dated November 19, 1987, and in accord with my Order of October 23, 1987, the Staff may respond to new information submitted by Mr. Morabito in his reply, on the schedule set forth herein.

I have also ascertained that there are several areas (set forth in the Attachment hereto) as to which I will require information beyond that already submitted by the parties, in order to reach a determination whether Mr. Morabito passed both the written and the simulator segments of his senior operator license examination. Because of the already extended length of time that has elapsed since Mr. Morabito initiated his appeal, and because answers and further information that I have requested will likely provoke followup inquiries, I have also determined that an oral presentation should be held. As direct testimony for that oral presentation, I will consider (1) both parties' responses to the inquiries set forth in the Attachment; (2) the Staff's response to Mr. Morabito's reply; (3) the Specification of Claims (to the extent it relates to Mr. Morabito's examination), the Staff response thereto, and Mr. Morabito's reply (all previously filed).

This oral presentation is being scheduled because of my need for further information or clarification of information, *not* because of Mr. Morabito's request for an oral presentation "as a platform for initiating national debate" on the operator license examination process (Specification of Claims at 32). Matters considered will be limited to the specific items identified herein, unless otherwise requested by a party and approved by me. At the oral presentation, I will pose questions on the matters to be considered. Dr. David L. Hetrick, the technical interrogator, may also question the parties. Although cross-examination by the parties will not be permitted as a matter of right (*see* proposed 10 C.F.R. § 2.1235(a)), I will permit parties to pose questions or lists of questions to the other party, subject to my approval.

As contemplated by proposed 10 C.F.R. § 2.1235(b), all direct testimony and responses to oral questioning are to be given under oath or affirmation. At the oral presentation, I intend to have the parties, to the extent they have not already done so, swear or affirm to the direct testimony referenced above. Parties should thus be prepared to identify any necessary changes or corrections to the documents previously submitted.

The parties' responses (direct testimony) should be filed (mailed) by December 21, 1987. The oral presentation will be held during January 1988, at a place and time to be announced (in the vicinity of Pittsburgh, Pennsylvania, or the Beaver Valley facility). At the oral presentation, I will entertain oral limited appearance statements, as permitted by proposed 10 C.F.R. § 2.1211(a) and as

announced in the Notice of Hearing dated July 15, 1987 (52 Fed. Reg. 27,485 (July 21, 1987)).

PRESIDING OFFICER

Charles Bechhoefer
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland,
this 24th day of November 1987.

ATTACHMENT

ADDITIONAL INFORMATION REQUIRED

To the extent applicable, each party should provide additional information in the following areas:

A. Written Examination

1. Question 6.03b

a. This question asked for three design features of the component cooling water system that minimize the effects of a rupture of the RCP thermal barrier. One of Mr. Morabito's answers that was judged incorrect was "[a]bility to manually isolate the thermal barriers." The Staff explains (Affidavit, ¶ 10) that "[a] containment entry, which is a lengthy and involved process, would be required to isolate the component and would not provide *immediate* reduction in the severity of the rupture" (emphasis added). The Staff goes on to state (*id.*, ¶ 11) that isolation valves are "*normally* designed to allow maintenance . . . and not to minimize the effects of a component failure" (emphasis added). In view of the fact that the question made no reference to the timing of the minimization of the effects of a rupture and no reference to any "normal" design feature to accomplish that purpose, is not Mr. Morabito's answer technically correct? In any event, does not the ambiguous scope of the question as described herein warrant the deletion of question 6.03b?

b. In an examination question of this type (requesting a specified number of answers), has the Staff invariably used the method of grading described in ¶ 15 of its affidavit? (Mr. Morabito, in his reply (at 12) claims otherwise. Mr. Morabito should provide additional specificity, if he can do so, with respect to the two

written examinations he references. For its part, the Staff should explain what is meant by the word "routinely" set forth in ¶ 15, line 9, of its affidavit.)

c. Were candidates advised not to supply more than the requested number of answers to questions such as question 6.03b?

d. Were candidates advised of penalties (either discretionary or mandatory) for a wrong answer accompanied by a sufficient number of correct answers? Were they informed, prior to or at the time of the written examination, of the method of grading that the Staff is now utilizing — i.e., that they would be given credit only for the percentage of correct/incorrect answers where more than three answers were supplied (Staff Affidavit, ¶ 15)?

(i) If so, why was Mr. Morabito initially given 1/3 credit (0.5 point) when only one of the four answers supplied was considered correct? If the Staff were utilizing the grading method described in ¶ 15 of its affidavit, should not Mr. Morabito initially have been given only 1/4 credit (0.375 point)?

(ii) If Mr. Morabito was *not* informed of the grading system, should he not either be given credit for at least two correct answers out of three (1.0 point) or, alternatively, should not the question have been deleted?

2. *Question 6.06a*

a. Does the phrase "cold solid plant operations" in examination question 6.06a refer only to standby conditions, or could it refer to a stage during plant startup?

b. Is the overpressure protection system ever used "during cold solid plant operations"? If so, explain.

3. *Question 6.06b*

Assuming that some points should have been deducted for Mr. Morabito's acknowledged listing of an incorrect setpoint, would not a deduction of 0.1 point (rather than 0.2 point) have been more appropriate, given the nature and significance of the mistake? Please explain.

4. *Question 6.07a*

Mr. Morabito stated that the steam generator code safety valves provide the "first" means of protection for Tavg increases. The Staff suggests another "normal first response." The Staff also indicates that the steam generator safety valves provide a "secondary or tertiary protection for T average in a limited

range of power levels." Because the question asked for the importance of steam generator code safety valves, without specifying whether primary, secondary, or tertiary protection was sought, should not Mr. Morabito have been given at least partial credit for his answer?

5. Question 6.07b

a. What is the purpose of the parenthetical phrase "(NOT CONDITIONS)" in examination question 6.07b?

b. The question asks for two reasons why the MSIVs are required to close during a main steam-line rupture. Mr. Morabito's references to pages 10.3-2 and 10.3-5 of the FSAR appear to provide different reasons why the MSIV shuts — i.e., as the primary isolator of a leak or as the backup to a nonreturn valve. Was not Region I correct in stating that the "facility literature provides many varied reasons for closing the MSIVs" and thus that "there is no definitive answer to the question" and that the question should be deleted (letter dated November 12, 1986, to Mr. Morabito, Attachment 1)?

B. Simulator Examination

1. General

a. Under NUREG-1021 (Rev. 2), the Operator Licensing Examiner Standards in effect at the time of Mr. Morabito's examination, a "rating of U [unsatisfactory] on any one competency *may* be considered an adequate basis for failure of the examination." ES-302, F.3 (emphasis supplied).

(i) Which, if any, of the four ratings of U in this examination would be considered adequate for failure of the examination in the event that it became the only competency so rated?

(ii) May a candidate pass the examination with ratings of U in two of the eight competencies?

b. The Standards further provide that "the assignment of an overall rating *must* be based on the specific circumstances of candidate's performance during the examination." ES-302, F.3 (emphasis supplied). How did the Staff develop the overall rating for Mr. Morabito?

c. Was any attempt made at quantitative evaluation of performance? For example, one could count the number of improper decisions, weigh them according to the degree of undesirable consequences, and compare with the number of correct decisions.

d. Is it appropriate for a single observation or comment by an examiner to be used as a basis for a "U" rating in more than one competency? If so, what

effect would such multiple use of a single observation or comment have on a candidate's overall rating?

e. The candidate's Specification of Claims (July 31, 1987) includes eight items (at 13-17) that address either ES-301 or ES-305 of the examination report. Only one of these items (5.2.A on page 6 of ES-305) is related to comments in the simulator examination summary sheet (ES-302-11 and attachments). The Staff response (October 9, 1987) addresses the candidate's claims concerning ES-302-11, including the subject matter of 5.2.A, but does not address the other seven claims.[1]

(i) What is the relevance of the eight comments in ES-301 and ES-305 (other than 5.2.A) to the simulator examination?

(ii) What is the significance of the circled letters A and E in the column headings of ES-305, page 6?

f. Were the procedures of NUREG-1021 (Rev. 2), ES-301, E, followed with respect to the orientation of the examiners who administered Mr. Morabito's simulator examination? Provide details.

2. Compliance/Use of Procedures (ES-302-11-1/4)

a. Comment 1

(i) Why were two power-range instruments giving indications different from the other two?

(ii) Is a procedure required for every small power reduction, regardless of the reason?

(iii) What is a surveillance procedure (Staff Affidavit at 14, ¶ 41)?

(iv) What is the meaning of the phrase "believe all indications" in Staff Affidavit at 14, ¶ 41, in the event of inconsistent indications?

(v) Would this comment by itself justify a grade of U for this competency?

b. Comment 2

(i) What is the relevance of the examiner's comment to the "Compliance/Use of Procedures" competency?

[1] Specifically, the Staff failed to address comments 2.5.H (ES-301 at 5); 5.1.C (ES-305 at 6); 2.5.E (ES-305 at 8); 7.1 (ES-305 at 8); 6.A.7 (ES-305 at 10a); 8.B.4 (ES-305 at 10a); and 8.C.2 (ES-305 at 10a).

c. *Comment 4*

(i) Why is this not a minor event that also illustrates good teamwork?
(ii) Would this comment by itself justify a grade of U for the competency?
(iii) Was Mr. Morabito informed prior to the examination that he would be responsible for knowing from memory the immediate actions of emergency procedures? If so, when or how? (*See* NUREG-1021 (Rev. 2), ES-301, H.)
(iv) How would the Staff respond to the four rhetorical questions posed by Mr. Morabito in his reply (¶¶ 2a-d at 8-9)? Answers should be provided for all simulator examinations for Beaver Valley, Unit 1.
(v) The Staff concedes (Affidavit, ¶ 50) that "this was the only evaluation made of the candidate's ability to properly perform the required immediate actions of the emergency procedures as a control board operator." In view of the significance of this single evaluation, did the Staff perform followup questioning as suggested by NUREG-1021 (Rev. 2), ES-303, B, to determine whether a rating of "M" or "S" would have been more appropriate? If so, please provide details. If not, please explain.

3. *Control Board Operations (ES-302-11-2/4)*

a. *Comment 1*

(i) Would this comment by itself justify a grade of U for the competency?

b. *Comment 2*

(i) Why is this not a minor event that also illustrates good teamwork?
(ii) Why not delete this comment in view of the examiner's confusion about indicator lights?

c. *Comment 3*

(i) Why is this not a minor event that also illustrates good teamwork?
(ii) Would this comment by itself justify a grade of U for the competency?

d. *Comment 4*

(i) Would this comment by itself justify a grade of U for the competency?

4. *Supervisory Ability (ES-302-11-3/4)*

a. *Comment 1*

(i) What is the relevance of the examiner's comment to the "Supervisory Ability" competency?
(ii) Was an alarm intended to be part of the scenario in question?
(iii) Was there a simulator malfunction?
(iv) How do examiners allow for simulator malfunctions in making their evaluations?
(v) Was Mr. Morabito's view of the valve position indicator blocked by the balance-of-plant operator? If so, how could Mr. Morabito have perceived the incorrectly positioned valve?

b. *Comment 2*

(i) Why does the examiner's comment include no specific citations?
(ii) How does the use of hand signals in the circumstance cited bear on the "Supervisory Ability" competency? (*See* Staff Affidavit, ¶ 71.) *See also* 5.b, below.

5. *Communications/Crew Interactions (ES-302-11-4/4)*

a. *Comment 1*

(i) What is the relevance of the examiner's comment to the "Communications/Crew Interactions" competency?
(ii) Would the candidate normally be expected to communicate with the operator before acting in this situation?
(iii) Were the symptoms of the emergency sufficiently understood by the candidate?
(iv) How much immediate diagnosis is required in this particular situation?
(v) Would this comment by itself justify a grade of U for the competency?

b. *Comment 2*

(i) Are there rules or standards that preclude the use of hand signals?
(ii) Was Mr. Morabito instructed concerning the inappropriateness of using hand signals?
(iii) Is there any way to resolve the controversy about whether the candidate understood this particular hand signal?
(iv) Would this comment by itself justify a grade of U for the competency (or for the "Supervisory Ability" competency)?

c. *Comment 3*

(i) Are there rules or standards against "thinking out loud"?

(ii) If the candidate's action here were judged as merely "thinking out loud," would that by itself justify an unfavorable comment in this competency?

(iii) Is Mr. Morabito's first verbalization properly characterized as an "incorrect analysis" (Staff Affidavit, ¶ 80)?

(iv) Was anyone misled by Mr. Morabito's initial verbalization?

(v) Would this comment by itself justify a grade of U for the competency?

Administrative Law Judge

ADMINISTRATIVE LAW JUDGE

Cite as 26 NRC 445 (1987) ALJ-87-6

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ADMINISTRATIVE LAW JUDGE

Ivan W. Smith

In the Matter of

Docket No. 50-320
(ASLBP No. 86-534-01-OL)
(Civil Penalty)
(License No. DPR-73)
(EA 84-137)

GENERAL PUBLIC UTILITIES
NUCLEAR CORPORATION
(Three Mile Island Nuclear
Station, Unit 2)

November 12, 1987

MEMORANDUM AND ORDER
(Approving Settlement Agreement and
Terminating Proceeding)

The NRC Staff and GPU Nuclear have submitted for approval a settlement agreement pursuant to the provisions of 10 C.F.R. § 2.203. The settlement is patently in the public interest. The parties have acted responsibly in agreeing to settle this matter as set out in the agreement.

ORDER

The settlement agreement is approved and is attached hereto as part of this Order. This proceeding is terminated.

Ivan W. Smith
ADMINISTRATIVE LAW JUDGE

Bethesda, Maryland
November 12, 1987

ATTACHMENT

SETTLEMENT AGREEMENT

The staff of the U.S. Nuclear Regulatory Commission (NRC staff) and GPU Nuclear Corporation (GPUN) enter into this agreement compromising and settling NRC Enforcement Action 84-137. Enforcement Action 84-137 involves a Notice of Violation (NOV) issued by the NRC staff charging GPUN with a violation of 10 C.F.R. § 50.7 and imposed a $64,000 civil penalty as a consequence. The NOV was based on charges that Richard D. Parks, a former Bechtel North American Power Corporation employee who was assigned to Three Mile Island Unit 2, was discriminated against early in 1983 because he raised safety concerns. The NRC staff and GPUN hereby agree as follows:

1. GPUN recognizes and views as of the utmost importance its obligation to insure that employees may freely raise safety concerns without fear of reprisal. The NRC staff acknowledges that GPUN has emphasized established procedures aimed at preventing harassment or intimidation of its employees who raise safety concerns. Further, the Commissioners and the NRC staff have previously found that the allegations of this enforcement proceeding involve at most an isolated instance.

2. GPUN and its contractor, Bechtel North American Power Corporation, continue to deny that harassment or retaliation against Mr. Parks occurred, while the staff continues to assert its belief that the Enforcement Action was appropriate as brought. The settlement does not resolve the existence of discrimination or the extent, if any, of management involvement in the alleged violations. Nevertheless, both sides agree that, in the present circumstances, compromise and settlement of the matter are in the interest of both sides and the public.

3. The NRC staff will reduce the severity level of the violation asserted in its August 12, 1985 Notice of Violation and in its March 6, 1986 Order Imposing Civil Monetary Penalty (EA 84-137) from Level II to Level III. Under the NRC's General Statement of Policy and Procedure for Enforcement Actions (10 C.F.R. Part 2, App. C), a Level II violation normally is appropriate when the violation alleged involves action against an employee in violation of 10 C.F.R. § 50.7 by plant management above first level supervision, while a Level III violation normally is appropriate when the alleged violation involves action against an employee in violation of 10 C.F.R. § 50.7 by first line supervision.

4. GPUN will pay a civil monetary penalty of $40,000, which is the appropriate civil penalty for a Severity Level III violation if one occurred at the time of the events alleged (1983). GPUN will make this payment within thirty days of the approval of this settlement agreement by the Presiding Officer in the above-captioned proceeding.

5. This settlement agreement is not intended and shall not be construed in any manner as an admission of fault or wrongdoing by GPUN or its officers, employees or contractors, including Bechtel North American Power Corporation.

6. GPUN and the NRC Staff also agree to use the joint press release attached as Exhibit A hereto [not published] to announce this settlement.

7. GPUN and NRC Staff will jointly move the Presiding Officer to approve this settlement agreement and terminate the proceeding thirty days thereafter. The settlement will constitute a bar to any future NRC proceeding or action involving the same claims and allegations raised in the NRC Staff's August 12, 1985 Notice of Violation.

FOR THE NUCLEAR
REGULATORY COMMISSION
STAFF

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