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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
LONG ISLAND LIGHTING COMPANY	)	Docket No. 50-322-OL-3
	)	(Emergency Planning)
(Shoreham Nuclear Power Station Unit 1)	)	
	)	

LILCO'S BRIEF IN OPPOSITION TO INTERVENORS' APPEAL OF THE LICENSING BOARD'S PARTIAL INITIAL DECISION ON THE SUITABILITY OF RECEPTION CENTERS

Hunton & Williams
707 East Main Street
P.O. Box 1535
Richmond, Virginia 23212

July 25, 1988

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Before the Atomic Safety and Licensing Appeal Board

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INTRODUCTION

Long Island Lighting Company files this brief in opposition to the June 20, 1988 brief of the Intervenors in this case. Those Intervenors -- Suffolk County, the State of New York, and the Town of Southampton -- appeal from the Atomic Safety and Licensing Board's May 9, 1988 Partial Initial Decision on Suitability of Reception Centers, LBP-88-13, 27 NRC ___ (1988) (hereinafter "PID"). For the reasons given in this brief, this Appeal Board should affirm the ASLB on each of the four matters raised on appeal.

The decision from which the Intervenors appeal is an admirable one. It is 109 pages long. It is comprehensive and detailed. It was written by a Board whose members are veterans of other emergency planning proceedings and have presided over several hearings in this case over the past five years.

The process leading up to the decision was thorough. Pretrial proceedings lasted six months, during which 32 people were deposed. The hearing began on June 30, 1987 and continued through eleven hearing days ending on July 30, 1987, when the record was closed. Twenty-six witnesses testified. The record underlying the decision has some 1,061 pages of written testimony, including attachments, and 1,847 pages of

transcript. One hundred exhibits were presented. Most of the witnesses were cross-examined at considerable length, and thus the ASLB had an opportunity to form its own judgments about the witnesses' expertise and candor.

Despite this thoroughness, on appeal the Intervenors assert that the ASLB made four "errors of law or fact." Suffolk County, State of New York and Town of Southampton Brief on Appeal of the Licensing Board's May 9, 1988 Partial Initial Decision on Suitability of Reception Centers (June 20, 1988) (hereinafter "Int. Br.") at 3-4. First, they claim that in deciding the 20 percent planning basis issue, the ASLB applied the wrong standard of proof and improperly relied on sheltering data. Second, they argue that the ASLB should not have "ruled in LILCO's favor without reviewing any FEMA findings . . . ." Id. at 4. Third, they contend that the ASLB did not articulate its reasons for rejecting the County's local unwanted land use ("LULU") argument. And, fourth, they complain that the ASLB improperly struck from New York State's testimony one question and answer about LILCO's registration procedure.

Thus, after a lengthy and elaborate hearing process the Intervenors claim four errors that are, except for the 20 percent issue, paltry: the ASLB failed to articulate its reasoning in enough detail on one minor issue; the Board struck 144 words of testimony on registration procedures; the Board did not have FEMA "findings" to consider. These alleged "errors" go not so much to the suitability of the reception centers as to minor criticisms of the agency's process. Moreover, all four claims of error (even including the 20 percent issue) do not really argue that a preponderance of the evidence supports the Intervenors. But the Intervenors nevertheless seek remand of the "entire proceeding" because each of the four errors "taints the entire decision." Int. Br. at 13; see also id. at 4-5.

To remand the "entire" proceeding would be uncalled for even if the Intervenors prevailed entirely, because many of the issues litigated below are not raised on appeal.

For example, the issue of whether LILCO's monitoring and decontamination technique is adequate is no longer in issue. Moreover, the capacities of the three reception centers and the roads leading to them have been fully litigated.

In fact, no remand at all is called for, because the Intervenors are wrong as to all four of their claims of error, as will now be demonstrated. This brief is organized as follows:

Part I -- The 20 percent planning basis

Part II -- The absence of FEMA "findings"

Part III -- The "LULU" (local unwanted land use) issue

Part IV -- New York State's stricken testimony on registering uncontaminated persons

ARGUMENT

I. The ASLB Correctly Decided the 20 Percent Planning Basis Issue

Of the four issues on appeal, only the 20 percent issue, in LILCO's view, is worth even a second glance. The substantive issue here is whether LILCO is required to have resources to monitor within about 12 hours 100 percent of the EPZ or only 20 percent. The requirement LILCO must meet is that "[a] range of protective actions have been developed for the plume exposure pathway EPZ for . . . the public." 10 C.F.R. § 50.47(b)(10).

What this means in terms of resources that must be provided is a question to be resolved by the evidence. See Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-847, 24 NRC 412 (1986), review declined Mar. 12, 1987. And the evidence strongly supports the 20 percent standard. The Intervenors do not argue otherwise in their brief. Instead, they quarrel with the Licensing Board's reasoning and choice of words.

The Intervenors challenge the ASLB's decision on the 20 percent planning basis on four grounds. First, they complain that the ASLB did not apply a high enough standard of proof to resolve the issue -- that the ASLB evaluated the evidence using a lesser standard of "defensibility" instead of a "preponderance of the evidence." Int. Br. at 16-17, 23-24. Second, they argue that FEMA's guidance is wrong because it is based on "sheltering" data. Id. at 17-22. Third, they claim that the "burden of proof" required the Board to disregard the NRC Staff's and FEMA's testimony and to look at LILCO's alone. Id. at 22-24. Fourth, they claim that the ASLB misinterpreted the Commission's decision in the San Onofre case and the Frye Board's decision on the adequacy of LILCO's 1986 exercise. Id. at 24-28.

The Intervenors are wrong on all four counts.

A. The Board Correctly Applied the "Preponderance of the Evidence" Standard in Reaching Its Decision

The Intervenors' first argument is that the Licensing Board used a "defensibility" standard instead of a "preponderance of the evidence." In fact, the Board found in LILCO's favor by at least a preponderance of the evidence. The Intervenors' argument depends on taking the single word "defensible" out of context and ignoring what the Board actually did with the evidence.

The parties agree that "preponderance of the evidence" is the correct standard. "Licensing boards are bound to base their decisions on what they judge to be the preponderance of the evidence adduced in the record." Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 405 n.19 (1976); see also Tennessee Valley Authority (Hartsville Nuclear Plant, Units 1A, 2A, 1B and 2B), ALAB-463, 7 NRC 341, 360 (1978) ("Absent some special statutory standard of proof, factual issues decided by this or any other Federal agency are determined by a preponderence of the evidence."). The Appeal Board in the Indian Point proceeding described the standard this way:

> The issues must be resolved on the basis of the evidentiary record developed in the proceeding conducted by the Licensing Board. With regard to whether an applicant has sustained its burden of proof on contested issues, the quantum of proof which must be adduced is a preponderance of the evidence. Whether or not the record evidence on contested issues satisfies the preponderance rule is a judgmental process which is often of the highest order and complexity. Especially is this so where, as here, there is a voluminous record, with conflicting expert opinions, and a paucity of data or experience which would either inspire or not inspire confidence in such opinions.

Consolidated Edison Co. of New York, Inc. (Indian Point Station, Unit No. 2), ALAB-188, 7 AEC 323, 356-57 (1974).

The dispute is whether the Licensing Board applied this standard. Unfortunately, the Board did not recite the magic words "preponderance of the evidence" that would have eliminated the dispute. But it is evident from the face of the PID that the Board did consider all parties' evidence, weigh it, and decide that the evidence for the 20 percent standard was weightier.

The ASLB carefully discussed all the parties' testimony, PID at 8-24, and gave the parties' positions and "the portions of the record which support them careful consideration," id. at 24. The Board first discussed the County's testimony, which was largely based on opinion polls conducted by Dr. Stephen Cole about what people said they would do in a hypothetical Shoreham emergency. The Board concluded that predictions based on opinion polls are unreliable, consistent with its 1984 decision on the evacuation shadow issue. Id. at 24 (citing Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-85-12, 21 NRC 644, 667 (1985)). In that earlier decision, the ASLB determined that surveys like Dr. Cole's do not have "literal predictive value."[1/] 21 NRC at 667. The Board confirmed this finding in the reception center

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1/ As if to support the Board's conclusion, the County submitted a poll showing that 1.3 million people would want to be monitored but then argued that NUREG-0654 must

(footnote continued)

PID:

> We see, at this juncture, no immediate way to predict the behavior, and we are still convinced, as we were in our earlier PID, that Dr. Cole's polling techniques tell only what the situation is now, not what it will be at some undetermined future date.

PID at 24.

Having concluded that "no firm predictions are possible," the ASLB accepted "the opinions of those who deal professionally with the business of emergency planning." Id. The NRC, FEMA, LILCO, and New York State presented testimony of emergency planners on what the appropriate planning basis for monitoring evacuees should be. In agreement with LILCO, FEMA, and the NRC, the Licensing Board concluded that "provision of monitoring capacity for 20% or more of the EPZ population within 12 hours will satisfy the guidance expressed in NUREG-0654, II.J.12." PID at 25-26. The ASLB gave "great weight to the policies of FEMA, and, for that reason, to the guidance expressed in the Krimm Memorandum," which gives FEMA's reason for the 20 percent figure. PID at 24-25. Twice in its decision the Board noted that the NRC Staff's testimony also supported the 20 percent planning basis. PID at 25, 26 n. 11. In addition, LILCO's testimony supports the 20 percent. Id. at 8-12.

On the other hand, the ASLB gave little weight to the testimony of New York State's witnesses. Id. at 25. The State witnesses argued that 100 percent rather than 20 percent is correct because they believed that FEMA required 100 percent (which FEMA denies, see Tr. 18,446-49 (Husar, Keller, Baldwin)) and because 100 percent is

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(footnote continued)

be interpreted to require monitoring for at least 100 percent of the EPZ, or people -- a reduction factor of about eight. See Suffolk County, State of New Y[illegible] Town of Southampton Proposed Findings of Fact and Conclusions of Law on [illegible] Suitability of Reception Centers (Sept. 14, 1987) (hereinafter "I.F.") at 59, 78-79. Their rationale was that "the survey was not that precise." I.F. at 78.

"prudent." Tr. 18,166-67, 18,148-49 (Papile, Czech), 18,251 (Baranski). The State provided the Board with no other evidence to counter the evidence of LILCO, FEMA, and the NRC Staff. In fact, on cross-examination it became apparent that counties in New York State within the 10-mile EPZ's of other operating nuclear power plants cannot meet the 100 percent standard the State would apply to LILCO. Tr. 18,371, 18,379, 18,472, 18,481-83 (Keller), Tr. 18,247 (Baranski), 18,252 (Czech). Moreover, the State does not plan for a "shadow phenomenon" outside the EPZ's at other plants. Tr. 18,173 (Czech).

In short, the Board's decision is consistent with the preponderance of the evidence standard. The Intervenors' only hope of sustaining their argument that the ASLB did not apply the preponderance of the evidence standard is to persuade the Appeal Board to ignore the record and the ASLB's discussion of the evidence. To that end the Intervenors urge the Appeal Board to focus solely on one word in the decision -- "defensible." Int. Br. at 23. They argue that since the Licensing Board said the 20 percent figure was "defensible," it must have evaluated the evidence based on that standard. But this argument misses the true import of the ASLB's decision. If the Board had applied a standard of "defensibility" in the way the Intervenors construe it, the ASLB would have considered only LILCO's testimony alone. The ASLB's decision itself disproves that notion.

B. The 20 Percent Planning Basis is Supported by a Preponderance of the Evidence

Besides the argument about the word "defensible," the Intervenors argue that the FEMA guidance on which the ASLB relied should be disregarded because it relies on "sheltering" data. But in fact the FEMA guidance is a perfectly sound way to estimate the planning basis. Moreover, the result of FEMA's analysis is consistent with other, independent analyses.

As noted above, the Board did give substantial weight to FEMA policy, as embodied in a memorandum by Richard W. Krimm of FEMA dated December 24, 1985, and to the expertise of FEMA's emergency planners. The Krimm Memorandum is "interpretive guidance" prepared by FEMA's Policy Development Branch and is FEMA's national policy. Tr. 18,314 (Husar), Tr. 18,440 (Husar), 18,346, 18,465 (Keller). It is based on FEMA's review of "[p]revious experience gathered on evacuation responses to a variety of natural and technological emergencies." LILCO Ex. 1 (Crocker et al. direct testimony), Att. L; FEMA Ex. 1. The NRC Staff supports the FEMA guidance as an appropriate interpretation of NUREG-0654 Criterion J.12. Staff Ex. 5 (Kantor direct testimony) at 6.

It is acceptable for FEMA to use the historical record in the manner it did. FEMA, like the ASLB, does not consider Suffolk County's polls to be a reliable data base. Tr. 18,324 (Keller). Therefore FEMA had to turn elsewhere for data.

FEMA started with experience in past emergencies. The Intervenors' complaint with this process is that there has never been in this country a radiological emergency that required large numbers of people to be monitored. FEMA did take into account, however, Three Mile Island, Tr. 19,192 (Kantor); a FEMA witness testified that to the extent that the experience at TMI bears on the situation today, it suports the 20 percent standard. Tr. 18,471 (Keller); see also Suffolk County Ex. 33. LILCO's evidence also drew on the TMI experience. It showed that after TMI only a small percentage (less than three percent) of the population asked to be monitored. (Only 736 whole-body counts and 200 thyroid counts were done, whereas some 35,000 people lived within five miles of the plant and some 144,000 people evacuated.) LILCO Ex. 1 (Crocker et al. direct testimony) at 15.

More important, FEMA explicitly increased the number of people expected, based on past experience, in order to account for the need to monitor but not to shelter

some people. Since there was no experience by which to estimate this factor, professional judgment was required. Tr. 19,189 (Kantor); see also Tr. 17,744 (Dreikorn), 18,166 (Papile). Research shows that anywhere from 3 to 20 percent of the evacuees arrived at relocation centers or shelters, FEMA Ex. 1, though a FEMA witness thought that 3-15 percent was more representative, Tr. 18,322 (Keller). Accordingly, FEMA chose the upper end of the 3 to 20 percent range as the planning basis. LILCO Ex. 1 (Crocker et al. direct testimony), Att. L; FEMA Ex. 1, see also Tr. 18,355-59 (Husar). As the ASLB noted in the PID, "those figures were adjusted upward in a manner consistent with the best judgment of an emergency planning professional." PID at 25.

Moreover, as the ASLB recognized, the 20 percent FEMA judgment was consistent "with the result of the Staff's analysis of the population fraction at risk . . . ." Id. The Staff's witness, Lewis Hulman, calculated the size of a straight-line Gaussian plume in each of sixteen 22½-degree sectors around the compass and determined the number of people that would be in the "footprint" of each such plume, including in every case people who live in the two-mile radius around the plant. He then calculated the percentage of the time the plume would touch various percentages of the EPZ population. Staff Ex. 5 at 5-8 (Hulman direct testimony); Tr. 19,224-25 (Hulman). In each of the three scenarios he analyzed, the percentage of people in the EPZ with the potential to be exposed to the calculated plumes would be less than 20 percent most (about 90 percent) of the time.

The Intervenors offhandedly dismiss the Staff's evidence, saying that the ASLB chose not to resolve the validity or significance of the evidence because "that analysis merely addresses the population fraction 'at risk.' PID at 25. In other words, the Hulman analysis addresses how many people might need monitoring, not how many would seek monitoring." Int. Br. at 16 n. 11. Thus, at the same time that the Intervenors argue that LILCO should have submitted an "independent analysis," they argue that

the Staff's PRA analysis is irrelevant. Moreover, their argument that the Board did not rely on the Staff's evidence is not enough to sustain their appeal. A party prevailing on the trial level may defend its favorable result on any ground that is supported by the record. Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-832, 23 NRC 135, 141 (1986). The Staff's analysis provides an independent record foundation for the 20 percent planning basis.

The Intervenors imply that the "independent analysis" LILCO should have conducted is an opinion poll like that done by Suffolk County. This view is unfounded, given the Licensing Board's rejection of survey data as unreliable. The County's polls are a (vain) attempt to predict the number of people who will want to be monitored after an unspecified accident in the uncertain future. But the determination of a planning basis is not a prediction. See Tr. 18,357 (Husar). The proper analysis looks not at a single accident but at a "spectrum" of accidents. See NUREG-0396 at 4-5, 7-8; Tr. 18,368-69 (Keller). The point is to determine what level of dedicated resources will provide an adequate basis that can be expanded if necessary in extreme cases. See Tr. 18,357 (Husar), 18,369 (Keller), 19,202-03 (Kantor).

LILCO, FEMA, and the NRC Staff emphasized that what is important is that there be a "planning basis" of detailed planning for a portion of the EPZ population, with the capability to expand the response if necessary. NRC Staff Ex. 5 (Kantor direct testimony) at 3-5, Tr. 18,369, 18,374-75 (Keller), 18,357 (Husar), 19,202-03, 19,222 (Kantor), 17,744 (Dreikorn), 17,481-83 (Crocker), 17,485-86 (Donaldson). This explains why the 12-hour period is not to be regarded as a deadline in an emergency but rather as a criterion to delimit the planning problem. See Tr. 19,203, 19,218-19, 19,234, 19,225-26 (Kantor), 18,390-91 (Keller), 17,477-78 (Watts). Twenty percent of the EPZ population provides a substantial planning basis. Tr. 19,221 (Kantor), 18,357-58 (Husar).

This concept is squarely consistent with the philosophy of federal emergency planning rules. For example, the Commission in San Onofre stated: "The emphasis is on prudent risk reduction measures. The regulation does not require dedication of resources to handle every possible accident that can be imagined. The concept of the regulation is that there should be core planning with sufficient planning flexibility to develop a reasonable ad hoc response to those very serious low probability accidents which could affect the general public." Southern California Edison Co. (San Onofre Nuclear Generation Station, Units 2 and 3), CLI-83-10, 17 NRC 528, 533 (1983) (emphasis in original), vacated on other grounds, GUARD v. NRC, 753 F.2d 1144 (D.C. Cir. 1985). NUREG-0396 recommends that "[n]o special local decontamination provisions for the general public (e.g., blankets, changes of clothing, food, special showers)" and no special decontamination equipment for property and equipment need be provided. NUREG-0396 at 14-15 (emphasis in original); LILCO Ex. 1 (Crocker et al. direct testimony) at 4-5. Similarly, the NRC requires detailed planning for only a 10-mile plume exposure EPZ, while at the same time recognizing that an ad hoc expansion of response efforts beyond this distance might be required. 45 Fed. Reg. 55,402, 55,406 col. 2 (Aug. 19, 1980). Likewise, when the NRC promulgated the regulation that requires no advance planning offsite for operation up to five percent power, it recognized that some offsite response might be required even at this low power level but reasoned that an ad hoc response would be adequate. 47 Fed. Reg. 30,232-33 (July 13, 1982) (preamble to low-power emergency planning rule); see also 46 Fed. Reg. 61,132, 61,133 col. 1 (Dec. 15, 1981) (notice of proposed rulemaking).

The Intervenors provided no reliable evidence to counter FEMA's, the Staff's, or LILCO's testimony on the adequacy of the 20 percent guidance.[2/] Indeed, the State

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2/ In a feeble attempt to show that LILCO's planning basis is insufficient, the Intervenors also argue that planning for a higher percentage of the EPZ population should be

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practically supported it. For example, the State witnesses simply couldn't say whether they would follow the Krimm Memorandum if it were published more formally. Tr. 18,159-62 (Papile). And they support, apparently, the concept of having a planning basis that can be expanded in extreme cases. Tr. 18,238-39 (Papile).

The Intervenors suggest that the Licensing Board in LBP-86-36 and the Appeal Board in ALAB-855 precluded the use of "sheltering" data in developing a planning basis. Int. Br. at 17-19. They claim that "the Licensing Board did the very thing it could not do -- it relied on sheltering data to reach a conclusion about monitoring behavior." Int. Br. at 20. Neither Board, however, went nearly so far as to forbid resort to the historical record, particularly if that record is interpreted with professional judgment.

The Intervenors point out that the Appeal Board thought that the factual claim that a 20 percent planning basis would cover both sheltering and monitoring needs was "of dubious validity." Int. Br. at 19, citing ALAB-855, 24 NRC at 801. But the Appeal Board did not have before it the factual record, including the testimony of FEMA and the NRC Staff, that has now been compiled. Most important, it did not have before it the Staff's and FEMA's explanation of the 20 percent rationale.[3/]

(footnote continued)

required "in light of the fact that during the February 1986 exercise scenario, 95,000 people were advised to report to reception centers for monitoring." Int. Br. at 23 n.17. The fact that an exercise scenario calls for almost 60 percent of the EPZ population to be monitored does not undercut the 20 percent planning basis, because the Krimm Memorandum recognizes that in some highly unlikely accidents more than 20 percent might need to be monitored. The 1986 exercise scenario was developed, not to prove that a higher planning basis is needed, but to test LILCO's ability to respond to an emergency that required it to implement its procedures for monitoring a larger percentage of the EPZ population.

3/ The Appeal Board also did not have before it LILCO's commitment to more than double the 20 percent planning basis to some 46.6 per cent. Since ALAB-855, LILCO has increased the number of monitors it alone provides from 180 to 293. Tr. 17,781-82 (Dreikorn).

C. LILCO Met Its Burden of Proof

Other than the argument about the word "defensible" and the attack on the FEMA guidance, the Intervenors' only remaining argument about the evidence supporting the 20 percent standard is the frivolous one that LILCO is not permitted to rely on NRC Staff or FEMA evidence. The way the Intervenors put it is that LILCO failed to establish its burden of proof. What they apparently mean is that LILCO is required to prove, by its own independent analysis alone, that FEMA policy as set forth in the Krimm Memorandum is correct. See Int. Br. at 22-23.

The Intervenors' misconstrue LILCO's burden of proof and, as a result, the standard of proof the Licensing Board must apply in making its findings. The ASLB's findings are not determined by which party sponsors the evidence. Rather, the ASLB must decide based upon a preponderance of all the evidence presented during the course of the proceeding. As the regulations provide, an initial decision will be based "on the whole record and supported by reliable, probative, and substantial evidence . . . . " 10 C.F.R. § 2.760(a). Similarly, the Administrative Procedure Act § 706 provides that a reviewing court must review the "whole record" or those parts of it cited by a party.

LILCO's burden of proof is to show that it complies with the regulation, 10 CFR § 50.47(b)(10). LILCO could meet this burden either by satisfying federal guidance or by other acceptable means.[4/] The federal guidance is NUREG-0654 II.J.12 and the Krimm Memorandum, LILCO Ex. 1 (Crocker et al. direct testimony), Att. L.

4/ NUREG-0654 serves as guidance for the NRC Staff's review and does not prescribe regulatory requirements, unlike regulations such as 10 C.F.R. § 50.47. Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 618, 710 (1985).

NRC Staff regulatory guides, including NUREG-0654, are entitled to considerable prima facie weight. Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), CLI-74-40, 8 AEC 809, 811, clarified as to other matters, 8 AEC 826 (1974); Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), ALAB-698, 16 NRC 1290, 1298-99 (1982).

To meet its burden, LILCO put the Krimm Memorandum guidance into evidence. Tr. 17,421. FEMA did also. Tr. 18,203, 18,263; see also FEMA Ex. 1. This was enough to establish prima facie the 20 percent interpretation of the rule.

But LILCO went further and offered its own analyses of why the 20 percent criterion is adequate. LILCO Ex. 1 (Crocker et al. direct testimony) at 7-23. First, LILCO presented one of the originators of NUREG-0654 to testify that the intention of the original draftsmen was in keeping with the 20 percent standard. Id. at 8-9.[5/] Second, LILCO witnesses testified that 20 percent is reasonable based on their experience from drills and exercises, on the nature of a radiological plume, and on the way in which protective action recommendations are made. Id. at 9-12. Third, LILCO witnesses testified as to what conclusions can be drawn about monitoring-seeking behavior from the experience at past accidents such as Three Mile Island. See id. at 14-23.

Having both submitted the federal guidance into evidence and independently supported its soundness, LILCO then demonstrated that LILCO meets -- indeed that it exceeds -- the 20 percent guidance. LILCO demonstrated that it could monitor 46.6 percent of EPZ population in about a 12-hour period using only its own resources. LILCO Ex. 1 (Crocker et al. direct testimony) at 42-43; id., Att. T, at 26-27; LILCO Ex. 26 (Lieberman rebuttal testimony) at 5, Tr. 17,728 (Watts), 17,744 (Dreikorn).[6/] It went

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5/ This was the testimony of Dale Donaldson, who was part of a three-man team responsible for drafting the "precursor" to NUREG-0654. LILCO Ex. 1 (Crocker et al. direct testimony) at 8, Tr. 19,232-33 (Kantor). According to Mr. Donaldson, the authors of the precursor document did not have a specific number of people in mind but believed "that only a small percentage of the EPZ would require monitoring." LILCO Ex. 1 (Crocker et al. direct testimony) at 8; see also Tr. 17,453-55 (Donaldson). Mr. Donaldson also testified, based on his experience with the NRC observing drills and exercises and responding to and investigating the TMI accident, that clear precoordination of responsibilities for monitoring is more important than extreme detail; that is, monitoring can be effectively implemented as long as the basic framework exists. LILCO Ex. 1 (Crocker et al. direct testimony) at 19, Tr. 17,457 (Donaldson).

6/ For "highly improbable radiological releases" where more than 20 percent of the population could be expected to need monitoring, the Krimm Memorandum says that it

(footnote continued)

further still and testified to a variety of back-up plans to serve larger numbers. LILCO Ex. 1 (Crocker et al. direct testimony) at 52-55, 59.

Once LILCO put this evidence into the record, the burden shifted to the Intervenors to rebut either the 20 percent criterion or LILCO's evidence that it could meet the 20 percent criterion. The Intervenors were unable to do either. Therefore, LILCO successfully met its burden.

The Intervenors' peculiar theory that only the applicant's evidence counts toward meeting its burden has no support in statute, regulation, or caselaw. It is common practice in this agency for the judges to rely on NRC Staff and FEMA evidence to support results urged by the applicant. Moreover, cross-examination is permitted. If an applicant had to rely on only its own evidence, there would be no point in allowing applicants to cross-examine and no point in most cases in having testimony from the NRC Staff.

Moreover, the separating of the evidence into watertight compartments, as the Intervenors suggest, is not the way to get to the truth where, as in this case, various pieces of evidence complement and mutually support one another. A good example is the evidence on the "legislative history" of NUREG-0654. LILCO could not sponsor testimony by the draftsmen of NUREG-0654, many of whom still work for the federal

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is expected that "ad hoc response measures, supplemented, if needed, by Federal and private sector resources" will be developed and implemented. LILCO Ex 1 (Crocker et al. direct testimony), Att. L, at 2.

LILCO did not, however, rest on the "ad hoc" provision of the guidance. Rather, it went further and presented evidence of how it would cope with much larger numbers of people than 20 percent of the EPZ. LILCO's procedures for responding to such "highly improbable releases" go beyond ad hoc measures and provide for a planned expansion of its monitoring capabilities, first using its own resources and then using other federal, private and local and State government resources to assist in monitoring the arriving public. LILCO Ex. 1 (Crocker et al. direct testimony) at 52-54, Tr. 17,666 (Linnemann), 17,725-27 (Crocker, Linnemann).

government. But LILCO did as well as it could from the private sector by presenting Mr. Donaldson, a former NRC Staffer whose work predated NUREG-0654. See Tr. 19,232-33 (Kantor). As it happened, the NRC Staff presented testimony that was independent of LILCO's but added to a chain of evidence showing how NUREG-0654 evolved. See Staff Ex. 5 (Kantor direct testimony), Tr. 19,214-15 (Kantor).

Similarly, the independent analyses by LILCO in its written testimony at 7-23 (based on historical evidence and other considerations), by FEMA (based on historical evidence and professional judgment), and by the NRC Staff (based on a probabalistic risk analysis and on the "considerations that led to the development of Criterion J.12") all give a consistent result. This combination of evidence from several parties provides a very high level of confidence that the result is sound.

In short, even if it were true that an ASLB must ignore other parties' evidence in determining whether the applicant has met its burden of proof, LILCO has met its burden by its own evidence. Since the NRC must look at all the evidence, including (of course) its own Staff's and FEMA's, it is that much more true that the burden of proof has been met.

D. The Board Correctly Applied NRC Precedent

Turning away from the evidence, the Intervenors argue that the ASLB "misconstrued NRC precedents which suggest that a planning basis larger than 20 percent is required." Int. Br. at 24. In particular, they contend that the ASLB failed to give the San Onofre and the Frye Board decisions sufficient consideration. Id. The Intervenors' arguments, however, are not supported by the cases they rely on or by the doctrine of stare decisis. The Board properly addressed the significance of the San Onofre and Frye Board decisions and concluded that they were not dispositive of the issue at hand.

1. The San Onofre Dictum Does Not Change the Plain Meaning of FEMA Guidance

The Intervenors argue that the 20 percent issue is not an evidentiary question at all but a legal or policy question that was already decided before the hearing by the San Onofre case. Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), CLI-83-10, 17 NRC 528, 536 n.12 (1983), vacated and remanded, GUARD v. NRC, 753 F.2d 1144 (D.C. Cir. 1985). Intervenors urge the Appeal Board not only to rule that the San Onofre dictum has the weight of precedent but also to rule that it has greater weight than the plain meaning of the words the dictum supposedly interprets.

The Commission in San Onofre obviously did not intend its words to supersede NUREG-0654. The Commission's paraphrase of II.J.12 in San Onofre is significantly abbreviated. Criterion II.J.12 itself reads as follows:

> Each organization shall describe the means for registering and monitoring of evacuees at relocation centers in host areas. The personnel and equipment available should be capable of monitoring within about a 12-hour period all residents and transients in the plume exposure EPZ arriving at relocation centers.

NUREG-0654 II.J.12. The Commission's paraphrase, on the other hand, says simply that the criterion "requires relocation centers capable of registering and monitoring all residents and transients in the plume exposure EPZ . . . ." San Onofre, CLI-83-10, 17 NRC at 536 n.12. Thus the paraphrase leaves out the limiting phase "arriving at relocation centers" and leaves out the 12-hour period.

The Intervenors have admitted that the footnote in San Onofre "arguably constitutes dicta . . . ." Suffolk County, State of New York, and Town of Southampton Proposed Findings of Facts and Conclusions of Law on the Suitability of Reception Centers (September 14, 1987) (hereinafter "I.F.") at 27-28. And the dictum is in a vacated decision to boot. But they nevertheless argue that the dictum requires a planning basis of 100 percent of the EPZ population.

The ASLB declined to give the dictum that effect:

> We do indeed regard the statement as obiter dicta. We believe that the Commission was merely restating in abridged form the guidance offered in the NUREG document and that the words of the document itself, "all residents and transients in the EPZ arriving at relocation centers," properly govern.

PID at 13. The Board is correct. Caselaw is binding only under the doctrine of stare decisis, which is limited to actual determinations of litigated and necessarily decided questions. It is not applicable to dicta or obiter dicta. See Black's Law Dictionary 1261 ("stare decisis") (5th ed. 1979). The issue of whether 100 percent or something less of the EPZ has to be monitored was not at issue in San Onofre.

The "plain meaning rule" does not help the Intervenors. This rule, which applies to statutes, not case decisions, precludes resorting to legislative history where the language of the statute is clear and unambiguous. Caminetti v. United States, 242 U.S. 470 (1916). If the plain meaning rule is to apply at all, it should apply to the language of the guidance document itself, which specifies that "all residents and transients in the plume exposure EPZ arriving at the relocation centers" should be monitorable "within about a 12-hour period . . . ." NUREG-0654 II.J.12. Therefore, the ASLB correctly refused to look to the Commission's dictum as binding precedent where "the words of the document itself, 'all residents and transients in the EPZ arriving at relocation centers,' properly govern." PID at 13.

If the Appeal Board were to accept Intervenors' "plain meaning" argument and apply it to the Commission's dictum, LILCO would be required only to demonstrate the ability to monitor all residents and transients in the 10-mile EPZ in whatever time necessary, because the Commission's dictum also leaves out the phrase "within about a 12-hour period" in criterion J.12. Given this interpretation, no one argues that LILCO cannot satisfy J.12. Indeed, this interpretation renders the dictum meaningless, since even a single person could monitor the entire EPZ, given unlimited time.[7/]

7/ The plain meaning rule does not apply when it produces absurd results. District of Columbia National Bank v. District of Columbia, 348 F.2d 808, 810 (D.C. Cir. 1965).

If the NRC is to apply canons of statutory construction, a more appropriate one is the rule that statutory words are to be given meaning if at all possible.[8/] In this case the words "arriving at the relocation centers" must be given some meaning, and that meaning is obviously to limit "all residents and transients in the plume exposure EPZ" to some lesser number "arriving at reception centers." This alone tells us that a planning basis less than 100 percent was intended. (And this interpretation is supported by the testimony of LILCO's witness Donaldson and the NRC Staff's witness Kantor.) How much less is addressed by the evidence.

In short, the Intervenors argue that the most significant issue in this case, the 20 percent standard, is not an evidentiary issue but a legal one. But they have already lost that argument. The Appeal Board remanded this issue for an evidentiary hearing. Now that the evidentiary record has been made, it cannot be discarded and the issue decided instead by a footnote in San Onofre.

2. The Intervenors' Reliance on the Frye Decision is Misplaced

The ASLB correctly rejected the Intervenors' argument that the Frye Board's decision on the adequacy of LILCO's 1986 exercise supports their position that there will be a monitoring "shadow" in the event of a Shoreham emergency. Int. Br. at 26-28. While the Board cautioned that "confused or conflicting information (or instructions) could cause a monitoring shadow," the Board correctly reasoned that the planning basis issue must be decided based on an assumption that LILCO will be required to be able to communicate properly with the public before Shoreham is licensed. PID at 25-26.

8/ "It is an elementary rule of construction that effect must be given, if possible, to every word, clause and sentence of a statute." State v. Bartley, 39 Neb. 353, 58 N.W. 172 (1894); Central & Southern Motor Freight Tariff Ass'n v. United States, 757 F.2d 301 (D.C. Cir. 1985); United States v. Menasche, 348 U.S. 528 (1955); Office of Consumers Counsel, State of Ohio v. Federal Energy Regulatory Commission, 783 F.2d 206 (D.C. Cir. 1986); McGlynn v. New Jersey Public Broadcasting Authority, 88 N.J. 112, 439 A.2d 54 (1981); King v. Alaska State Housing Authority, 633 P.2d 256 (Alaska 1981).

The Board's reasoning is correct. In evaluating one part of a plan, the NRC must assume that the other parts will be properly implemented so that the part being reviewed is evaluated on its own merits. Moreover, the Frye decision found only that LILCO must improve its means of disseminating information to the public, not that the planning basis for monitoring evacuees should be altered to accomodate a continuing inadequacy.

The short of the matter is that any fundamental flaws found by the Frye Board and sustained in the pending appeal will have to be corrected or else LILCO will not get a license. If an accident occurs, the LILCO Plan will have been reviewed against the criteria of NUREG-0654 and approved.[9/] The Intervenors ask the Appeal Board to presume that Shoreham will be licensed to operate without an adequate plan, which is contrary to the regulations.

II. The Licensing Board Properly Ruled On the Issues Before It Notwithstanding the Absence of FEMA Findings

In their second claim of error the Intervenors argue that, in violation of 10 C.F.R. § 50.47(a)(2), the Licensing Board incorrectly "ruled in LILCO's favor without reviewing any FEMA findings on the suitability of LILCO's reception centers or monitoring procedures." Int. Br. at 4. The Intervenors complain that the Board's decision "wholly fails to address the absence of FEMA findings." Id. at 29-30. This "failure," the Intervenors conclude, "constitutes clear and reversible error" and requires remand of the entire proceeding. Id. at 30, 34.

9/ Cf. Louisiana Power & Light Co. (Waterford Steam Electric Station, Unit 3), LBP-82-100, 16 NRC 1550, 1562 (1982) (NRC Staff testified that if a plan complies with NUREG-0654 no additional measures need be taken to cope with public anxiety); Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-82-70, 16 NRC 756, 780 (1982) (NUREG-0654 presumes that citizens will act reasonably on the information provided them).

The Intervenors' argument is wrong in two respects. First, as a matter of law the Intervenors improperly interpret 10 C.F.R. § 50.47(a)(2) and incorrectly assert that a licensing board may not reach a decision absent FEMA findings. The Intervenors ignore Commission case law that squarely shows that a licensing board's evidentiary findings can be made independent of FEMA findings.

Second, as a matter of fact the Intervenors understate the extent of the testimony by FEMA witnesses in this case. Their bald claim is that it is "beyond dispute that there were no FEMA findings of any kind on which the Licensing Board could base any reasonable assurance finding concerning the suitability of LILCO's reception centers." Int. Br. at 32. If they mean to say that a Regional Assistance Committee ("RAC") review of LILCO's monitoring procedures had not been conducted at the time of the reception center hearing, they are correct. As shown below, however, the testimony of the FEMA witnesses, taken as a whole, establishes that FEMA witnesses did evaluate the salient features of LILCO's plans for reception centers and found them to be generally adequate.

A. NRC Regulations Do Not Require FEMA Findings Prior to a Licensing Board's Decision on Plan Adequacy

NRC regulations do not require FEMA findings as a condition precedent to deciding a case. Section 50.47(a)(2) of the emergency planning regulations states as follows:

> (2) The NRC will base its finding on a review of the Federal Emergency Management Agency (FEMA) findings and determinations as to whether State and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented, and on the NRC assessment as to whether the applicant's onsite emergency plans are adequate and whether there is reasonable assurance that they can be implemented. A FEMA finding will primarily be based on a review of the plans. Any other information already available to FEMA may be considered in assessing whether there is reasonable assurance that the plans can be implemented. In any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability.

10 C.F.R. § 50.47(a)(2). As the Intervenors interpret this provision, the Licensing Board was foreclosed from issuing any decision on the suitability of LILCO's reception centers due to what the Intervenors perceive to be the failure by FEMA to issue any findings, either interim or final, on the adequacy of the LILCO Plan. The ASLB's "finding of reasonable assurance," the Intervenors argue, "is based on a legally deficient record requiring reversal and remand for the purpose of considering FEMA findings -- whenever they may be issued." Int. Br. at 34.

The Intervenors' conclusion is incorrect. The relationship between a licensing board's evidentiary determinations and FEMA findings was discussed in Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), LBP-85-14, 21 NRC 1219 (1985), affirmed in part and reversed and remanded in part as to other matters, ALAB-836, 23 NRC 479 (1986). In Limerick the licensing board was faced with a situation in which "practically all of the various school district, municipal and county emergency plans . . . were awaiting formal adoption at the time of the hearing." 21 NRC at 1231. As a consequence, "FEMA had . . . not yet commenced its review of the draft plans received into evidence." Id.[10/] The licensing board noted that "[i]nasmuch as the FEMA witnesses had not yet had an opportunity to review the current draft plans received into evidence . . . they were simply not in a position in several instances to address the adequacy or implementability of several aspects of the plans challenged by the [intervenors'] contentions." Id.

Despite this situation, the board did not find it necessary to defer its ruling to await further FEMA review. Instead, after assessing the role of FEMA in NRC

10/ In the Limerick case, as in the LILCO reception centers proceeding, a RAC review of the earlier versions of the various plans was presented to NRC, and interim findings based on this RAC review were available to the Board at the time of the evidentiary hearing. As the board noted, however, the "plans received into evidence were far more advanced than those reviewed by FEMA." 21 NRC at 1231 n. 28.

licensing proceedings as set forth in an earlier version of the Memorandum of Understanding Between the NRC and FEMA ("MOU") and after distinguishing between FEMA "final" findings under 44 C.F.R. Part 350 and FEMA "interim" findings under the MOU, the board noted:

> Although FEMA interim findings are to be given the weight of a rebuttable presumption in an NRC licensing proceeding, the MOU recognizes that the most current interim findings may not be available at the time offsite emergency planning contentions are decided in an evidentiary hearing. Accordingly, the MOU further provides that FEMA routine support for the NRC licensing process "will include providing assessments of State and local plans," and that, "[t]o support its findings and determinations, FEMA will make expert witnesses available," inter alia, before NRC licensing boards.

21 NRC at 1229 (footnotes omitted). The board concluded that it was not required to await FEMA interim findings:

> [i]t is the responsibility of the NRC, taking due regard of the FEMA interim findings related to the offsite plan, to make the findings required under 10 C.F.R. § 50.47(a)(1) for issuance of a full-power operating license. A licensing board is limited to considering only those emergency planning issues in controversy among the parties. This Licensing Board is not required to await FEMA interim findings, but rather bases its own findings, as to any admitted contentions, on all of the evidence in determining whether reasonable assurance exists that offsite emergency plans are adequate and capable of being implemented. This includes the testimony of technical experts and consultants, governmental emergency planners and other officials, and any other individual with relevant, material and reliable testimony. This Board also has considered any approved emergency plans, the current version of draft plans in preparation for adoption, and other documents which bear upon the adequacy or implementability of those plans. Accordingly, our evidentiary findings are independent of the FEMA interim findings.

Id. (footnotes omitted) (emphasis added).

The Limerick licensing board noted that "offsite emergency planning findings are predictive rather than merely descriptive in nature" and found that the "incompleteness of the FEMA review at this time, including the receipt of any further planning documents necessary for that review, does not impede this Board's ability to make

the necessary predictive findings." 21 NRC at 1229-30, 1232 (footnote omitted). After considering the qualifications of the various witnesses, including those presented by FEMA, the board concluded that it could be "satisfied that there is ample evidence upon which to make sound predictive findings." Id. at 1232. The Intervenors make no attempt to reconcile their position with this precedent; they do not even mention it.

Moreover, the cases relied upon by the Intervenors as support for their argument are not inconsistent with Limerick. The three cases the Intervenors cite -- Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-781, 20 NRC 819 (1984); Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-776, 19 NRC 1373 (1984); and Cincinnati Gas and Electric Co. (Wm. H. Zimmer Nuclear Power Station, Unit No. 1), ALAB-727, 17 NRC 760 (1983) -- stand simply for the proposition that the Commission's emergency planning regulations do not require "final" FEMA findings on the adequacy of offsite response plans and that "preliminary FEMA reviews and interim findings presented by FEMA witnesses at licensing hearings are sufficient as long as such information permits the Licensing Board to conclude that offsite emergency preparedness provides 'reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.'" Diablo Canyon, 19 NRC 1373, 1379 (footnote omitted).

The cases also make it clear that testimony of FEMA witnesses during a hearing can constitute FEMA's findings on plan adequacy. See Diablo Canyon, 19 NRC 1373, 1381 ("Although the written report setting forth the interim FEMA findings that was introduced into evidence did not refer explicitly to the state plan because of the primacy of the county plan, [the FEMA witness's] testimony on the sufficiency of the state plan constitutes FEMA's finding on this subject" (footnote omitted)); see also Southern California Edison Co. (San Onofre Nuclear Generating Station, Units 2 and 3), ALAB-717, 17 NRC 346, 380 (1983) (If final FEMA findings are unavailable, the "clear import"

of the NRC/FEMA MOU is that "FEMA will provide Commission licensing proceedings, through FEMA witnesses, the benefit of its most current evaluation of State and local emergency planning. There is no hint of 'freezing' either FEMA or the licensing proceeding to earlier and likely outmoded information.")

In the Shoreham case FEMA did present testimony. And, as shown below, the Intervenors have wholly failed to demonstrate that the evidence presented by the FEMA witnesses was insufficient to allow the Board to reach its decision on the issues before it.

B. FEMA's Testimony Supports the ASLB's Conclusion that LERO Procedures are Adequate and Satisfy NRC Regulations

During the course of the eleven-day reception center proceeding, the Licensing Board heard evidence on nine issues, set forth at PID 4-5. Of the nine, only four were related to FEMA's review of the LILCO Plan itself:

(1) the adequacy of LILCO's proposed monitoring procedures;

(2) staffing requirements given LILCO's new reception centers proposal;

(3) the propriety of LILCO's proposal to transport all evacuees traveling on buses to the Hicksville reception center in light of LILCO's use of that facility as the LERO family relocation center; and

(4) whether LILCO's proposal to send evacuees to LILCO parking lots in Hicksville, Bellmore, and Roslyn could or would ever be implemented in a way to protect the public health and safety.

The Board, in rendering its decision, combined the above four issues into a single category that it called "monitoring related issues." PID at 5. The remaining five issues, involving the planning basis, traffic-related matters, and the distance to the reception centers, are not the types of issues that FEMA typically assesses when reviewing an offsite emergency plan. Accordingly, the RAC did not intend to issue comments on these five other issues because they traditionally do not do so; nor, in some instances (e.g., the traffic-related issues), did FEMA sponsor direct testimony. FEMA Ex. 2 (Baldwin et al. direct testimony) at 8-9, 15.[11/]

11/ The Intervenors' claim that a licensing board may not rule on an issue in the absence of a FEMA finding is disproved by the fact that, throughout the course of the

The Intervenors dismiss FEMA's testimony on the monitoring-related issues as being unhelpful to the ASLB, arguing that "FEMA's witnesses submitted virtually no substantive direct testimony . . . and that which was submitted took a noncommittal position until such time as an exercise occurs." Int. Br. at 32. The Intervenors complain that the ASLB "ignored the testimony of the FEMA witnesses that FEMA findings on the adequacy of the reception centers could only be made after a FEMA-graded exercise of proposed sites set up as reception centers." Id at 34. The Intervenors further note that the FEMA witnesses "had not reviewed LILCO's draft revisions, including LILCO's proposed new monitoring procedures," id. at 33, and allege that the "limited FEMA testimony elicited on cross-examination concerning LILCO's procedures . . . was largely irrelevant and most of its [sic] was negative to LILCO's case," id. at 33 n. 25.

The Intervenors' characterization of the FEMA testimony as having been scant, adverse to LILCO, and unhelpful to the ASLB is at odds with the record and with the ASLB's own stated rationale for its decision on the monitoring issues. Also without merit is the Intervenors' assertion that the ASLB's decision on reception center planning issues must be held in limbo until after a FEMA-graded exercise of LILCO's reception centers is conducted and evaluated.

(footnote continued)

Shoreham proceeding, the ASLB has often ruled in LILCO's favor on specific issues (such as the accuracy of LILCO's evacuation time estimates) for which there was neither a FEMA finding nor FEMA-sponsored testimony. See LILCO Reply to Intervenors' Proposed Findings on Reception Centers (Sept. 21, 1987) at 6-7 n.3 for a list of examples. Indeed, with respect to the snow removal issue, the ASLB decided in LILCO's favor contrary to a FEMA finding. See LBP-85-12, 21 NRC at 814-15. Moreover, with respect to the issue of evacaution time estimates it is standard practice to have the federal government's testimony sponsored by the NRC Staff (meaning Dr. Urbanik) instead of FEMA.

1. The ASLB Relied on FEMA Testimony in Ruling on the Monitoring-Related Issues

The Intervenors' claims to the contrary notwithstanding, it is clear from the record that the ASLB found the FEMA testimony useful. Moreover, the testimony elicited from FEMA on cross-examination indicated that LILCO's draft procedures were in fact sufficient to correct the problems identified in the Revision 8 RAC review. As the ASLB noted, the changes made to Revision 8 of the LILCO Plan to "accommodate adverse FEMA RAC comments" were admitted into evidence without objection. PID at 82.

Moreover, on April 28, 1988, the RAC issued its final report on Revision 9 of the LILCO Plan that incorporated LILCO's draft monitoring procedures as they were litigated during the reception centers hearing. The RAC approved LILCO's changes, underscoring the correctness of FEMA's testimony on those changes and the appropriateness of the ASLB's ruling. See RAC Review Comments on Rev. 9 of the LILCO Plan (Attachment 1 to this brief) at 65-70. It is true that NUREG-0654 Criterion J.12 is still rated "Inadequate" in the Revision 9 RAC Report; however, this is due entirely to an issue -- relocation center procedures for schoolchildren -- that is unrelated to any of the reception centers issues that were before the ASLB.[12/] (LILCO has corrected the school relocation center inadequacy in Revision 10, which is currently under review by the RAC.)

a. Adequacy of monitoring technique

With respect to LILCO's monitoring technique, LILCO's procedures calls for a scan of the head, shoulders, hands, and feet of each evacuee who arrives at the reception centers by private vehicle. LILCO's previous procedure (Revision 8) required that

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12/ Inadequacies in RAC Review Comments are stated in bold type. Recommendations for improvement are shown in italics and are not mandatory. For an explanation of this procedure, see page 2 of Attachment 2 to this brief.

only the hands and feet of each driver be monitored; this method did not receive a favorable RAC review. See PID at 92. But LILCO elicited from a FEMA witness testimony that LILCO's revised procedures to monitor all arriving evacuees (rather than just the driver) would satisfy that aspect of NUREG-0654 Criterion J.12. FEMA witness Keller said: "Clearly, the requirement for all arriving would be met if all arriving were monitored . . . ." Tr. 18,418 (Keller).

In light of this testimony by FEMA, the absence of a formal FEMA review of the revised procedures at the time of the hearing was not a hindrance to the Licensing Board. The ASLB was persuaded by FEMA testimony "that the Applicant's monitoring method would most likely detect contamination picked up in the most realistic scenarios . . . ." PID at 92-93. The ASLB would have preferred having FEMA's review in the record, but it nonetheless found that the "weight of the evidence indicates there is nothing unworkable or fundamentally wrong with its current monitoring proposal." PID at 93.

Similarly, in reaching its decision with respect to LILCO's estimated monitoring time, the ASLB was again able to draw upon FEMA testimony in addition to the evidence presented by LILCO:

> Actual monitoring time may vary and is not precisely known, however FEMA has graded an exercise based on 90 seconds per individual albeit without enthusiasm for the accuracy of that number. Tr. 18,420-21 (Keller). According to FEMA, high levels of radiation can be found by monitors in less than 90 seconds, while low levels may require 90 seconds or more to detect. Tr. 18,391-92, 18,420 (Keller). . . . LILCO's time trials show that about 100 seconds are required on an average, but when variation from the average is considered, the longest monitoring times are required to detect the least significant doses.

Id. at 93-94.

Regarding LILCO's procedures for evacuee registration at the reception centers, the ASLB noted that LILCO's recordkeeping procedure was "in keeping with FEMA testimony that detailed information for evacuees not contaminated is not needed. Tr. 18,274-76 (Keller)." PID at 89. In ruling in LILCO's favor on this issue, the ASLB emphasized that the "FEMA testimony, which we consider persuasive on this issue, is to the effect that detailed information on those not contaminated is not needed." Id. at 99 (emphasis added).

The ASLB also relied upon the FEMA witnesses' expertise in ruling on the adequacy of LILCO's decontamination methods, finding that the "testimony of LILCO's and FEMA's witnesses agree and is convincing that experience demonstrates the vast majority of people contaminated do not require a full shower, with simple washing effective to remove most contamination." Id. at 98. Also, the NRC Staff, which has expertise in matters of radiological monitoring, argued in its proposed findings (though not in testimony) that LILCO's monitoring method is adequate.

b. Staffing requirements

Whether there is adequate staffing is determined from a simple calculation that accounts for the expected number of evacuees (given the 20 percent planning basis), the estimated monitoring time per evacuee, and the regulatory requirement that the arriving evacuees be monitorable within about 12 hours. The ASLB, taking this calculation into account, ruled in LILCO's favor on the staffing issue, stating that it could "find no miscalculation in LILCO's figures" and that it could "conclude that both its staffing arrangements and monitoring method meet NRC's regulatory standards and criterion." Id. at 96.

The RAC review of Revision 8 had faulted LILCO's plan for assigning only 12 persons to monitor evacuees arriving by bus at the Hicksville reception center; this allowed for the monitoring within 12 hours of only about one-half of the expected bus

evacuees. See FEMA Ex. 2 (Baldwin et al. direct testimony) at 16-17. In response to the RAC criticism, LILCO doubled the number of bus evacuee monitors. PID at 97. Though FEMA had not reviewed the change prior to the hearing, FEMA testified that it corrected the RAC inadequacy. Tr. 18,416-17 (Keller) ("So, if you doubled the number of monitors that would get you below the 12 -- about 12 hours. So, that would appear to cover at least the first part of the concern which is addressed on Page 17.").

c. Use of Hicksville facility as LERO Family Relocation Center

Likewise the Board had ample evidence on which to base its ruling that there was no inherent problem with LILCO's plan to use the Hicksville facility as the LERO Family Relocation Center notwithstanding its use as a general population reception center for bus evacuees. The ASLB said that it could not "detect any difficulties with assigning bus passengers to the Hicksville Center, the facility programmed to accommodate LERO family members." PID at 97. Once again the ASLB was persuaded by FEMA's testimony. PID at 98. During cross-examination, a FEMA witness FEMA testified, based on a site visit to the Hicksville reception center, that he did not "see any reason why that [the co-location of facilities] should have any negative impact on the operation of the rest of the reception center function." Tr. 18,434 (Keller).

d. Whether LILCO's reception center proposal would protect public health and safety

In the PID, the ASLB's decision on the fourth enumerated issue was subsumed within its consideration of the other monitoring related issues generally. In light of its favorable ruling on the first three issues, the ASLB was able to conclude that LILCO's overall proposal was "adequate to meet the requirements of NRC's regulatory standards and criteria." PID at 101.

2. An Exercise is Not Required Prior to the ASLB's Ruling on Planning Issues

Intertwined with the Intervenors' allegation that the ASLB erred in ruling in the absence of FEMA "findings" is their claim that the ASLB "ignored" FEMA testimony that FEMA's ultimate evaluation of LILCO's reception centers will be made only following a graded exercise of the LILCO Plan. Int. Br. at 34. The gist of the Intervenors' argument is that the ASLB was obligated to postpone its decision -- if not the reception centers proceeding itself -- until after a FEMA-graded exercise had been conducted (and, presumably, formally assessed by FEMA).

The Intervenors, in making such an argument, appear to have confused the separate concepts of FEMA findings "based only on the review of currently available offsite plans" with FEMA findings on preparedness, which are "based on review of currently available plans and joint exercise results." NRC/FEMA Memorandum of Understanding, 50 Fed. Reg. 15486 (1985). This distinction is outlined in the April 18, 1985 Memorandum of Understanding between the NRC and FEMA.

The Intervenors' argument puts the cart before the horse. The reception centers proceeding is analogous to the hearings of 1983-84, based on which the ASLB made a determination on the adequacy of the LILCO Plan prior to a graded exercise.

As evidenced throughout the course of the Shoreham proceeding, planning litigation and exercise litigation, while interrelated, are conducted on two different tracks. LILCO's plan for reception centers will be assessed by FEMA in light of LERO's performance during the June 7-9, 1988 exercise. A full-power operating license will not issue for the Shoreham plant until, among other things, it has been determined that LILCO's plan (both as written and as exercised) provides reasonable assurance that the public health and safety will be protected. In light of this fundamental fact, the Intervenors' argument that the ASLB was precluded from issuing its decision on planning issues prior to FEMA's evaluation of exercise results cannot be credited.

III. The Licensing Board Adequately Articulated Its Reason for Deciding the Local Unwanted Land Use Portion of the Evacuation Shadow Issue

In their third claim of error, the Intervenors challenge the ASLB findings on the evacuation "shadow" issue, claiming that the Licensing Board "made no explicit findings" on the County's local unwanted land use ("LULU") argument "as to whether people who live around the reception centers would evacuate in the event of an emergency." Int. Br. at 35. Because of the ASLB's alleged failure to "articulate any basis for resolving the issue," the Intervenors contend that this aspect of the case must be remanded. Id. at 36.

The Intervenors construe the ASLB's findings too narrowly. In fact, the ASLB articulated its reason for rejecting the LULU argument when it stated its overall finding on the evacuation shadow issue. It found, as noted above, that people living around the reception centers "will behave predominantly in accordance with public information that is disseminated at the time an emergency happens" so long as "confused or conflicting information is [not] disseminated to the public . . . ." PID at 77.

This reasoning meets the standard of articulation expected of NRC licensing boards. According to NRC caselaw, licensing boards have a duty "to articulate in reasonable detail the basis for the course of action chosen." Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 41 (1977), quoting Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-104, 6 AEC 179 (1973). The Appeal Board, as well as all parties, must be able readily to comprehend the foundation for the board's rulings. Northern States Power Co., ALAB-104, 6 AEC at 179 n. 2. The "orderly functioning of the process of review" demands no less than that the grounds upon which the licensing board acted be "clearly disclosed and adequately sustained." Seabrook, ALAB-422, 6 NRC at 41.

There are limits, however, to a licensing board's obligation to explain its decision. For example, a licensing board decision need not refer specifically to every proposed finding proffered by the parties; a decision meets the requirements of the Administrative Procedure Act and the Commission's Rules of Practice if it "sufficiently informs a party of the disposition of its contentions." Seabrook, ALAB-422, 6 NRC at 41 (quoting Wisconsin Electric Power Co. (Point Beach Nuclear Plant, Unit 2), ALAB-78, 5 AEC 319, 321 (1972)). And a reviewing court is permitted to let a decision stand if the agency's path can reasonably be discerned, though of less than ideal clarity. Greater Boston Television Corp. v. FCC, 444 F.2d 841, 851 (D.C. Cir. 1970). But the reviewing court "must not be left to guess as to the agency's findings or reasons." Id.

As the Intervenors acknowledge, the LULU argument was presented by the County as one of two arguments about the effect of the location of LILCO's reception centers on an evacuation shadow. I.F. at 121; Int. Br. at 34-36. According to the LULU theory, there would be a "shadow" evacuation from around LILCO's reception centers because residents there would perceive the centers as dangerous. The second argument (which is not argued on appeal) concerned a predicted shadow evacuation of people living between the boundary of the 10-mile EPZ and the reception centers.

In the PID, the ASLB summarized the positions of all parties on both arguments under the heading "Shadow Evacuation Phenomenon." PID at 74-77. There it noted that it had treated the shadow evacuation issue extensively in its earlier partial initial decision. PID at 77 (citing LBP-85-12, 21 NRC at 655-71). In harmony with the earlier decision, the ASLB found once again that "a rational public will behave predominantly in accordance with public information that is disseminated at the time an emergency happens." PID at 77 (citing LBP-85-12, 21 NRC at 670). It cautioned, however, as it had in the earlier PID, "that a 'shadow' could develop if confused or conflicting information is disseminated to the public, . . ." PID at 77. The earlier decision on the

shadow phenomenon has passed Appeal Board review and the time for Commission review as well.

The Board expressly applied its reasoning to the argument about a shadow evacuation between the EPZ and the reception centers. Id. Although the Board did not repeat the same words with respect to the LULU argument, its reasoning applies to that as well. If clear and concise information is disseminated to the public, it can be expected that at most an insignificant number of people located outside the areas being evacuated will evacuate. This conclusion applies to people living between the boundaries of the 10-mile EPZ and the reception centers, as well as to those living around the reception centers.

Indeed, this is precisely what the evidence shows. LILCO witnesses Dr. Mileti and Dr. Lindell testified that only after the risk has been clearly defined by an authoritative source will people flee as they did at Love Canal and Times Beach. LILCO Ex. 1 (Crocker et al. direct testimony), at 23, cited at PID 76. If this were not true, one would have observed people migrating from the areas around Three Mile Island, train derailments involving toxic chemicals, etc. Id. This testimony was uncontradicted, even though County witness James Johnson has studied the same accidents or types of accidents. See Suffolk County Ex. 13 (Cole et al. direct testimony), Ex. 3.

In short, the Licensing Board decision meets the standard of clarity expected of it. The Appeal Board is not "left to guess as to the [ASLB's] findings or reasons." See Greater Boston, 444 F.2d at 841. Rather, the Licensing Board's path in reaching its conclusion on the LILCO argument can be discerned from its explanation about why it rejected the evacuation shadow issue.

Leaving aside the question of how detailed the written decision was, the ASLB's result was correct. The "LULU" theory was disproved by a preponderance of the evidence. There appears to be no empirical data to support it. What empirical evidence

there is, as noted above, does not suggest that people will automatically flee from a hazardous waste site. Also, the LULU theory applies to many other power plants in the country; reception centers are often located at schools or other public buildings that are located in populated areas. Tr. 18,365 (Keller), 17,762 (Dreikorn).

The LULU theory is simply another version of Suffolk County's "irrational man" theory, which holds that people are so frightened of radiation that they will flee from it no matter what the actual risk. The ASLB rejected this theory in 1985, LBP-85-12, 21 NRC 644, 669-71, and it has never found favor with any NRC board or, so far as LILCO knows, with any competent emergency planning professional. In the reception centers hearing LILCO presented substantial evidence to show that people do not react to radiation in the knee-jerk fashion predicted by Suffolk County. LILCO Ex. 1 (Crocker et al. direct testimony) at 14-22.

The evidence, both from the 1983-84 hearings and from the 1987 reception centers hearing, supports the conclusion that people will not evacuate needlessly if they are provided good information. There is therefore no basis for either reversal or remand of this issue.

IV. The Licensing Board Did Not Commit Error in Striking the State's Evidence on LERO's Registration Procedure

The Intervenors' last claim is that the ASLB's striking of the State's testimony on LERO's registration procedure was "clearly in error" because "[t]here was simply no basis to strike the State's testimony concerning registration" in light of the fact that the ASLB eventually made findings on the adequacy of LERO's registration procedure. Int. Br. at 38. The Intervenors urge the Appeal Board to reverse the ASLB's finding on LERO's registration procedure and remand it for further evidentiary hearings. Id.

In fact, there is no reason to disturb the ASLB's finding. The ASLB properly struck the State's testimony because it did not bear on health and safety and did not bear on compliance with NRC regulations. And even if the testimony were admissible, the ASLB's failure to admit it would be no more than harmless error.

A. LERO's Registration Procedure Is a Two-Step Process

LERO's procedure for registering evacuees is a two-step process for people found to be, or suspected of being, contaminated. At the initial monitoring phase, the traffic guide at each monitoring station records the license plate number and state, the number of occupants in each vehicle, and whether a "clean tag" has been issued or not. LILCO Ex. 1 (Crocker et al. direct testimony), Att. Q (OPIP 4.2.3) §§ 5.4.4 and 5.4.5(a) (Rev. 8); id., Att. P (OPIP 4.2.3) § 5.4.5 (2/20/87 Draft); Tr. 17,617-18, 17,704 (Dreikorn). If any contamination above an acceptable value (specified in the Plan) is found anywhere on the vehicle or on any of the passengers, everyone in the vehicle is sent to one of the decontamination trailers for further monitoring and, if necessary, decontamination. LILCO Ex. 1 (Crocker et al. direct testimony), at 40; Tr. 17,572 (Dreikorn); LILCO Ex. 1 (Crocker et al. direct testimony), Att. Q (OPIP 4.2.3) § 5.5. (Rev. 8).

The procedure is quite conservative. If anyone in the vehicle shows signs of contamination, everyone in the vehicle goes to the deontamination trailer for further monitoring. If there is any question whether the level of contamination is above acceptable values, all of the passengers in the vehicle go to one of the trailers. Tr. 17,586-87 (Dreikorn), 17,590 (Donaldson). In the trailer detailed information is collected about the evacuees, including where they live, where they were at the time of the accident, what area of the body was contaminated, what amount of contamination was found, and what decontamination methods were used. Tr. 17,619, 17,704 (Dreikorn); LILCO Ex. 1 (Crocker et al. direct testimony), Att. R (OPIP 3.9.2) (Rev. 8).

B. The Stricken Testimony Addressed People Who Are Not Contaminated

The New York Sate testimony stricken by the ASLB addressed only LERO's procedure for registering evacuees who are not contaminated. It did not concern LILCO's

method of recordkeeping at the decontamination trailers. The stricken testimony reads in its entirety as follows:

> 3. Record Keeping
>
> Q. Do you have any other concerns about LILCO's monitoring procedures?
>
> A. Yes. We have an additional concern about inadequate record keeping. Under the Draft materials, the Traffic Guide assigned to each monitoring station is instructed to record the license plate of each vehicle monitored at his station and the number of people in each car. This is not sufficient. In our opinion, it is important to record the names of all people who have been monitored, whether they are contaminated or not, and, if possible, to record their intended destination. We have found in our experience with other emergencies that it is important to record the identities of all people going through reception centers for purposes of reuniting families, providing data for medical follow-ups, and other such reasons. It is also useful to determine evacuees' destinations so that LILCO can respond appropriately to inquiries from anxious relatives or others regarding the whereabouts of particular evacuees.

State Ex. 1 (Papile et al. direct testimony), at 22-23. The Intervenors submitted no testimony on LILCO's more detailed recordkeeping procedure at the decontamination trailers.

C. The County's Testimony on LERO's Registration Procedure Was Properly Stricken

LILCO moved to strike the State's testimony for two reasons. First, LILCO argued that the issue of recordkeeping did not appear to be admitted by the ASLB's December 11, 1986 Memorandum and Order, which set forth the issues to be litigated. LILCO's Motion to Strike Testimony of Papile et al. (April 18, 1987) ("LILCO Motion") at 2; see also Memorandum and Order (Ruling on LILCO Motion to Reopen Record and Remand of Coliseum Issue)(Dec. 11, 1986). LILCO contended that the amount of data recorded was not material to the adequacy of LILCO's monitoring procedure, staffing requirements, or "whether the proposal to send evacuees to parking lots would ever be

implemented in a way to protect the public health and safety." LILCO Motion at 2. Second, LILCO argued that there was no basis in the regulations for requiring LILCO to record the identities of all persons going through the reception centers for the purposes stated in the State's testimony. Id. at 3.

In granting LILCO's motion, the Licensing Board said:

> The Board agrees with LILCO that the Papile panel testimony proposing the recording of the "identities of all people going through reception centers for purposes of reuniting families, providing data for medical follow-up, and other such reasons" does not materially relate to the matters at issue in this proceeding. Further, New York has not provided an adequate regulatory basis upon which a board could rely upon to enforce an order to change the plan or deny an operating license even if the testimony was accepted as true. Neither has New York provided a rational basis on radiological public health and safety why the Board should interpret section J.12 as they urge when the section itself is silent on the matter.

Memorandum and Order (Ruling on LILCO's Motion to Strike Testimony of Papile, et al.) (June 17, 1987) at 4.

The ASLB's analysis was correct. The remanded issue, as the Intervenors note, was whether any factors make the reception center facilities unsuitable. Int. Br. at 7. The stricken testimony does not relate to that issue. Moreover, radiological health and safety does not require that the identities of uncontaminated persons should be recorded. While long-term "medical follow-ups" for uncontaminated persons would be related to health and safety, it is not an immediate concern. Furthermore, there are ways to contact people for this purpose, for example, by using license plate numbers (which LILCO does record for uncontaminated people) or by contacting people who were in the areas affected by the plume. See Tr. 17,706, 17,715-16 (Dreikorn).

NRC regulations and FEMA guidance on monitoring are directed toward protecting people who are contaminated, not those who are free from contamination. NRC regulations are concerned with whether "there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency" to

protect the public health and safety. 10 C.F.R. § 50.47(a)(1); see also North Anna Environmental Coalition v. US NRC, 533 F.2d 655, 665 (D.C. Cir. 1976) ("The [Atomic Energy] Act requires 'adequate protection to the health and safety of the public,' 42 U.S.C. § 2232(a), and the facility operation must not be 'inimical' to the health and safety of the public. 42 U.S.C. § 2133(d).") Therefore, there is no basis in NRC regulations for requiring more detailed recordkeeping of uncontaminated people. The Licensing Board properly struck the State's testimony as outside the scope of the proceeding.

D. The State's Testimony Would Not Have Altered the ASLB's Decision If It Had Been Admitted

Even if it were error to have stricken the State's testimony, it would be only harmless error. The record shows that, even if the ASLB had not stricken the testimony, its findings on the adequacy of LILCO's monitoring procedures would not have changed.

This is so because the State testimony would have to be weighed against the credible evidence in the record that the State's concerns are not well founded. FEMA witness Keller testified that detailed information about evacuees who are not contaminated is not needed and that the failure to gather such information does not present a radiological health problem. Tr. 18,274-76 (Keller). It is more important to have complete information on those persons who are found to be contaminated. Id. (Keller).

In their proposed findings the Intervenors set forth a new argument why more information on uncontaminated persons should be gathered. They contended that "it might also be necessary to contact people who had been monitored and found uncontaminated if a question later arises as to whether they were properly monitored." I.F. at 107; see also PID at 85. The Licensing Board, however, agreed with FEMA's testimony:

> In regard to LILCO's registration procedures, the Applicant's plan to record full details of only those going through the decontamination process is criticized by Intervenors as too limited. In their view, registration [sic] names of everyone

> monitored is necessary to protect public health and safety arguing that all other plans in FEMA's Region II require this data. The FEMA testimony, which we consider persuasive on this issue, is to the effect that detailed information on those not contaminated is not needed. It is needed only for those going through the decontamination process. It appears to the Board that LILCO's plan to contact non-contaminated individuals, if necessary, through license plates or public service announcements, would more than provide for the unusual event where subsequent communication would be required. LILCO's planned registration procedure is adequate in the Board's judgment.

PID at 9[illegible]-100.

The Licensing Board's finding is sound. LILCO has a means for contacting uncontaminated persons if the need arises. LILCO Ex. 1 (Crocker et al. direct testimony), at 47, Tr. 17,618-19 (Dreikorn). Collecting more detailed information at the initial monitoring phase is not required. The ASLB's decision would have been no different even if the State testimony had been admitted.

CONCLUSION

For the reasons stated above, the Appeal Board should affirm the ASLB's partial initial decision on LILCO's reception centers, Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-88-13, 27 NRC ___ (May 9, 1988).

Respectfully submitted,

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DATED: July 25, 1988

Review Comments Based On
NUREG-0654/FEMA-REP-1, Rev.1,
Supp. 1

Local Offsite Radiological Emergency Response Plan for Shoreham
Final Review of Revision 9 by Regional Assistance Committee (RAC)
Dated April 28, 1988

NUREG-0654 Element	Review Comment(s)	Rating
J.12	The plan provides for school children being directly transported to school relocation centers at the Nassau County Community College and the Nassau County Veterans Memorial Coliseum in the event of an evacuation. School children would be reunited with their parents at the school relocation center. Procedure OPIP 3.6.5, page 19 of 75, emphasizes that this procedure will allow school children to be reunited with their parents at the earliest opportunity. **However, if there has been a radiological release, direct transport to the school relocation centers without prior personal radiological monitoring and decontamination, if necessary, subjects the school children to risk of unnecessary exposure. For example, contaminated clothes will continue to irradiate the wearer and may contaminate others. Parents after being reunited with their children may not drive them to reception centers for personal radiological monitoring and we could not locate in the plan that parents would be instructed to do so.** The LERO Reception Centers are designated as three (3) LILCO facilities located in Bellmore, Hicksville and Roslyn. The adequacy of these facilities as reception centers will be evaluated at a future exercise. The plan (Section 3.9, page 3.9-5 and Procedure OPIP 3.9.2, Section 5.5) specifies that evacuees arriving at the reception centers will be monitored within approximately 12 hours. A Traffic Guide will take a smear swipe of the automobile and two monitors will check for radiation on all automobile passengers. Attachment 8 to Procedure OPIP 3.9.2 gives a trigger level for declaring items contaminated. If no contamination is found above acceptable limits a "clean tag" will be attached to the car. Procedures (OPIP 3.9.2, Section 5.6) are also in place for monitoring incoming bus evacuees and separating contaminated and non-contaminated persons. All general population evacuees arriving on buses provided by LERO will be monitored on the bus by monitors working in the aisle of the vehicle (see OPOP 3.9.2, Section 5.6.8.d).	I

NUREG-0654 Element	Review Comment(s)	Rating
J.12 (Cont'd)	Bus evacuees, private vehicles and passengers that have contamination above acceptable limits will be directed to a decontamination area. Evacuees will be directed to trailers where they will be monitored for surface and thyroid contamination in accordance with procedures specified in OPIP 3.9.2. Trailers are equipped with sinks and showers to perform decontamination and paper clothing is available. All waste water from the decontamination trailers will be collected and contained in collapsible storage tanks. These tanks are sized to enable full-flow operations of the trailers for 24 hours. Upon termination of the emergency, all potentially contaminated liquid and solid waste will be transported to the plant for disposition (see Section 4.2.B, page 4.2-1). Evacuees will be issued "clean tags" when they have been remonitored and determined not to have contamination above acceptable levels. Provisions are also in place for transfer of evacuees that have non-removable contamination to hospitals (plan Section 3.9, page 3.9-5). Monitoring personnel notification and deployment is included as part of the Standby and Mobilization Procedures set forth in OPIP 3.3.3, Attachment 1 and Attachment 2, part G.b. Monitoring stations and staff capabilities have been developed for accommodating over 30% of the estimated EPZ vehicles during the summer period. Should the demands for monitoring exceed these capabilities, plans are in place for developing additional monitoring stations and acquiring trained monitors and equipment from DOE and the Institute for Nuclear Power Operators (INPO). If, these resources are insufficient and it is expected to still take more than 12 hours to monitor the population, the reception center personnel will be directed to monitor only the vehicle and driver of the cars in which two or more persons traveled together. These measures are in compliance with Federal	

NUREG-0654 Element	Review Comment(s)	Rating
J.12 (Cont'd)	Guidances which allows for the development of ad hoc measures more than 20% of the estimated EPZ population to be evacuated in a radiological emergency (see Section 3.9, page 3.9-6). Procedure OPIP 4.2.3 provides details regarding the activation, layouts with diagrams of monitoring station positions, and operation of the reception centers. Procedure 3.9.2 establishes the procedures for the monitoring/decontamination of evacuees (and emergency workers). The effectiveness of the reception center and procedures used to monitor/ decontaminate evacuees at these locations will be evaluated at an exercise. Procedure OPIP 3.9.2, page 13 of 52 calls for an initial car survey with the HP 210 or 260 probe to be considered contaminated at 0.1 mR/hr (360 CPM) but when later monitoring is performed the acceptable contamination level is actually higher (0.3 mR/hr [1360 CPM] - HP 270) page 26 of 52. This procedure is appropriate only if the second monitoring is done after decontamination of the vehicle. Procedure OPIP 3.9.2 avoids the possibility of a contaminated person entering the relocation center. "Clean" and "contaminated" tags have been added to Procedure OPIP 3.9.2 (see Attachments 5 and 6) to ensure that potentially contaminated persons will be kept separate from monitored individuals who have been admitted to the relocation center for mass care. Individuals found to be clean following monitoring and decontamination will be issued a "clean" tag and be required to sign out before being directed to the mass care facilities operated by the American Red Cross at the Relocation Centers. According to Procedure OPIP 3.9.2, Section 5.1.5, all completed monitoring and decontamination forms will be collected at the reception centers by the Decontamination Coordinator and returned to the EOC and filed.	

NUREG-0654 Element	Review Comment(s)	Rating
J.12 (Cont'd)	*Nowhere in the decontamination procedures for evacuees is it mentioned that decontamination efforts should be halted if the skin becomes abraded or broken. No precautions that the decontmination procedure may cause such problems are mentioned (OPIP 3.9.2 pg 15 of 52).* The American Red Cross will open and operate Congregate Care Shelters for long term sheltering (plan Section 2.2, page 2.2-9). Services related to the operation of Congregate Care Centers provided by the American Red Cross are described in ARC 3050 "Disaster Services Regulations and Procedures" (Sept. 1982), include the following: • Shelter Management • Registration • Counseling • Feeding • Housing • Clothing • Medical Services By letter dated November 2, 1987, the Nassau County Chapter of the American Red Cross asked that specific references to it be deleted from the LERO Plan, and reiterated that, "in the event of a nuclear accident and evacuation, the Red Cross will provide mass care services to the extent of its abilities and will cooperate with public and private organizations to meet the needs." The document American Red Cross, Disaster Services Regulation and Procedures, ARC 3027, May 1980 (July 1980 Prtg.), page 4, makes the following provision for "Emergency Services in Sudden Catastrophes": .... When the disaster involves potential liability on the part of a company or property owner, emergency services are provided. Their extent is related to what the company involved is prepared to do. (See ARC 3003, page 4, section K; also, see Attachment 6.)	

NUREG-0654 Element	Review Comment(s)	Rating
J.12 (Cont'd)	Special populations will be monitored and decontaminated at reception facilities located at the Emergency Worker Decontamination Facility (EWDF) in Brentwood and the Staging Areas in Port Jefferson, Patchougue and Riverhead. According to Figure 2.1.1, the following monitoring and decontamination personnel are assigned to these locations:	

- Brentwood Emergency Worker Decontamination Facility - 45 Monitoring/decon. personnel
- Port Jefferson Staging Area - 5 Dosimetry Record Keepers
- Patchoque Staging Area - 5 Dosimetry Record Keepers
- Riverhead Staging Area - 6 Dosimetry Record Keepers

All Health Care special facilities including Nursing/Adult homes are assigned to the predesignated monitoring locations and to predesignated relocation (i.e., congregate care) centers. The special populations are assigned to the monitoring locations as follows:

Facility	Special populations (Number)
Brentwood EWDF	1641*
Port Jefferson Staging Area	0
Patchougue Staging Area	483*
Riverhead Staging Area	186

*includes preschool population assigned to these facilities.

NUREG-0654 Element	Review Comment(s)	Rating
J.12 (Cont'd)	According to information provided by LILCO with its submission of Rev. 9, sufficient personnel are available to monitor the special population evacuees at approximately the same rate at which they arrive at the monitoring locations. In the event it becomes necessary to evacuate hospitals, these populations will be monitored at reception hospitals "to be selected at time of emergency" (see OPIP 3.6.5, Attachment 2). Although it would be preferable to have hospital reception centers preassigned in the procedures, current plans to arrange these facilities at the time of the emergency are reasonable in view of the fact that any evacuation of hospitals would be carried out under the direction of the Hospital Administrator(s) responsible for those institutions. In the event it becomes necessary to evacuate the approximately 28,000 public, parochial and nursery school children in the Shoreham EPZ, school relocation centers have been designated at the Nassau County Community College and the Nassau County Veterans Memorial Coliseum in Uniondale. These two facilities have a combined capacity of approximately 32,000 and would be activated to hold the children until they can be reunited with their families. The Director of Local Response will be responsible for contacting the Nassau County Executive and obtaining permission to use these facilities if needed.	

Federal Emergency Management Agency
Region II 26 Federal Plaza New York, New York 10278

May 6, 1988

MEMORANDUM FOR: Grant Peterson
Associate Director
State and Local Programs and Support

FROM: Jack Sable
Regional Director

SUBJECT: RAC Review Comments for the LILCO Local Offsite Radiological Emergency Response Plan for Shoreham, Revision 9

Per your request of February 16, 1988 attached is the review of the referenced plan which has been conducted by the Region II Regional Assistance Committee (RAC). As referenced on each page of the document, this review has been conducted in accordance with the interim-use and comment document jointly developed by FEMA and NRC entitled: Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (Criteria for Utility Offsite Planning and Preparedness); NUREG-0654/FEMA-REP-1, Rev. 1, Supp. 1. In reviewing this plan, FEMA and the RAC have assumed that in an actual radiological emergency, State and local officials that have declined to participate in emergency planning for the Shoreham plant will:

(1) Exercise their best efforts to protect the health and safety of the public;

(2) Cooperate with the utility and follow the utility offsite plan; and

(3) Have the resources sufficient to implement those portions of the utility offsite plan where State and local response is necessary.

Although Revision 9 constitutes a major revision, affecting more than 1000 pages of LILCO's plan, the Local Emergency Response Organization's (LERO's) concept of operations remains essentially unchanged from previous versions of the plan that have been reviewed. Therefore, this review builds upon RAC comments developed for previous revisions (Revs. 1, 3, 5, 6, 7, and 8) of the plan and this updated review reflects current operations, resources and status of the utility's offsite emergency planning effort. The following steps were taken in completing this review:

(1) RAC comments for Revisions 5, 6, and 7 heretofore detailed in separate documents, and comments on Revision 8, were consolidated into one document dated 2/11/88 and was distributed to the RAC members.

(2) A preliminary review dated 3/17/88 of Revision 9 was conducted by FEMA Region II and contractors to the REP program. This preliminary review was distributed to the RAC, FEMA Headquarters and LILCO on March 18, 1988.

(3) Region II met with LILCO representatives on April 8, 1988 and received the utility's proposed actions to resolve items rated inadequate (I) in the 3/17/88 preliminary review comments.

(4) Detailed review comments on Revision 9 of the plan were received from RAC member agencies and were consolidated into an updated review document dated 4/21/88.

(5) A RAC meeting, chaired by FEMA Region II was held in our offices to finalize the attached comments on Revision 9 of the plan. A record of this meeting was transcribed.

In the course of developing the attached updated review, the following nomenclature has been adapted from previous reviews:

A (Adequate) The element is adequately addressed in the plan. Recommendations for improvement shown in *italics* are not mandatory, but their consideration would further improve the utility's offsite emergency response plan.

I (Inadequate) The element is inadequately addressed in the plan for the reason(s) stated in bold type. The plan and/or procedures must be revised before the element can be considered adequate. For ease of understanding, the reason(s) an element has been rated inadequate is, where possible, stated first.

As a means of summarizing this rather lengthy review and for ease in understanding abbreviations used, an Element Rating Summary and List of Acronyms are provided at the end of the document.

Seventeen (17) elements are currently rated inadequate (I) and, in accordance with your request, Region II recommends a negative finding that the plan does not presently provide reasonable

assurance that adequate protective measures can be taken in the event of a radiological emergency at Shoreham.

Planning for the exercise can go forward for two reasons. First, the utility has provided Region II and the RAC with proposed plan changes to address these inadequacies that would be incorporated, prior to the exercise, into Revision 10 of the plan. Eleven (11) of these inadequacies require relatively minor changes, and the utility's proposed changes are responsive to the RAC/FEMA concerns. Second, for the six (6) inadequate elements requiring more substantive revision, five (5) of these (i.e., provisions for communications with New York State, element F.1.b; the public information program for residents, transients and the agricultural community, elements G.1 a-e, G.2 and J.11; and written agreements for "first-call" commitments with companies supplying supplementary buses for a "one-wave" evacuation of schools, element J.10.g) will not be exercised. With regard to the remaining inadequacy that must be evaluated at the exercise (i.e., planning for the monitoring and decontamination of school children evacuated after a release, element J.12), FEMA is providing technical assistance to the utility to expedite the resolution of this issue for its inclusion in Revision 10.

With respect to LILCO's submission of Revision 10, FEMA will review the plan changes, coordinate with the RAC, and incorporate them in the evaluation of the exercise. Should any additional changes be forthcoming, every effort will be made to incorporate them in the exercise as well.

Based on all of the above, I recommend that the exercise proceed as planned. If you have any questions, please contact Mr. Ihor W. Husar, Chairman, Regional Assistance Committee, at FTS 649-8203.

Attachment

LILCO, July 25, 1988

CERTIFICATE OF SERVICE

In the Matter of
LONG ISLAND LIGHTING COMPANY
(Shoreham Nuclear Power Station, Unit 1)
Docket No. 50-322-OL-3

I hereby certify that copies of LILCO'S BRIEF IN OPPOSITION TO INTERVENORS' APPEAL OF THE LICENSING BOARD'S PARTIAL INITIAL DECISION ON THE SUITABILITY OF RECEPTION CENTERS were served this date upon the following by Federal Express, as indicated by one asterisk, or by first-class mail, postage prepaid.

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