7137

LBP-88-24

'88 SEP 23 P4:55

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

SERVED SEP 26 1988

James P. Gleason, Chairman
Dr. Jerry R. Kline
Mr. Frederick J. Shon

In the Matter of	)	Docket No. 50-322-OL-3
	)	(Emergency Planning)
LONG ISLAND LIGHTING COMPANY	)	
	)	
(Shoreham Nuclear Power Station, Unit 1)	)	September 23, 1988
	)	

CONCLUDING INITIAL DECISION
ON EMERGENCY PLANNING

D502

TABLE OF CONTENTS

IV. REALISM DISCOVERY AND SANCTIONS

LBP-88-24

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

James P. Gleason, Chairman
Dr. Jerry R. Kline
Mr. Frederick J. Shon

In the Matter of	)	Docket No. 50-322-OL-3
	)	(Emergency Planning)
LONG ISLAND LIGHTING COMPANY	)	
	)	
(Shoreham Nuclear Power Station, Unit 1)	)	September 23, 1988

APPEARANCES

James M. Christman, Esq., Donald P. Irwin, Esq., Mary Jo Leugers, Esq., Kathy E. B. McCleskey, Esq., Rita Sheffey, Esq., K. Dennis Sisk, Esq., and Joseph M. Spivey, Esq., on behalf of the Applicant, Long Island Lighting Company.

Fabian G. Palomino, Esq., Richard J. Zahnleuter, Esq., Herbert H. Brown, Esq., Lawrence Coe Lanpher, Esq., Karla J. Letsche, Esq., Christopher McMurray, Esq., Michael S. Miller, Esq., Ronald Ross, Esq., J. Lynn Taylor, Esq., and Stephen B. Latham, Esq., on behalf of the State of New York, Suffolk County, New York, and the Town of Southampton, New York.

Richard Bachmann, Esq., Gregory A. Berry, Esq., Lisa Clark, Esq., Edwin J. Reis, Esq., and Mitzi Young, Esq., on behalf of the U.S. Nuclear Regulatory Commission.

William R. Cumming, Esq., on behalf of Federal Emergency Management Agency.

CONCLUDING INITIAL DECISION ON EMERGENCY PLANNING

OVERVIEW

In this concluding decision, the Board combines a variety of pending issues remaining and considers a summary disposition motion on emergency broadcast system issues, remanded issues involving the adequacy of school bus drivers, hospital evacuation time estimates for an emergency evacuation, and non-compliance with Board Orders on discovery. During the lengthy course of this contested operating proceeding, which concerns an application of the Long Island Lighting Company (LILCO) for an operating license at the Shoreham Nuclear Power Station (Shoreham), various Licensing Boards have considered and adjudicated a complex selection of contentions. Testimony was received from over 200 witnesses through several hundred days of hearings and, in Partial Initial Decisions in 1983 and 1985, Licensing Boards resolved most of the contested issues in the case in favor of LILCO.[1] An additional issue involving the adequacy of reception centers has also been decided to

---

[1] See LBP-83-57, 18 NRC 445 (1983) and LBP-85-12, 21 NRC 644 (1985).

LILCO's benefit[2] and the remaining contested matters are disposed of in this opinion. Here, we remove the remaining litigation obstacles to a full operating license by resolving the matters at issue in LILCO's favor and find no regulatory obstacles to an acceptable emergency plan for the Shoreham facility.[3]

---

[2] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-88-13, 27 NRC 509 (1988).

[3] Inasmuch as the record on issues other than the realism contentions is complete, those matters are resolved herein on the merits. The dismissal sanction does not therefore have any effect on any issue other than the realism litigation.

I. MOTION FOR SUMMARY DISPOSITION ON EMERGENCY BROADCAST SYSTEM (EBS) ISSUES

A. Introduction

On June 20, 1988 LILCO filed a Motion For Leave To File Summary Disposition Motion on the EBS Issue together with a Second Motion for Summary Disposition of the EBS Issue (Motion hereafter). On June 21, 1988 the Board removed its prohibition on further summary disposition motions.[4] LILCO's motion for leave to file was granted and other parties were free to file motions of their own. Intervenors responded in opposition on July 12, 1988 and on the same date the NRC Staff responded in support of LILCO's motion.[5] Intervenors subsequently responded in opposition to the Staff's response.[6]

LILCO then filed a letter with the Board dated July 27, 1988 requesting leave to file yet another response because

---

[4] Memorandum and Order, June 21, 1988 (unpublished).

[5] Response of Suffolk County, State of New York, and Town of Southampton in Opposition to LILCO's Second Motion for Summary Disposition of the EBS Issue, July 12, 1988, (Response hereafter). NRC Staff Response to LILCO's Second Motion for Summary Disposition on EBS Issues, July 12, 1988, (Staff Response).

[6] Response of Suffolk County, the State of New York, and the Town of Southampton to NRC Staff Response in Support of LILCO's Second Motion for Summary Dispostion of the EBS Issue, July 27, 1988.

Intervenors had requested affirmative relief in their response and allegedly had seriously misstated the facts. LILCO's proposed response was attached to the letter.[7] Intervenors replied August 2, 1988, contending that LILCO's latest filing should be disregarded and rejected in its entirety by the Board.[8]

LILCO's motion climaxes a complicated series of events dating back to the Commission's order reopening the record on LILCO's EBS plan after a withdrawal of WALK radio as its primary radio station. CLI-87-5, 25 NRC 884 (1987). When WALK withdrew, LILCO revised its EBS plan by naming inter alia, station WPLR in Connecticut as its lead EBS station. The revised plan was first disclosed to the Board and parties in a Motion For Summary Disposition of the WALK Radio Issue dated November 6, 1987. After consideration of the parties' positions, the Board denied LILCO's motion on December 21, 1987 on grounds that LILCO's new EBS required review by other parties and an opportunity for contentions

---

7 LILCO letter addressed to Judge Gleason and members of the Board, July 27, 1988. See also LILCO's Response to Intervenors' Response in Opposition to LILCO's Second Motion for Summary Dispostion of the EBS Issue, July 27, 1988, (Proposed Response).

8 Suffolk County, State of New York and Town of Southampton Opposition to LILCO's Unauthorized and Impermissible "Response to Intervenors' Response In Opposition to LILCO's Second Motion for Summary Disposition of the EBS Issue," August 2, 1988, (Opposition hereafter).

to be filed. The Board permitted Intervenors to submit contentions on the EBS plan. In due course Intervenors submitted a single contention with numerous bases. The Board accepted some of the proffered bases (which were in the nature of subcontentions), rejected others, and opened the matter to discovery. Written testimony was filed and the stage was set for trial of the EBS issue in May 1988.

The EBS issues were not heard however because prior to trial the continued participation of station WPLR in LILCO's revised EBS system became doubtful, and LILCO disclosed in letters to the Board dated May 9, May 16, and May 25, 1988, and in written realism testimony filed May 6, 1988 that it was again revising its EBS plan. Motion Att. 1; Response Att. 2, 3. The latest scheme, which was more fully disclosed in Revision 10 to its plan, relied on the New York State EBS system with station WCBS in New York City as the lead station. The Board expressed uncertainty about provisions of the new plan and ordered limited discovery by the parties to clarify LILCO's proposal. We directed the parties to file briefing papers shortly after the end of the limited discovery concerning the proceeding. Tr. 20429.

On June 20, 1988 Intervenors filed a briefing paper as did the Staff.[9] LILCO however filed its motion for summary

---

[9] Governments' Briefing Paper Concerning LILCO's (Footnote Continued)

disposition of the EBS issue. This effectively cancelled plans for hearing and the parties responded to LILCO's motion. The briefing papers filed by Intervenors and Staff became moot regarding any procedural recommendations they contained. To the extent the briefs addressed the merits of LILCO's EBS plan, they were outdated, and were not considered in deciding the EBS motion. However the limited discovery that was ordered by the Board was interrupted by Intervenors and LILCO was not permitted to take depositions of Intervenors' personnel. Motion Att. 7. Portions of Intervenors' briefing paper are relevant to the issue of whether the Board should sanction Intervenors for failure to permit discovery. We decide the issue of sanctions separately in this Concluding Initial Decision.

In this decision the Board rules that LILCO has prevailed in its motion and we grant Summary Disposition of the EBS issue.

Numerous summary disposition motions have been filed in the Shoreham proceeding over the past several years and the governing law has been set forth in many past pleadings and decisions. No purpose would be served by another recitation here. See LBP 87-26, 26 NRC 201, 211-12 (1987).

(Footnote Continued)
Emergency Broadcast System, June 20, 1988. NRC Staff Briefing Paper on the Emergency Broadcasting System Issue, June 20, 1988.

In view of our decision herein, the Board finds it unnecessary to address either LILCO's letter of July 27 or Intervenors reply of August 2. Additionally, we consider both filings improper. See 10 CFR 2.749(a).

B. LILCO Position

LILCO's motion states that Station WPLR will no longer be relied upon in its EBS Plan. Instead LILCO's emergency plan now relies on the official New York State EBS for the Nassau-Suffolk Counties Operational area which is triggered by WCBS, the Common Point Control Station (CPCS-1), in New York City. LILCO's request for summary disposition of the EBS issue is based on the Board's earlier Partial Initial Decision, LBP-85-12, 21 NRC 644 (1985), on the admitted EBS related facts in LILCO's Second Renewed Motion for Summary Disposition of the Legal Authority Issues, on the Board's recent decision to rule in LILCO's favor on the eight "Legal Authority" contentions, and on the Statement of Material Facts and affidavits attached to the motion.

Attached to LILCO's motion was a "Statement of Material Facts As To Which LILCO Contends There Is No Genuine Issue To Be Heard On The EBS Issue". The document contains 11 factual statements about which LILCO claims there is no genuine issue. In summary, LILCO states that its EBS plan no longer relies on WPLR, that it does rely on the State EBS

to broadcast emergency information and that the trigger station for the State EBS is WCBS(AM) in New York City. LILCO states that the Nassau-Suffolk Counties Operational Area is comprised of about 30 Long Island radio stations including WALK(FM) and gives details on how the network will be activated. LILCO asserts that it will rely on the State EBS to activate tone alert radios and that it will recrystallize the tone alert radios so they can be activated by WCBS and WALK. LILCO's facts 8 through 11 state the broadcast characteristics and power of WCBS and that LILCO has measured the field strength of WCBS in the emergency planning zone (EPZ). The field strength is assertedly 580 microvolts per meter throughout the Shoreham EPZ while the tone alert radios can be activated by 30 microvolts per meter.

The motion included 9 supporting attachments. In summary they consist of Revision 10 for the EBS system, a copy of the State of New York Emergency Broadcast System (EBS) Operational Plan, facts the Board ruled as admitted in a previous motion for summary disposition, a consultant report on field strengths of WCBS as a function of distance from the station, the affidavit of Douglas M. Crocker attesting to facts in LILCO's EBS plan, and the affidavit of Sudhir K. Khanna attesting to the field strength of WCBS.

LILCO argues in support of its motion that the issue of adequate coverage of the EBS network is resolved by the

facts it has presented, and by the fact that adequacy of coverage has already been admitted in litigation by Intervenors. LILCO claims that Intervenors are precluded from raising interface issues concerning WCBS because any such issue is encompassed within the realism/best efforts Contention 5 for which the Board has announced it will rule in LILCO's favor as a sanction for Intervenors' refusal to comply with the Board's discovery orders.

LILCO claims that in view of the evidence and argument it has presented no genuine issue of material fact remains to be litigated and the Board should grant summary disposition.

C. Intervenors Position

Intervenors filed a timely reply to LILCO's motion in which they addressed each of LILCO's asserted "facts" and which included Intervenors' "Statement of Material Facts as to Which There Exists a Genuine Issue To Be Heard On Matters Raised By LILCO's Second Motion For Summary Disposition of The EBS Issue". The response was accompanied by 8 attachments consisting of case related correspondence, Intervenors Briefing Paper, transcript pages, and pages from depositions of Douglas M. Crocker. Intervenors filed a separate reply to the NRC Staff response to LILCO's Motion

but did not cite any new arguments or data not already in their response to LILCO's motion.

Intervenors argue that LILCO's new EBS proposal is materially different from its previous proposal and that they have not had adequate opportunity to review it. The Board should therefore reject this motion on the same basis it rejected LILCO's last motion for summary disposition on the EBS issue (Memorandum and Order, December 21, 1987, at 3-4 (unpublished); the present EBS is even more radically new than the old because it relies on stations which have said they would not participate in LILCO's EBS (WALK and WPLR), and there is no agreement with any station in the new network, and in particular not with WCBS, to participate in LILCO's EBS plan. Response at 14-16. Moreover, say Intervenors, the plan is ambiguous on the continued role of WPLR in the EBS, on LILCO's continued reliance on a backup local EBS network, and on how that network would be activated in an emergency. Id. at 16-19.

Intervenors take issue with LILCO's assertion that there is no admitted contention concerning the adequacy of the State EBS network. They claim this is merely an attempt by LILCO to eliminate an existing contention by changing its plan and then preventing review of the new plan. They concede however that the contention relating to WPLR is now moot. The Intervenors urge the Board to grant summary disposition in their favor on the existing WPLR contention

or declare the contention moot and as a matter of law rule for the Intervenors. They urge further that they be provided the opportunity to submit contentions and pursue discovery on the new plan. This course, allegedly, would be consistent with one taken previously under similar circumstances. Memorandum and Order, December 21, 1987; Response at 19-22.

The Intervenors cite numerous reasons why the adequacy of coverage of the State EBS has not been resolved. First they claim that the adequacy of the State EBS has never been litigated in this proceeding and its adequacy has never been conceded. The adequacy of WALK radio to broadcast at night was, they assert, the only contention litigated in the original hearings and in any event WALK radio has withdrawn from LILCO's EBS network; furthermore, it is misleading for LILCO to claim the governments have admitted fact number 17 in LILCO's Second Renewed Motion, because that fact was related only to Contention 5 of the realism/best efforts issues. There was no EBS proposal before the Board at the time that matter was decided, fact 17 was not controverted because Intervenors believed it irrelevant to the issues before the Board, and issues of adequacy were left open by the Board when it decided against LILCO. 26 NRC 201, 225. Moreover, claim Intervenors, any apparent concession of the adequacy of WALK radio in their subsequent pleadings

opposing the WPLR proposal cannot be accepted as fact in deciding this motion.

Intervenors claim that LILCO's consultant report and its supporting affidavit fail to state that WCBS provides adequate coverage of the EPZ, that the significance of the numerical field strength data in the consultant report is not stated, and that regulatory standards require a signal strength of 2 millivolts per meter to serve communities in excess of 2500 persons. The data in the report shows that the 2 millivolt contour reaches only a small portion of the EPZ and since there are many communities in excess of 2500 persons Intervenors infer that WCBS coverage may not meet Federal Communications Commission (FCC) requirements and, at a minimum the coverage of WCBS is called into question.

Finally, Intervenors claim they were not obligated to produce witnesses for deposition by LILCO on the EBS issue because the Board's bench order of May 26 limited discovery to what was necessary for the Intervenors to ascertain the scope of LILCO's EBS proposal. In Intervenors' view, the Board ordered discovery unilaterally for their benefit. Thus, LILCO is not now entitled to any presumption adverse to Intervenors for failure to produce witnesses in discovery. In any event according to Intervenors, LILCO abandoned its attempts to obtain discovery. Response at 29-30.

Quoting Board language denying LILCO's previous motion for summary disposition on EBS issues, Intervenors claim LILCO's present motion is purely "executory" and not a proper subject for summary disposition. In support, they cite the Board's previous denial and reasons previously provided in support of other arguments related to participation of WPLR, of WALK and of WCBS. Id. at 30-32. Intervenors dispute each of LILCO's "material facts not in dispute" and rely on reasons already cited herein.

The Board summarizes the dispute according to reasons given by Intervenors. In the interest of brevity we list the basic arguments together with the "facts" they apply to in parentheses as follows: The continued role or participation of WPLR is unclear and LILCO may still rely on WPLR (disputing facts 1, 2, 5, 6, 7, 11); WCBS has not agreed to participate in LILCO's plan (disputing facts 2, 3, 4, 5, 8, 9, 10, 11); Intervenors have had inadequate discovery and cannot admit or deny alleged facts (disputing facts 3, 4, 9, 10, 11); alleged facts are misleading, irrelevant, or not supported by the record (disputing facts 1-11); the report of LILCO's consultant, Cohen and Dippell, does not establish adequacy of coverage of WCBS (disputing facts 8, 10, 11). Id. at 33-40.

Intervenors attached a statement of material facts in dispute to their response giving 20 separate reasons why the LILCO's motion should be denied. The statement consisted of

a tabulation of issues that Intervenors think should be litigated.

Finally, Intervenors assert that contrary to LILCO's views they are entitled to raise interface issues in their opposition, even if the Board rules for LILCO on realism/best effort Contention 5 as a sanction against Intervenors. This is assertedly so because the broadcast stations are private entities that are not covered by the Commission's best effort assumption. According to Intervenors, even if the Governments asked the stations to broadcast emergency information, they are under no obligation to do so.

For all of the foregoing reasons, Intervenors urge the Board to deny LILCO's motion, to provide Intervenors with the opportunity to pursue discovery and to submit additional contentions on LILCO's new EBS plan.

D. NRC Staff Position

The NRC Staff agrees with LILCO and concludes that the motion for summary disposition should be granted. The Staff conclusion is based on its assessment that Contention 5, as restated by the Board, presents no legal authority issue, and that the only other contentions in the case, 20 and 57, present concerns for adequacy of broadcast coverage within the EPZ that Intervenors have not attempted to controvert

under the new plan. The Staff asserts that the Board may rely on the "best efforts" assumption to conclude that Government officials will permit LILCO to activate the system in an emergency. Even if they do not however, FCC regulations permit the EBS system to be used without government permission in an emergency. The question of agreements with EBS stations was not within the scope of the originally admitted contention and may not now be considered. Moreover according to Staff such agreements are not necessary here because the Intervenors themselves will permit the EBS system to be activated. Staff Response at 6-10.

E. Other Issues

LILCO's assertion that no admitted contention remains to be heard after a finding of mootness for the WPLR contention is not correct. When the Commission reopened the EBS issue it did so with instructions to admit additional contentions only to the extent they assist in focusing further the litigation on earlier admitted issues. The earlier admitted issues still require resolution in the context of LILCO's new plan. These issues consist of Contention 5 dealing with realism best efforts, contention 20 dealing with adequacy of WALK radio notification, and Ccontention 57 dealing with adequacy of activation of tone

alert radios. Contention 5 is being resolved separately in this Partial Initial Decision and need not be considered here. Contentions 20 and 57 however express fundamental concerns about the adequacy of notification of EPZ residents in an emergency. Those concerns have been constant throughout litigation of the EBS issue even though specific factual reasons why notification in the EPZ might be inadequate have changed as the plans changed. Consistent with this view the Board previously admitted WPLR contentions only to the extent that they helped focus issues of adequacy of notification. Staff Response at 8-9. The issue that remains before us is therefore whether LILCO's new EBS plan provides for adequate emergency notification of the public within the EPZ by direct broadcast and tone alert activation. However, contrary to Intervenors' view this is not the occasion for filing new contentions. That opportunity would only arise, as it did previously, if LILCO's motion is denied. In responding to LILCO's motion Intervenors have had the opportunity to focus the issues by citing material facts showing that a genuine dispute exists.

F. Intervenors Material Facts

The Intervenors submitted a statement with their response that listed some 20 material facts purportedly in

dispute. The statement consisted in its entirety of brief statements of issues the Intervenors think are, or ought to be, open for litigation. The statement did not tend to disprove or controvert any information submitted by LILCO. The Board found this statement inadequate and improper and did not consider it in deciding this motion. We have previously cautioned Intervenors of the fruitlessness of submitting such statements in answers to summary disposition motions. 27 NRC 355, 386 (1988). Intervenors also assert as facts in dispute that LILCO has not obtained letters of agreement with WCBS; broadcasters have discretion not to broadcast emergency messages when requested to do so; and LILCO's consultant report does not establish that WCBS has adequate coverage in the EPZ.

C. Analysis and Conclusions

LILCO has submitted an alternative plan for broadcasting emergency information that relies on the preexisting State EBS. The new plan does not rely on station WPLR or other local stations in a network of privately negotiated agreements to broadcast emergency information except as a fourth level of backup to be employed only as a last resort. LILCO fact 5d. The changed plan has caused all existing contentions relating to WPLR and the previous private network to become moot. Contrary

to Intervenors' assertions, however, there is no justification for the Board to render a decision in Intervenors' favor on those issues. First it would not advance the case to do so because it would not resolve the matter now before us which is the adequacy of the State EBS. Second no record has been developed to support a decision on the merits, and third no reason now exists to develop a record on the matter.

LILCO need not prove any facts concerning the adequacy of WPLR even though its future role in LILCO's plans is ambiguous or unsettled, because it has developed a primary plan that places reliance elsewhere for broadcasting emergency information. Intervenors' cannot defeat LILCO's motion for summary disposition by presentation of facts asserting inadequacy or ambiguity of WPLR's continuing role, because such facts are immaterial even if true. LILCO no longer relies on WPLR; any continuing efforts it expends to define an emergency role for WPLR are intended to produce a backup EBS. Fact 1, 5d. A backup EBS is not required by NRC, however, and the test of adequacy must be made on the basis of whether LILCO's principal plan meets NRC requirements. NRC regulations do not prevent LILCO from exceeding regulatory requirements by developing a backup system for broadcasting emergency messages to the public and proof of adequacy of such a system cannot be made a condition of licensing.

Under these circumstances the WPLR contention and bases are dismissed for mootness without a decision on the merits. Accordingly, the adequacy of WPLR or the associated privately organized local network to broadcast emergency messages is no longer in controversy before us.

LILCO does not assert that it has obtained letters of agreement with WCBS in New York City, or with any other station, to broadcast emergency information. There is no fact in dispute and the Board accepts as true that no letters of agreement exist. The issue does not turn on resolution of disputed facts but on whether a letter of agreement is required by NRC regulations. Both LILCO and the Staff argue that no letter of agreement is required in these circumstances.

NUREG-0654 requires applicants to provide evidence of capability of local and state agencies to provide information promptly over radio and TV at the time of activation of an alerting signal. Evidence of capability is to be provided as follows: "The emergency plans shall include evidence of such capability via agreements, arrangements or citation of applicable laws which provide for designated agencies to air messages on TV and radio in emergencies". App. 3, at 3-4. The guidance states further: "It may be necessary for utility organizations to sign agreements with CPCS-1 stations in order to cover a fast breaking general emergency described in Appendix 1". App.

3, at 3-15. When evidence of capability is provided, a separate letter of agreement between LILCO and WCBS might also be needed but it is not mandatory under the guidance. In context, the guidance describes a contingent requirement, applicable if the evidence of capability which must be provided does not include adequate assurance of prompt response in a fast breaking emergency.

LILCO submitted "The State of New York Emergency Broadcast System (EBS) Operational Plan", dated July 1981, in support of its motion. Motion, Att. 4. The plan states that the procedures it contains have been agreed to by the Broadcast Industry and the State of New York. Legal authority for the plan is cited and detailed procedures are provided. The plan specifically provides for EBS response in "nuclear incidents". Approval and concurrence have been obtained from the Chief of Staff to the Governor, the FCC, The President, New York State Broadcasters Association Inc, the National Weather Service, and Chairman, New York State Emergency Communications Committee. The plan provides that "upon receipt of a request to activate the local EBS . . . the CPCS-1 . . . may proceed as follows." The lead station will interrupt its regular broadcast to transmit the emergency message and will transmit the emergency broadcast system attention signal. Motion, Att. 4, p. 6. All other broadcast stations will be alerted by the two tone attention signal and will perform the same procedures as outlined for

the CPCS-1 station by rebroadcasting the emergency message. Motion Att. 4; "Emergency Broadcast System (EBS) Procedures for the Nassau-Suffolk Counties New York EBS Operational Area". Fifth unnumbered page. The plan lists the actions to be taken in immediate sequence upon receiving a request and makes no reference to time delays in broadcasting except for message authentication which is always required. The State plan provides on its face for prompt station response. Intervenors have not challenged the authenticity of the plan nor have they factually controverted any of its provisions. The Board therefore accepts the plan as authentic and as an accurate depiction of the EBS response by the broadcast industry.

LILCO's evidence establishes that a State EBS plan that has the capability required by NUREG-0654 is in effect in New York State. The State plan is written in virtually identical terms to those used in NRC guidance. NUREG-0654, Appendix 3, p. 3-13, 3-15. LILCO's evidence further establishes that the State plan provides for EBS response in nuclear incidents and for the prompt notification that would be required in a fast breaking accident at Shoreham. Therefore, no additional letter of agreement between LILCO and WCBS is required to satisfy the guidance of NUREG-0654.

Intervenors challenge based on the provision in the State EBS plan for the exercising of independent management discretion and responsibility raises no material disputed

fact. The provision for management discretion is a part of FCC regulations and it therefore has generic applicability. Motion, Att. 4., p. 2. No agreement between private parties could nullify a Federal rule. The plan itself cautions broadcasters to avoid escalation of public confusion and to broadcast information based on definite and confirmed facts. Such matters could require the exercise of management discretion permitted in the rule. However, neither that provision nor any facts presented by Intervenors raise a reasonable factual question as to whether station management would broadcast confirmed emergency information when requested. Motion, Att. 4., p. 5.

Intervenors' effort to raise doubt about the adequacy of coverage of WCBS in the EPZ based on LILCO's consultant report is based on an error in reading a critical passage in that report. To avoid further error, we quote the passage verbatim from the Cohen and Dippell report. "A 0.5 mv/m signal is the FCC required (sic) for primary service to rural areas and communities with population less than 2500 persons, and this WCBS contour covers the entire EPZ." However, a signal strength of 2 mv/m is required by the FCC standards to serve communities with populations in excess of 2500 persons including "Census Designated Places" (CDP's)." Motion, Att. 6, p. 2. The Intervenors neglected to consider the phrase "primary service" in their interpretation of the foregoing passage. The passage, as written, cites FCC

signal strength criteria for a station to be designated to provide primary service in a rural area or in a community in excess of 2500 persons. The criteria do not address the minimum signal strength required for transmission of audible emergency messages in the EPZ; much less do they establish that the coverage of WCBS in the EPZ is inadequate as urged by Intervenors. LILCO's assertion of adequate coverage by WCBS in the EPZ is not controverted by facts presented in the Cohen and Dippell report.

It is immaterial to a determination of adequacy of the State EBS whether WCBS meets the FCC criteria as a provider of primary service in every portion of the EPZ. The question before us is whether or not it can adequately notify residents of the EPZ in an emergency. The Board declines, however, to put an absurd construction on a Federal rule, and we therefore do not accept the possibility that FCC has defined broadcast signal strengths for primary service which are too weak to be received. Even though the consultant report does not give the minimum signal strength for adequate radio reception, the only reasonable interpretation of the Federal criteria for primary stations cited by the consultant is that a strength in excess of 0.5 mv/m provides acceptable reception. It is uncontroverted that WCBS operates at maximum permissible power for AM stations and that it provides a signal strength of at least .38 mv/m throughout the EPZ. Motion, Att. 9. The Board

concludes that whether or not WCBS meets the FCC definition of a primary station within the EPZ, LILCO's consultant plainly intended to establish with the foregoing information that the signal strength of WCBS is adequate to provide emergency information to residents throughout the EPZ. No material facts to the contrary have been presented that would justify opposition to that conclusion.

It is uncontroverted that the EBS plan provides for WCBS to both broadcast emergency messages directly and to alert the network of Long Island stations by means of an alerting signal which will cause the network to broadcast information as well. There is no dispute that the EBS plan includes about 30 radio stations on Long Island at least some of which can reach the EPZ with an audible signal. Thus the Long Island network can adequately broadcast information to the residents of the EPZ, even if WCBS for some reason could not. The notification system described in the State plan therefore has redundancy. Intervenors have not cited any material facts which would raise a serious question as to whether an adequate warning to residents of the EPZ could be delivered through the network of stations in the State EBS or why a redundant system would prove inadequate.

LILCO states by affidavit that it will rely on the State EBS to activate tone alert radios and that it will replace or recrystallize its tone alert radios so that they

can be activated by either WCBS or by WALK. Facts 6 and 7; Motion, Att. 8. LILCO's consultant report states that tone alert radios can be activated by a signal of 30 microvolts per meter and that WCBS has a minimum field strength of 580 microvolts per meter throughout the EPZ. The data gives adequate assurance that the tone alert radios can be activated by WCBS unless contrary material facts are presented in opposition. Facts 10 and 11; Motion, Att. 9. The capability of WALK radio for activating tone alert radios constitutes redundant capacity. However, its capability to activate tone alert radios within the EPZ has been adjudicated and resolved. The Board found that there is no NRC requirement to include tone alert radios in an emergency plan for special facilities. 21 NRC 644, 760 (1985).

Intervenors only answers to the foregoing facts are that they are irrelevant because letters of agreement have not been obtained, and that WALK cannot be relied upon because it previously withdrew from LILCO's EBS plan.

Intervenors answers are not sufficient to controvert LILCO's facts. We decide herein that letters of agreement are not required by NRC regulations in this instance, where a preexisting agreement between the State and the Broadcast industry complies with NRC guidance. Intervenors provide no facts showing that WALK has withdrawn from the State EBS, and its future participation in the State system is not

disputed with material facts. The Board concludes from the foregoing analysis that no disputed material fact exists concerning whether LILCO's plans for activating tone alert radios are adequate for notifying special facilities. Moreover, tone alert radios are not required for special facilities by NRC regulation or guidance.

LILCO argues that the Intervenors are barred from raising issues concerning how it will interface with the State and County in activating the EBS system by our announced intention to dismiss Contention 5 from the proceeding. In a separate part of this decision, the Board resolves Contention 5. We need not (and do not) decide the legal question, however, because LILCO gave its interface plan in its statement of material facts. Motion, fact 5. It will rely on the Suffolk County Executive or the State Emergency Management Office to permit activation of the State EBS. If that fails it will contact WCBS directly. If that fails it will activate the local Shoreham EBS. The plan therefore contains four levels of actions for activating the EBS. Additional detail is given in Revision 10 to the plan. Motion, Att. 2. Nothing in that description has been controverted by a material fact.

Intervenors claim that, even if the Board does dismiss Contention 5, they are not barred from raising interface issues. Their claim is supported by legal argument that the Commission's best effort assumption applies only to

governments and cannot be applied to private entities such as broadcasting stations. This creates genuine doubt in their view that private broadcasters will transmit emergency messages, even if requested to do so by Government officials.

Intervenors present no material facts that controvert any fact concerning interface procedures submitted by LILCO. Their assertion, without supporting facts, that private broadcasters might not broadcast emergency messages is plainly absurd in the face of an existing agreement between the Broadcast industry and the State of New York to broadcast such messages. Motion, Att. 4. We do not decide the legal controversy concerning whether the Commission's rules apply to private entities because it is unnecessary to do so. The Board's finding is based on factual evidence that is uncontroverted by Intervenors. We do not rely on application of the best efforts assumption to private entities in reaching our decision.

Intervenors have not successfully controverted any material fact asserted by LILCO. Such a finding is sufficient for granting a motion for summary disposition. Nevertheless Intervenors press additional procedural or legal arguments which in their view are sufficient basis to deny LILCO's motion. The Intervenors argue that LILCO's EBS plan is radically new and they have not had adequate time to

review it. Thus they claim they cannot admit or deny several of LILCO's facts.

NRC regulations provide authority for a presiding officer to refuse the application for summary disposition or to order a continuance to permit affidavits to be obtained if it appears from an opponent's affidavit that he cannot provide by affidavit facts essential to justify his opposition. 10 C.F.R. 2.749(c). Intervenors have not provided affidavits in their response to the motion nor do they otherwise provide adequate reason why they could not obtain facts to justify their opposition to LILCO's proposal. The State EBS has been in existence at least since 1981. It is approved by New York State. No reason is given why New York State, which is a party to this proceeding and to the State EBS plan, is not already in possession of facts that would justify its opposition if they exist.

The Board has previously taken a dim view of LILCO's propensity for introducing substantial revisions to its emergency plan for the first time in motions for summary disposition. Several such motions have been denied in the past. In a prior revision of the EBS plan involving WPLR we labeled LILCO's motion "executory" in denying it. Intervenors urge the same result in this case. In the previous instance, however, the motion preceded Revision 9 of the plan by more than two months and the plan itself

consisted of a new, privately developed EBS, bonded together by privately executed letters of agreement. It was executory because it rested on LILCO's assertions alone and there had been no opportunity for review by any party. In the present plan however LILCO will become, in effect, a user of a preexisting State Pla. which is approved by the State of New York, the details of which are accessible to the opposing parties. The fact that a change in plans was forthcoming was disclosed in early May 1988, and Revision 10 to the emergency plan which contained the new scheme for EBS was made available on or about May 25, 1988. Intervenors had limited discovery on the new plan. The motion for summary disposition was dated June 20, 1988 and Intervenors responded on July 12, 1988. If facts existed to justify Intervenors' opposition to the present plan, they could have been timely produced in the foregoing sequence of events. The Board concludes that Intervenors' legal or procedural objections have no merit, and they do not constitute cause for denying LILCO's motion for summary disposition.

Intervenors' argument that LILCO's plar is ambiguous or unclear is equally without merit. The State EBS plan together with Revision 10 provides a sufficiently clear disclosure of LILCO's plan to enable Intervenors to submit at least some facts that would justify their opposition, if such facts exist.

The Board did not consider LILCO's assertion that it could rely on admitted fact number 17 from a previous motion to establish that Intervenors have admitted the adequacy of coverage of the State EBS in the EPZ. Intervenors disputed LILCO's assertion but we decide the motion on the basis of the factual evidence submitted in the motion and responses. It was unnecessary to reach the question posed by previously admitted facts.

Because we decide on other grounds that LILCO has prevailed on its motion, the Board does not decide whether LILCO is entitled to a factual presumption of adequacy of its plan as a sanction against Intervenors for refusing to permit depositions during the limited discovery we ordered when Revision 10 was published. Suffice it to say, however, that the Board cannot recall an instance in the long history of this case where it has ordered unilateral discovery for the benefit of only one party. Intervenors' assumption that we had done so in this case is simply wrong.

The Board rejected Intervenors' claim that summary disposition should be denied because a particular subject has not been previously litigated or conceded. Response at 24. That is not a proper answer to a motion for summary disposition. It is true as Intervenors assert, for example, that the adequacy of coverage of WALK radio was not litigated in prior hearings on LILCO's emergency plan and that the Board found that the range of stations is not at

issue in Contention 20. 21 NRC 644, 764. The reason the matter was not at issue however is that Intervenors had expressed no basis for concern in their contention on the subject. Their only basis for concern in previous litigation was that WALK did not broadcast at night. The Board subsequently construed the contention to express an underlying concern for adequacy of public notification within the EPZ for the purpose of dealing with the reopened proceeding. This could include a question of coverage because the bases for concern under a new plan could have changed since the initial decision. That does not automatically trigger a new opportunity for litigation however. Intervenors have had the opportunity in their response to factually confront LILCO's assertions about adequacy of coverage in the EPZ. We may therefore decide the issue on the basis of material facts submitted by the parties.

H. Decision

The Board concludes that Intervenors have not controverted facts submitted by LILCO concerning adequacy of broadcast coverage within the EPZ. We find that none of the facts submitted by LILCO in support of its Motion for Summary Disposition on EBS issues have been controverted by Intervenors. The facts submitted by LILCO are adequate, to

establish the adequacy of its plan to comply with NRC regulations and guidance concerning a public emergency warning system. Intervenors' procedural and legal objections to LILCO's motion are without merit. No material facts are in dispute on LILCO's current EBS plan and LILCO is entitled to summary disposition as a matter of law. LILCO's Motion for Summary Disposition on EBS issues is granted.

II. SCHOOL BUS DRIVERS REMAND

This remanded issue centers around the potential for "role conflict" in the school bus drivers upon whom the LILCO Plan depends for the transportation of school children in a radiological emergency. The particular role conflict to be examined here is the conflict between the societal roles which the bus drivers play as family members and as emergency drivers, and the question is whether such conflict could cause abandonment of the role of bus drivers in such large numbers as to make the LILCO Plan unworkable.

A. Introduction

This issue has had a long and turbulent history in the litigation of this case. Indeed, the notion of role conflict formed the basis of one of the contentions dismissed by the Board in the Phase I portion of the proceeding in 1982. That contention questioned the availability of all emergency workers, alleging that no provision had been made for role conflict/role abandonment of emergency workers in general.

In the Phase II portion of the hearings we heard evidence on a contention, Contention 25, which dealt with role conflict as it might affect many categories of emergency workers, including, in particular, bus drivers.

The specific subcontention, Contention 25.C, read as follows:

> Contention 25.C. The LILCO Plan fails to take into account the role conflict that will be experienced by school bus drivers. In fact, a substantial number of school bus drivers are likely to attend to the safety of their own families before they report (if they report at all) to perform the bus driving duties which LILCO assumes will be performed. Role conflict of school bus drivers will mean that neither school buses nor school bus drivers will be available to implement the LILCO Plan. Without an adequate number of buses or bus drivers, LILCO will be incapable of implementing the following protective actions:
>
> 1. early dismissal of schools (necessary under the LILCO Plan to permit school children to be sheltered or to evacuate with their parents);
>
> 2. evacuation of schools.

After hearing evidence on the potential for role conflict in all classes of emergency workers, we concluded:

> [A]lthough some emergency workers may experience a conflict between their emergency duties and their family obligations, the preponderance of the credible evidence of record establishes that this will not be a significant problem at Shoreham and that a sufficient number of emergency workers will respond in a timely fashion . . . . (21 NRC 644, 679)

With regard to school bus drivers in particular we considered a survey of school bus drivers presented by Suffolk County witness Dr. Cole (Cole, ff. Tr. 2789, at 7); we considered the testimony of LILCO witness Dr. Mileti (Cordaro et al., ff. Tr. 831, at 35; Tr. 1086, 1166, (Mileti)); and we agreed with the LILCO witness's testimony, finding that the survey would not reliably predict bus driver behavior and that even were it roughly indicative it would not suggest a massive defection on the part of the

drivers. 21 NRC 644, 675-6. Thus we found in LILCO's favor on the contention.

The Intervenors sought review of the decision, and in ALAB-832, 23 NRC 135, the Appeal Board, while not disturbing our findings for emergency workers other than school bus drivers, remanded the issue of role conflict for the bus drivers themselves. 23 NRC 135, 149-154.

We had excluded certain portions of the Intervenors' proffered testimony on the matter, in particular we had excluded the results of a survey of Suffolk County volunteer firemen (Cole, ff. Tr. 1216, at 12-16), and in the Appeal Board's view "the results of a survey as to the potential for role conflict among firemen . . . would provide insight into the likely course of conduct of school bus drivers." 23 NRC 135, 153. The Board reasoned that "if a trained professional emergency worker such as a fireman would put family obligations ahead of the discharge of . . . emergency duties . . . it is a fair inference that an individual not in such a line of endeavor would encounter at least as great role conflict." Id. Further, the Appeal Board distinguished the relevance which this data might have for school bus drivers from that which it might have for other emergency workers. Id. at n.5, n.6.

In fine, the Appeal Board concluded that ". . . we . . . cannot make a finding that a sufficient number of school bus drivers can be relied upon to perform their

duties . . ." (23 NRC 135, 154). And the Board directed us to reconsider our prior findings and conclusions, to offer an opportunity for the parties to adduce additional evidence and, at a minimum, to accept the testimony related to the survey of volunteer firemen. Id. In remanding this issue, however, the Appeal Board left undisturbed our findings with regard to role conflict in the case of teachers (findings which had been challenged on appeal) and our findings concerning role conflict in other types of emergency workers. We had seen no role conflict problem, despite poll testimony to the contrary, since we weighed other evidence more heavily. 21 NRC 644, 679. Addressing the matter of teacher role conflict specifically, the Appeal Board noted our weighting of the testimony approvingly. 23 NRC 135, 151-52.

In directing us to accept the testimony concerning the volunteer firemen, the Appeal Board relied upon its earlier decision in the Zimmer case,(Cincinnati Gas and Electric Company (William H. Zimmer Nuclear Power Station, Unit No. 1), ALAB-727, 17 NRC 760, (1982)), saying:

> It is thus unsurprising that, in the consideration of emergency planning in Zimmer, we found that surveys of volunteer life squadsmen and firemen concerning the role conflict they would encounter raised "a serious question as to whether bus drivers could be depended upon to carry out their responsibilities" in the event of an accident at that plant.

23 NRC 153.

In Zimmer the Appeal Board had found an unresolved question as to whether bus drivers would in fact respond to their driving duties in an emergency. 17 NRC 760, 772. The Board perceived this question in testimony presented by Richard Feldkamp, Assistant Chief of the New Richmond Life Squad. The citation made by the Appeal Board in ALAB-727 was to a portion of Chief Feldkamp's testimony which reads:

> During the course of my involvement as both a life squadsman and fireman in association with the members of the life squad and firemen of the Village of New Richmond, approximately 95% of the life squadsmen have indicated and (sic) will not respond in a volunteer emergency response role in the event of a Zimmer Station accident. As to firemen, approximately 25% will not respond in an emergency role.

Testimony of New Richmond Life Squad Assistant Chief Feldkamp, ff. Zimmer Tr. 5467, at 2-3.

Further, the Appeal Board evidently gave a measure of quantitative credence to the numbers mentioned in Chief Feldkamp's testimony, saying:

> Although not in terms of bus drivers, testimony adduced at the hearing below suggested that approximately 95% of the volunteer life squadsmen and 25% of the fire fighters, also volunteers, would not respond promptly in the event of an accident.

17 NRC 760, 772.

In a more recent case Philadelphia Electric Company (Limerick Generating Station Units 1 and 2), ALAB-836, 23 NRC 479 (1986)), the Appeal Board found the results of a survey conducted by a school superintendent entitled to greater weight than the Licensing Board there gave them. The Appeal Board remarked that the survey was "rather

straightforward and neutral in the simple questions it asks the drivers", and the Board noted that the survey showed almost 42% of the drivers failing to "respond positively" to the survey itself. 23 NRC 479, 517. The fact that the survey data left unclear just how many drivers did not respond at all to the survey was deemed "irrelevant" by the Appeal Board, since that Board believed that even failing to return such a questionnaire or answering "undecided" would suggest less than "reasonable assurance" that the driver would report for duty. Id. at n.68.

The Appeal Board there concluded that the Applicant was "obliged to produce affirmative evidence of an adequate number of available drivers from some source, once the survey results substantially clouded that matter with doubt." 23 NRC 479, 518.

After the remand, LILCO substantially revised its plan for the evacuation of school children and moved for summary disposition of Contention 25.C on the basis of the new plan. LILCO's Motion for Summary Disposition of Contention 25.C ("Role Conflict" of School Bus Drivers), October 22, 1987. In the revised plan, LILCO proposed to provide enough of its own employees to drive as many school buses as might be needed to evacuate all school children in a single wave. Further, LILCO proposed to provide "backup" drivers for all the regular school bus drivers which such a single wave evacuation would entail. Thus the plan moved from a

situation in which LILCO relied on a comparatively small number of regular school bus drivers to make more than one trip each to a situation in which LILCO would supply enough of its own employee-drivers to evacuate the children in one wave, even if the regular drivers should renege on their duties.

The Intervenors opposed LILCO's Motion, arguing that LILCO had radically changed its plan for dealing with school children. The Intervenors charged that the Motion reflected nothing more than an executory future commitment by LILCO to recruit and train the necessary drivers, and that there had been no indication that the drivers LILCO might supply could actually serve as regular and backup drivers in an emergency. Answer of Suffolk County, the State of New York and the Town of Southampton to LILCO's Motion for Summary Disposition of Contention 25.C ("Role Conflict" of School Bus Drivers), November 13, 1987.

We denied LILCO's Motion, and we recast the issue to be dealt with, saying:

> The basic issue to be explored by the Board is whether, in light of the potential for role conflict, a sufficient number of school bus drivers can be relied upon to perform emergency evacuation duties. To assure an adequate number of bus drivers, LILCO has developed its new proposal for auxiliary drivers. It will suffice for our purposes that an opportunity to confront this plan be provided and a period for discovery on the plan's dimensions be authorized.

Memorandum and Order (Ruling on Applicant's Motion October 22, 1987, for Summary Disposition of Contention 25.C Role Conflict of School Bus Drivers), December 30, 1987, at 5.

In response to a later motion by LILCO, we made it clear that we regarded the subject of the remand as very circumscribed and we intended the remand to comprise only the issue of the number of bus drivers who could be relied upon to drive in a radiological emergency. In particular, we ruled that "Questions concerning the availability of buses, reception centers for school children, and evacuation time estimates are not within the scope of the remanded bus driver issue." Memorandum and Order (Ruling on LILCO Motion In Limine and Motion to Set Schedule), February 23, 1988, at 4. With that ruling as a basis, we subsequently struck portions of the Intervenors' proffered testimony. Memorandum and Order (Pending Motions to Strike), May 9, 1988.[10]

---

[10] The Governments would have us reconsider our original ruling, summarily reverse it, admit the proffered testimony at this late date, and base our decision on that testimony. That we decline to do. To begin with, we adhere to our original view as to the proper scope of the remanded hearing. But even were we to depart from that view, we would not consider admitting the testimony and using it without opportunity for cross examination on the part of the other parties.

During the trial on the remanded school bus driver role conflict issue, LILCO presented the testimony of Douglas M. Crocker, Robert B. Kelly, Michael K. Lindell, and Dennis S. Mileti.[11] Suffolk County presented a panel consisting of sociologists Stephen Cole, Ralph H. Turner, and Allen H. Barton,[12] and a panel of eight school officials and transportation directors from school districts in and near the EPZ. This latter panel included Bruce G. Brodsky, Edward J. Doherty, Howard M. Koenig, Nick F. Muto, Robert W. Petrilak, Anthony R. Rossi, J. Thomas Smith, and Richard N. Suprina.[13] Neither the State, Federal Emergency Management Agency (FEMA), nor the NRC Staff presented witnesses on this issue.

---

[11] Testimony of Douglas M. Crocker, Robert B. Kelly, Michael K. Lindell, and Dennis S. Mileti on the Remanded Issue of "Role Conflict" of School Bus Drivers, ff. Tr. 19431 (Crocker, et al.)

[12] Testimony of Stephen Cole, Ralph H. Turner, and Allen H. Barton on the Remand of Contention 25.C--Role Conflict of School Bus Drivers, ff. Tr. 20672 (Cole, et al.)

[13] Direct Testimony of Bruce G. Brodsky, Edward J. Doherty, Howard M. Koenig, Nick F. Muto, Robert W. Petrilak, Anthony R. Rossi, J. Thomas Smith and Richard N. Suprina, ff. Tr. 20259 (Brodsky, et al.).

B. Parties Positions

We turn first to the theoretical treatment of role conflict/role abandonment given by the opposing groups of sociologists and psychologists presented by LILCO and Suffolk County. Individuals in complex societies have multiple roles; sometimes these roles conflict. For example, one's role as a family member may conflict with one's role as a worker, while roles in religious or other organizations may conflict with either of those roles or with each other. The County's witnesses defined the concept and gave several examples. Cole, et al., at 10-12. LILCO's witnesses, while agreeing that role conflicts could occur (Tr. 19513, 19548-9 (Mileti)), viewed such conflict as something that would not present a real problem. Crocker, et al., at 48 (Lindell); Tr. 19439 (Lindell); Tr. 19539 (Mileti). In particular, the LILCO witnesses assert that a serious conflict of roles will not arise and role abandonment will not occur in emergency workers when each individual's emergency role is clearly understood, through training or otherwise. Crocker, et al., at 9, 14-15; Tr. 19497-99 (Lindell). LILCO's witnesses also believe that certain sociological forces will assist in minimizing the chance of role conflict/role abandonment in school bus drivers in an emergency, and that among these are the strong tendency of human adults to aid children (Tr. 19567

(Mileti)), the high priority which society assigns to evacuating school children in danger (Tr. 19529 (Mileti), the "normative overlap" or similarity which exists between the bus drivers' ordinary work and their duties in an emergency, (Crocker, et al., at 15) and the feeling of responsibility engendered in the drivers because they were the very people who brought the children to their schools with the expectation that they would return for them later. Tr. 20188-9 (Lindell).

The County's witnesses, on the other hand, say that "the sociological literature demonstrates that, in our society, family roles tend to be the most important". Cole, et al., at 14. These witnesses predicted that a very large number of school bus drivers would choose to attend to the needs of their families first, performing their bus-driving duties only after they had fully satisfied themselves that their families were safe. Cole, et al., 17-18.

Both sets of experts attempted to bolster their positions with experiential data. The County's witnesses cite a work by Lewis Killian (L.W. Killian, "The Significance of Multiple Group Membership in Disaster", American Journal of Sociology, January 1952, at 309-14) to indicate that, in four disasters studied, "The great Majority of persons interviewed who were involved in [role conflict] dilemmas resolved them in favor of the family, or, in some cases, friendship groups". Id. at 311. The

witnesses also cite a 1953 Dutch study, a study done in Texas in 1958, a doctoral dissertation in 1958, and still another study in 1958. They quote only the last of these (W. H. Form and S Nosow, Community in Disaster, (1958)), noting that Professor Barton, one of the witnesses, summarized them all in his work Communities in Conflict (1969), and they assert that the conclusion that "help for family members, friends, and neighbors comes first" is typical of all the studies. Cole, et al., at 28-9.

LILCO's expert witnesses, on the other hand, view role conflict/role abandonment as a "non-problem". They regard the work of Killian and that of Professor Barton as "older literature" (See LILCO's Proposed Findings at 26). They report that they have searched the later literature, and they cite many reports to the effect that role conflict does not produce role abandonment, that role conflict does not result in loss of emergency manpower, and that emergency workers who have clear understanding of what is expected of them do their jobs. The LILCO witnesses found only one article that seriously questioned that proposition, an article by James H. Johnson (previously a witness for Suffolk County). That article reported a survey (during normal times) of teachers, one third of whom said they would not assist in evacuating schools. Crocker, et al., at 9-15.

LILCO's witnesses also rely heavily on work done and analysis by Dr. Russell Dynes, who testified earlier in

these hearings for LILCO. Cordaro, et al., ff. Tr. 831. Dr. Dynes then testified that in a review of over 6000 interviews, conducted by the Disaster Research Center at Ohio State, he did not find even one instance where the functioning of an emergency organization was undercut by personnel not reporting for duty. Id. at 16-17. He asserted that in his experience the problem in emergencies is less likely to be a loss of personnel than a surfeit. Tr. 918-19 (Dynes). Suffolk County's witnesses disagreed with the data Dr. Dynes put forward, criticizing the Disaster Research Center study and questioning its applicability here. They pointed out particularly that the study was not directed specifically at role conflict, that the interviewees may have wanted to put a favorable light on their performance in emergencies, and that no radiological emergencies were included. Cole, et al., at 38-39.

The Suffolk County witnesses did not actually cite any instance in which an emergency response had been impaired by role conflict. LILCO's witnesses said they knew of no instances of role abandonment in emergencies (Crocker et al. at 25-27), with the possible exception of certain medical personnel at Hiroshima, who first attempted to treat victims but later gave up the attempt. Id. at 26 (Mileti). This was despite a study of fifty large, quickly developing, problem-laden evacuations in densely populated areas. Id. at 26-27 (Kelly). However, LILCO's witnesses did concede

that bus drivers might not carry out their duties if they perceived that a radiological plume directly threatened their own families in a fashion similar to "a person seeing his own house on fire". Id. at 23 (Lindell, Mileti).

LILCO's witness Kelly (or people acting under his supervision) also conducted two telephone interview surveys, one of emergency managers and bus company officials and one of actual bus drivers involved in 19 evacuations. The surveys found no refusals to drive by any notified bus drivers, only scattered instances involving 10% or less of any group of drivers wherein drivers arrived late because they first helped their families, and no cases where there were insufficient drivers to evacuate all who needed to be evacuated. Id. at 28-29. The County attacked the results of these surveys on several grounds. Governments' Proposed Findings at 53. The County brought out that Mr. Kelly had checked and corrected the results of the survey in certain instances, but had only investigated cases where role abandonment appeared to have taken place. Tr. 19905-20 (Kelly). The County also questioned whether Mr. Kelly had made certain that the people interviewed were those most familiar with the incident investigated and most likely to know about it. Tr. 19868-70 (Kelly). Errors were made in recording some data. Tr. 19902-3 (Kelly). The sample of bus drivers was small (Tr. 19938 (Kelly)), and one of the

questions seemed to the Intervenors ambiguously worded. Governments' Proposed Findings at 51.

While the techniques employed may not have been such as to assure the soundest, most iron-clad data, the Board regards the County's criticisms as minor. We believe that the survey shows what it appears to show, viz., that in past experience, role abandonment by bus drivers has been rare and not a significant impediment to emergency evacuations.

We turn now to a matter at the core of this remanded issue: the survey of firemen conducted by Dr. Cole denied admission as evidence in the earlier hearings, and a more recent survey, conducted in preparation for this remand hearing. This brings to a total of three the surveys conducted by Dr. Cole on this subject and admitted into evidence: (1) a 1982 survey of school bus drivers (See Cole, et al., ff. Tr. 2792), (2) the 1982 survey of firemen, and (3) the 1988 survey, also a survey of firemen. Cole, et al., ff. Tr. 20672, at 40-41. The results of all three were discussed in the witnesses' latest testimony. Id. at 40-58.

Briefly summarized, the results of the 1982 survey of bus drivers indicated that 69% of the drivers said that they would first make sure their families were safely out of the evacuation zone in the event of a Shoreham emergency, 4% more said they would check on their families before reporting, 3% said they would leave the zone immediately,

and only 24% said they would report to work to take children to a shelter. Cole, et al., at 41.

The 1982 survey of firemen was structured in a manner sufficiently complex to require the construction of an index correlating the answers to two separate questions in order to estimate the number of firemen who would report for duty in a radiological emergency, Dr. Cole's analysis indicated that 36% of the firemen would look after the safety of themselves and their families in a way which would prevent them from reporting quickly, 55% would attempt to report quickly, and 8% did not know what they would do. Id. at 47. Dr. Cole found support for the results of this part of the survey in certain other questions included, questions in which the interviewee was asked to agree or disagree with a particular statement. For example, he found that 92% agreed that "In the event of a nuclear emergency at Shoreham, it would be the obligation of everyone to first look after the health and safety of their (sic) family." On the other hand, only 17% agreed with the statement that "In the event of a nuclear emergency at Shoreham, a volunteer firemen must place duty to the fire department over duty to family." Id. at 47-48.

The 1988 survey of firemen was more complexly structured and required more complex analysis than that conducted in 1982. Id. at 50-54. Nevertheless, Dr. Cole felt he could reliably conclude from it that less than one

third of the firemen can be counted upon to help out during an emergency at the Shoreham plant. Id. at 55. Asked why the fraction who would respond had diminished between 1982 and 1987, Dr. Cole ascribed the decrease to two conditions: First, the later poll provided a better assessment of what firemen would do, and second, the increased publicity about Shoreham and the intervening accident at Chernobyl had increased the concern over Shoreham in the Long Island community. Id. at 55-56 n. 35.

Unlike the surveys introduced by LILCO and discussed above, Dr. Cole's work is predictive, that is, it asks people what they would do rather than asking what they did (or what others did). Predictably, the LILCO witnesses attacked this aspect of the surveys as they have in the past. Dr. Mileti reminded us that he has repeatedly stated in the past that poll data gathered on behavioral intentions should not be taken as predictive of future behavior. He recounted his experience in interviewing people to find what they intended to do if an earthquake were predicted. Subsequent study of a "near prediction" in fact showed their behavior to be quite different from what the interviews predicted. Crocker, et al., at 40-41. Dr. Mileti has maintained throughout these proceedings that emergency behavior is determined by situational perceptions at the time of the emergency, not by previous intentions. Cf. Tr. 1085-86; 1164; 1121-22 (Mileti). Indeed, Drs. Lindell and

Mileti went so far as to say that Dr. Cole's polls are measuring, not future behavior, but present attitudes, favorable or unfavorable, toward LILCO, and possibly the attitudes of the respondents toward their families. Crocker, et al., at 43.

We have ourselves agreed in the past that predictive polls are of dubious validity. In our Partial Initial Decision (21 NRC 644, 667, 676) we found that polls were not reliable predictors of human behavior in an emergency and we ruled against the Intervenors on both the matter of role conflict and the matter of shadow evacuation. In our Partial Initial Decision on the Suitability of Reception Centers (27 NRC 509) we again affirmed our conviction that Dr. Cole's polling techniques would not predict future behavior. 27 NRC 509, 523.

Apparently concerned lest we might deem the supply of bus drivers inadequate, LILCO made substantial changes in its Plan with respect to the evacuation of school children. In order to remove any "lingering doubt" as to the sufficiency of drivers and to assure that all schools would be evacuated as quickly as possible, LILCO adopted a procedure which relies on bus drivers who are members of LILCO's own LERO organization. Crocker, et al., at 49-50. The new procedure comprises a "one wave" evacuation (one in which enough drivers and buses are assigned to each school so that each bus and driver make only one trip). Id. at 50.

Not only are enough LERO drivers added to the pool of regular bus drivers to accomplish this, but a sufficient number of LERO drivers are also added to yield a LERO substitute for each regular driver. The LERO drivers needed to yield a one-wave evacuation if the regular drivers do in fact drive are termed "primary" drivers; those whose duty is to drive only if the regular drivers are unable or unwilling to d[illegible] are called "backup" drivers. Id. at 49.

LILCO calculates that a total of 509 drivers will be needed. To perform that calculation, LILCO took the public and parochial school populations, reduced the number by 5% to account for absences, and further reduced it by 20% for high schools to account for students who would evacuate in their own cars or with someone else. For nursery schools they used the total school population. Id. at 50-51. They determined the number of buses needed by assuming 40 students per bus for high schools and 60 students per bus for the lower grades. Id. These assumptions are the same as those litigated in our earlier hearings. Id.

LILCO expects to train a total of 613 bus drivers. Id. at 52. This allows 301 drivers to serve as backup drivers for the regular school bus drivers. LILCO added to that number 150% of the 208 primary drivers required to yield the needed 509; thus the plan is to supply a backup driver for every regular driver plus 150% of the primary drivers needed for a one-wave evacuation. Id. at 53.

To mobilize the LERO drivers, pagers will be set off to call a selected group of drivers and they will call the rest by telephone. The drivers will be trained to report directly to pre-designated bus yards, backup drivers going to yards that normally supply buses and primary drivers going to yards that do not. Backup drivers will report to the company dispatcher and drive only if asked to do so by the dispatcher. If the bus dispatcher asks the LERO driver to drive, the driver will pick up an Assignment Packet from a box established by LILCO at the yard and head for the school designated in the packet. Primary drivers will pick up Assignment Packets and depart for their assigned schools directly. Id. at 53-54.

The entire plan for the call-up and dispatch of the bus drivers is presently outlined in Revision 10 to the Emergency Plan, and is described in Attachments O and P to LILCO's Supplemental Testimony on the Remanded Issue of "Role Conflict" of School Bus Drivers, ff. Tr. 19431 (LILCO's Supplemental Testimony). That late revision made only one major change to the program set forth above: it recognized that some regular bus drivers take their buses home, and it stated LILCO's belief that these drivers will return their buses to the bus yards if they decide not to drive. It makes other changes which are minor and adds 21 drivers for one specific school. LILCO's Supplemental Testimony at 2-3.

The Intervenors characterize LILCO's latest plan as "unworkable" and "fatally flawed". Governments' Proposed Findings at 64, 95, 100. They attack the plan on several grounds.

First they assert that the plan underestimates the school populations requiring transportation. Brodsky, et al., at 37-43. Further, the Intervenors disagree with LILCO's computational practices in reducing the numbers by 5% to account for absences and (in the case of high schools) by 20% to account for students who drive or ride with others. Governments' Proposed Findings, Citing Tr. 20309 (Suprina); 20310 (Petrilak).

The Intervenors' witnesses also assert that seating 40 high school students and 60 lower grade students on each bus would lead to extra noise and confusion "which is very distracting to the driver and poses a potential safety hazard" Indeed, they assert that"[f]or any trip over 10 miles, we would never load the bus three per seat . . . regardless of the age or size of the students." Brodsky, et al., at 41-42 (Petrilak, Doherty, Smith). The Intervenors' witnesses also question whether LILCO has accurately represented the number of 20-seat buses available, pointing out that many of their own buses are not full size. Id. at 42-43. And if teachers were to ride on the buses to assist the LERO drivers in keeping order, there would be even fewer seats. Tr. 20414-16 (Rossi).

Further, the Intervenors' witnesses say they doubt that the LERO drivers' selection, training, and experience would properly prepare them for the safe and efficient transport of students. The witnesses stress the rigorous selection and training process which their regular drivers undergo, and they point out that there is more to competent operation and control of children than simply possessing a Class 2 bus operator's license. Brodsky, et al., at 50-52.

LILCO and the Intervenors engage in a number of small skirmishes as to facts and law. The Intervenors would have us find that "LILCO [does] not yet have any employees licensed to drive buses." Governments' Proposed Findings at 63-64 n.49. While LILCO points out that, in the part of the record Intervenors cite, LILCO's witness stated that the vast majority already had appropriate licenses in their possession. LILCO Reply at 42, Citing Tr. 19705 (Crocker). LILCO claims that its drivers would be exempt from certain State requirements for school bus drivers because they are "volunteers". LILCO's Proposed Findings at 54-55. The Intervenors counter that LERO employees are not "volunteers" under the law cited because they are given overtime pay and bonuses for their participation in LERO. Governments' Proposed Findings at 78 n. 69. LILCO replies with a minor dissertation on the etymology of the word "volunteer". LILCO Reply at 50-51. The Intervenors repeatedly attempt to raise issues we have already ruled outside the scope of this

proceeding: the overloading of telephone circuits (Governments' Proposed Findi s at 88); the availability of buses (Id. at 83); and the monitoring and decontamination of school children (Id. at 96). LILCO, of course, objects to these attempts. LILCO's Reply at 52, 55, 56-57. As we observed in note 10, supra, we do not intend to disturb our earlier rulings.

C. Opinion and Conclusions

We have carefully considered the positions of the parties and the evidence supporting them. Our decision must hinge upon two successive questions: first, in the face of the present record and the rulings of the Appeal Board, does the role conflict/role abandonment issue raise sufficient doubt about the availability of the regular bus drivers to oblige the LILCO to produce its own substitutes in accord with ALAB-836 (23 NRC 479, 518), and second, to the extent that LILCO/LERO employees are relied upon, either as primary or secondary drivers, can they adequately fulfill the bus driver function.

LILCO believes that the answer to the first question is no, and hence believes that we should relieve the LERO organization from the responsibility to provide the "back up" drivers. LILCO's Proposed Findings at 58. We agree.

We are aware that the Appeal Board in Zimmer found that surveys of firemen and life squadsmen by a fire chief raised "a serious question as to whether bus drivers could be depended upon to carry out their responsibilities" in a nuclear emergency. We are further aware that in Limerick the Appeal Board found that, for certain school districts a substantial cloud was cast on the availability of drivers (23 NRC 479, 518), although in the latter case the Appeal Board also found that the Licensing Board properly ignored certain other similar surveys. Id. at 519.

Nonetheless, in the case at bar, the Appeal Board specifically remanded this issue because we had excluded the evidence concerning firemen's role conflict and the implications thereof for bus drivers' role conflict, not for any misinterpretation of the total weight of evidence on role conflict as a whole. 23 NRC 135, 153-54. Indeed, with regard to other classes of workers, for example school teachers, the Appeal Board affirmed our finding that role conflict would not cripple the plan, where that finding was grounded on evidence other than survey results, even though some surveys to the contrary had also been excluded in that instance. Id. at 151-52. The Appeal Board directed us to admit the firemen survey evidence "at minimum", and we have done so. But we have also admitted contrary evidence which we regard as far weightier.

In dealing with the question of role conflict as it applies to teachers, the Appeal Board specifically found that historical testimony, that of the Chief of FEMA's Natural and Technological Hazards Division, to the effect that teachers had met their obligations dominated informal survey results. 23 NRC 135, 151-52. In Limerick no such contrary evidence had emerged; indeed, the evidence of FEMA's witnesses was to the effect that the availability of bus drivers had not been assured. 23 NRC 479, 519.

We have considered the mass of evidence presented by the LILCO witnesses and condensed above. Those witnesses presented historical evidence to the effect that previous emergency situations have not occasioned the role abandonment of bus drivers. The Intervenors were unable to show any substantial history of such role abandonment. In the surveys cited above, surveys of both the literature and the memories of persons involved in emergency responses, response organizations simply did not lose their effectiveness because of role conflict/role abandonment.

As we note above, we have in the past accorded very little weight to Dr. Cole's surveys as predictors of human behavior, and in fact the results we thus reached have, in the main, been left undisturbed. With the admission of all the evidence, we find here as we have before that on a priori attempt to predict human behavior from surveys of opinion must yield before the a posteriori evidence of what

people have in fact done. The Intervenors' challenge in this case is grounded upon a compound hypothesis for which none of the elements of scientific proof have been established. The elements of that hypothesis are: 1. Role conflict exists among emergency worker to a degree that would prevent them from performing an emergency role, and 2. Opinion polls provide an adequate measure of that conflict and its impact on the response resources of an emergency organization.

These two elements may well be true. But when all the evidence adduced shows no case where they have functioned and many cases where they have not, we must disregard them. We are fully aware that LILCO has the burden of proof in showing the adequacy of its Plan to protect health and safety, but however plausible the Intervenors' hypotheses may seem to some at first blush, they would have to point out at least some instances in which they have appeared. To discount LILCO's substantial evidence to the effect that bus drivers do, in fact, respond would be to require LILCO to prove a negative, viz., to show that something could never happen in the future.

We have previously found that Dr. Cole has used valid statistical and design methodology in his polls. The problem does not lie with the technique but with the fundamental concept. There is nothing inherent in the methodology that compels the conclusion that they have

predictive value. The poll measures opinion at the time it is taken. It remains valid only as long as the opinions do not change. But we must pass upon a plan that is expected to remain viable for thirty years. Not only will the simple passage of time affect the real results that may occur, but the press of the situation in an accident will dominate any response. It is, in fact, precisely that effect that LILCO's witnesses tell us will change the minds of those who now say they will not help. We are inclined to agree with the LILCO witnesses who say that the polls measure opposition to Shoreham and present concern for family. That opposition is well known, but the Commission's rules do not allow such opposition to serve as a basis for a licensing decision.

The Intervenors' polls are not a real support for the role conflict/role abandonment hypothesis. LILCO's evidence substantially refutes the hypothesis. We find for LILCO, and we see no need for LILCO to supply back up drivers for the regular school bus drivers.

We turn now to the question of whether the drivers to be supplied by LILCO, LERO workers, are available in sufficient numbers and are usable as planned. As to the first matter, the availability of sufficient numbers, we believe that LILCO has carried the day. To begin with, accidents which will require the evacuation of <u>all</u> residents of the area are among the rarest of accidents. Even if all

schools must evacuate, there appears to be substantial assurance of a sufficiency, even a surfeit, of drivers. True, the total school population has been adjusted downward by factors which the Intervenors call to question. But even the shortfall of 64 buses (and hence bus drivers) hypothesized by the Intervenors' witnesses is only of the order of 10% of the total. Brodsky, et al., at 41. The overage of 50% of the primary drivers built into the system by LILCO should cover that and more.

Even if there were a slight shortage of drivers (and hence of buses), crowding, or the accepting of standees, would not be totally objectionable as an emergency measure. Indeed, all of the Intervenors' main objections: crowding, noise, use of inexperienced drivers, questions of State law devolving about the word "volunteer", and the objections of school officials to the use of drivers they have not approved, would pale in the face of an actual emergency. The notion, for example, that school children fleeing a hazard would be denied access to Nassau County because the County would not admit a bus unlicensed therein is ludicrous. Brodsky, et al., at 55.

True, in an emergency the children would not be transported as elegantly and understandingly as one would desire them to be under regular circumstances. But transported they would be. The Intervenors would have LILCO assure an evacuation system that goes beyond the merely

serviceable to reach the truly fastidious. We think that unnecessary. We also note that, after the remand in Limerick, the licensee proposed to solve the problem of possible role abandonment of bus drivers by supplying licensee employees to drive buses. Philadelphia Electric Co. (Limerick Generating Station Units 1 and 2), LBP-86-32, Supplement to Third Partial Initial Decision, 24 NRC 459, 464. That proposal not only met with the Licensing Board's approval, (Id. at 471) but it also received the Appeal Board's blessing. ALAB-857, 25 NRC 7, 15.

We believe, then, that an adequate provision has been made for a supply of bus drivers. We might emphasize that, although the respective needs for buses and drivers exhibit a one-to-one correspondence, the supply of the two resources is unrelated. We thus adhere to our finding in our Partial Initial Decision (21 NRC 644, 872-74) to the effect that it has not been shown that enough buses will necessarily be available. Indeed, since far more buses will be needed under the present Plan than under the previous one, that finding is, a fortiori, true now. But we here clarify that decision by stating that it was indeed our intention to leave the counting of available buses to the Staff.

D. Decision

The record upon remand and our deliberations on that record thus lead us to the decision that the Applicant has, in the case at bar, proposed a plan which swamps any possible shortfall of bus drivers with drivers from an assured source. The condition for reasonable assurance which the Appeal Board set forth in Limerick has been met. We acknowledge that, in the course of arranging for an adequate supply of drivers, LILCO has made substantial changes in the general scheme for evacuation of school children, and we recognize that the use of drivers from LERO may entail conditions which would not be desirable on a day-to-day basis. Nevertheless, we view the new plan as a substantial improvement on the old, and we regard its drawbacks as minor in the face of the purposes it is meant to serve.

We find that LILCO's plan to supply school bus drivers in the event of an evacuation gives reasonable assurance that the health and safety of the public will be protected. We conclude that LILCO's projected response in this area meets the standards and requirements of the NRC's Regulations.

III. HOSPITAL EVACUATION REMAND

A. Introduction

The issue here arises from the Commission's remand concerning Hospital Evacuation Time Estimates (ETEs). CLI-87-12, 26 NRC 383 (1987). The Commission ruled that ETEs in LILCO's emergency plan were required for three designated hospitals which exist either immediately within or just outside the Shoreham EPZ boundary: John T. Mather Memorial Hospital, St Charles Hospital, and Central Suffolk Hospital. Although the latter hospital is outside the 10 mile EPZ boundary, LILCO has formulated emergency plans for it and does not allege any distinction for emergency planning purposes from the hospitals within the EPZ. Similarly, the Board did not draw such a distinction in its Partial Initial Decision and does not do so herein.

The Board concluded in its Partial Initial Decision on Emergency Planning that LILCO's plan for protective actions for the three hospitals in or near the EPZ boundary was reasonable even though LILCO did not calculate specific evacuation time estimates for each one. The conclusion was based on consideration of the hospital's location, shielding factors of hospital buildings, and the needs of hospital patients for special consideration when devising a protective action plan for radiological emergencies.

LBP-85-12, 21 NRC 644, 843-848 (1985). We found by inference from data in the record, however, that evacuation of the three hospitals could generally require about 8 hours 50 minutes to evacuate in each case. Id. at 845.

The issue of hospital evacuation time estimates (ETEs) was remanded on Appeal. ALAB-832, 23 NRC 135 (1986). The Appeal Board interpreted 10 C.F.R. Part 50, Appendix E, Section IV together with the guidance of NUREG-0654 as requiring an analysis of hospital ETEs without exception for case specific circumstances.

The Commission took review of ALAB-832, agreed with the Appeal Board's interpretation of Appendix E and NUREG-0654, and returned the issue to the Licensing Board with instructions that the regulations require "evacuation time estimates for the EPZ without exceptions for special facilities such as hospitals." In so ordering, the Commission suggested that the Board might alternatively find the LILCO plan adequate from the existing record under 10 C.F.R. 50.47(c)(1) on the ground that deficiencies in the plan are not significant for the plant in question.

In a subsequent summary disposition motion (December 18, 1987), LILCO alleged inter alia that it had calculated specific ETEs for the three hospitals, that it had incorporated those estimates into a forthcoming revision of its emergency plan, and that this would remedy the deficiency found by the Appeal Board and the Commission. In

an Order of February 24, 1988 (Order), the Board denied LILCO's motion because it relied in part on the new ETEs and there existed a genuine disagreement of experts as to the bases for the new calculations.[14] We determined however that LILCO's ETEs were the only matter within the scope of the Commission's remand order and other issues proffered by intervenors such as capacity of reception hospitals and letters of agreement would not be litigated.

The standards which must be met for the narrow purposes of this remand proceeding are set forth in NUREG-0654 Sect. II. J.8, 10 and Appendix 4. These sections require inter alia that plans must specify evacuation time estimates for protection of mobility impaired persons and persons in special facilities and specify acceptable methods for making the estimates.

The issue specified by the Board in this proceeding was whether LILCO's ETEs for the three hospitals have adequate bases and accuracy to comply with NRC regulations and guidance. Governments' Proposed Findings at 141; Order at 12. The Board rules in this decision that LILCO's hospital

---

[14] Memorandum and Order (Ruling on LILCO's Motion for Summary Disposition of the Hospital Evacuation Issue), February 24, 1988 (unpublished). See also Memorandum and Order (Ruling on Intervenors' Motion for Reconsideration of Board Order on Summary Disposition of Hospital Evacuation Issue), April 14, 1988 (unpublished).

ETEs are accurate and that it has fulfilled the Commission's order on remand concerning hospital ETEs. We find no merit in Intervenors' assertions that we should order the results of sensitivity analyses to be included with the ETEs in LILCO's plan.

Expert witnesses were presented by LILCO, the State of New York, and the NRC Staff. Neither FEMA nor Suffolk County presented witnesses on this issue. Mr Edward B. Lieberman and Ms. Diane P. Driekorn testified for LILCO. Dr. David T. Hartgen testified for the State of New York and Dr. Thomas Urbanik II testified on behalf of the NRC Staff. All witnesses have testified previously in this proceeding and the Board has accepted their qualifications as experts.

B. LILCO Position

LILCO's position in this controversy is that it has provided ETEs for the three EPZ hospitals as required by the Commissions remand order; that it has used computational methods similar to those employed for other special facilities; that the methods it used were previously found adequate in this proceeding; that it has set forth reasonable assumptions that were used in the analysis; and that it has employed a dynamic analysis as required by NUREG-0654. Thus in its view, the narrow requirements of the remand have been fulfilled and it is entitled to a

decision in its favor on the hospital ETE issue. LILCO's Proposed Findings at 61-66.

C. NRC Staff Position

The NRC Staff agrees with LILCO and proposes factual findings essentially similar to LILCO's. Staff's Proposed Findings at 10-14. The Staff's expert witness reviewed LILCO's methods and results in producing hospital ETEs and found them reasonable and in accordance with the guidance of NUREG-0654 Appendix 4. The Staff's expert made no independent calculations. Staff's Proposed Findings at 22. The Staff, however, emphasized the importance of assumptions used in the analysis. If the assumptions are similar, the results will be similar. Staff's Proposed Findings at 23. The Staff asserts that average vehicle speed assumed for the analysis is properly the average from beginning to end of the evacuation over the actual highways. Variation in vehicle speeds during the evacuation could be large, but the critical question for the analysis is determination of the overall average sustainable speed. Staff's Proposed Findings at 24. The average speed of 15 mph used by LILCO in its analysis for the Long Island Expressway is on the low side of expected speeds since no freeway in the United States has average sustained speeds less than 20 mph. Staff's Proposed Findings at 25-26.

D. Intervenors Position

Intervenors argue that numerous errors revealed in LILCO's testimony during hearing render LILCO's efforts unreliable and that the Board should be skeptical of the results since other undiscovered errors may yet infect LILCO's ETEs. Governments' Proposed Findings at 156. In spite of asserted error, however, Intervenors concede that LILCO's estimates are "close enough". Such a concession would ordinarily put an end to controversy. However, Intervenors assert that their major concern is really that LILCO's hospital ETEs should be accompanied by the results of sensitivity analyses to account for uncertainties in assumptions used in the analyses. Governments' Proposed Findings at 157. They cite in support of this view, variation in results related to input assumptions, and a previous Board order which required that sensitivity analyses for EPZ evacuation times be included in the plan. Governments' Proposed Findings at 158. Intervenors also assert that they were prejudiced by the Board's ruling that LILCO could file rebuttal and error correcting testimony because the filings were untimely. Governments' Proposed Findings at 153.

E. Rebuttal and Surrebuttal Testimony

LILCO presented ETEs in Revision 9 to its plan that were computed by a fairly laborious manual method which, if accurate, might reasonably have been thought to fulfill the Commission remand order which only required that hospital ETEs be included in the plan. The Board denied summary disposition on this issue because it found that a genuine dispute existed concerning the bases and accuracy of LILCO's ETEs. However, the lines of battle apparently expanded during pretrial discovery from a narrow focus on the basis and accuracy of the ETEs to include a challenge based on Intervenors' perceived need for the emergency plan to take account of sensitivity of the estimates to uncertainties in the assumptions used in the analysis. The shifting focus was indirectly disclosed to LILCO in pretrial discovery, but it did not become fully evident until prefiled testimony was submitted. The discovery hint was sufficient, however, to cause LILCO to hasten to develop a computer program that would enable the computation of sensitivity analyses. The task was finished and results were produced virtually on the eve of hearing. Tr. 20587-99 (Lieberman). LILCO sought leave of the Board to file rebuttal testimony which would include sensitivity analyses. See argument of counsel at Tr. 20198-20234. The motion was granted. Tr. 20236.

Intervenors requested leave to file surrebuttal testimony. The motion was also granted. Tr. 20457.

LILCO's rebuttal analyses were based on computer calculations which produced essentially the same results with similar inputs as the manual calculations. The principal advantage of computer computation was to make possible rapid repetitive calculations needed for the sensitivity analyses which had become Intervenors' central concern. The computer analyses produced somewhat different results from the manual calculations, however, because LILCO's consultant found and corrected some computational errors during the program development and introduced some new errors, as was later revealed. In granting the motion to file rebuttal and surrebuttal testimony and in setting deadlines for filing surrebuttal testimony, the Board took account of the fact that the focus of controversy had expanded from that originally specified and that LILCO's manual and computer analyses produced substantially the same results. Intervenors' analyses of the fundamental bases for the manual computations would likely not be invalidated simply because LILCO had developed the means to make more rapid computations. Fairness required the Board to permit LILCO's rebuttal so that it could confront Intervenors' sensitivity allegations. While Intervenors' task of review was undoubtedly strenuous it was not prejudicial because

even though new data was produced by LILCO the fundamental conceptual bases for its analyses had not changed.

F. Evacuation Time Estimates

Intervenors' surrebuttal analysis of the new computations was somewhat fruitful. Dr. Hartgen found errors in LILCO's rebuttal analyses which prompted a further corrective filing by LILCO. New York Surrebuttal Testimony, ff. Tr. 20692, at 5-9 (Hartgen). LILCO Corrections to Rebuttal, ff. Tr. 20586 (Driekorn, Lieberman). The errors were of such subtlety that they could only be found by an expert working with diligence, however, the errors were in the nature of mistakes perhaps traceable to hasty development of LILCO's computer program. Governments' Proposed Findings at 155. The effect of the errors on the ETEs was small and they did not raise questions about the fundamental bases for LILCO's analyses. Tr. 20602 (Lieberman). Mr. Lieberman corrected one more error on the witness stand which he thought might have the effect of lengthening his ostensibly final ETEs for a group of vehicles by an average of about 10 minutes. Tr. 20582, 20585 (Lieberman). The effect of all this review was to drive the ETEs through a short excursion which started from and returned to the original manually estimated ETEs.

The manually calculated ETE estimates in Rev. 9 for Central Suffolk, St. Charles, and Mather hospitals for normal conditions were 12:19, 12:20, and 12:00 hours respectively. LILCO Testimony, ff. Tr. 20856, Att. C IV-184-85 (Driekorn, Lieberman). After the rebuttal, surrebuttal and corrective testimony the emergent estimates were, in the same order 12:05, 12:06, and 11:47 hours. LILCO Correction to Rebuttal Testimony, ff. Tr. 20856, at 7 (Driekorn, Lieberman). If some of these were lengthened by about 10 minutes to account for the last error, the final ETE estimates approach the original estimates. Tr. 20602 (Lieberman). The Board concludes that the effect of the errors was inconsequential for emergency planning. While some of the corrections for adverse conditions were somewhat larger, they were, in the Board's view, equally inconsequential to the principal purpose of assisting decision makers in making a protective action decision in an emergency. The Board agrees with Staff that LILCO's manual computations were valid in the first instance. Tr. 20473 (Urbanik).

Intervenors' prefiled testimony contained their own independently calculated ETEs showing sensitivity analyses based principally on the belief that average highway speeds during an evacuation are a matter of substantial uncertainty. The testimony contained a surprising result; Dr. Hartgen's independently modeled ETEs were sufficiently

similar to LILCO's for similar assumed conditions to conclude that there is no factual controversy concerning the basis and accuracy of LILCO's ETEs. New York testimony, ff. Tr. 20692, Att. 9 (Hartgen). Nevertheless, in his written testimony, Dr. Hartgen pressed the view that LILCO's analyses were infected with error, were unreliable, and should have included numerous sensitivity analyses. It was not until Intervenors' surrebuttal testimony was filed that Dr. Hartgen, under attack from Mr. Lieberman, defended his results by pointing out that they must be valid because they are virtually the same as those obtained by Mr. Lieberman. New York Surrebuttal Testimony, ff. Tr. 20692, at 11, 19 (Hartgen); Tr. 20789-91 (Hartgen).

Dr. Hartgen performed a wide ranging sensitivity analysis using average vehicle speeds that LILCO thought were too low in some cases because the speeds were unsupported by observation or experience. However, both parties presented test cases for average speed variation of 5 mph above and below the base case. Intervenors performed the analyses only for St Charles Hospital while LILCO did them for all three hospitals. The results show that for St. Charles, the parties are in essential agreement on how evacuation time varies with average vehicle speed in the range of 5 mph above and below the base case. Decreasing the average speed by 5 mph lengthens the evacuation time by somewhat more than one hour in both analyses, and increasing

the speed by 5 mph shortens the time by somewhat less than one hour. New York Surrebuttal Testimony, ff. Tr. 20692, Att. 4 (Hartgen); LILCO Corrective Testimony, ff. Tr. 20586, at 8 (Driekorn, Lieberman).

Intervenors' additional test cases, based on more extreme reductions in average highway speeds, produced much longer ETEs. New York Testimony, ff. Tr. 20692, Att. 9 (Hartgen). But valid assumptions must be used in test cases if the results are to be accepted as valid. Tr. 20530-31 (Urbanik). Dr. Hartgen himself thought that 5 mph variation was about the limit of accuracy for estimate highway speeds under level of service F conditions, but pressed the view that speeds could conceivably be much less. New York Testimony, ff. Tr. 20692, at 34 (Hartgen). LILCO used 15 mph for highway speeds under congested conditions in its base case while the Staff thought that 20 mph would be more appropriate based on nationwide experience with highway traffic. Tr. 20491, 20515 (Urbanik). The Staff and LILCO differ by a range (not variance) of 5 mph. However, if error exists in LILCO's base analyses, it is likely in the direction of assuming speeds that are on the low side of expectation. Tr. 20515 (Urbanik). The record will not support any more precise resolution. The Board accepts 5 mph variation in average speed from the base case as the probable limit of uncertainty in making ETEs. The ETEs

could as well be shorter than LILCO found in its base case, rather than longer as advocated by Intervenors.

Wherever LILCO and Intervenors did analyses with similar parameters, they produced similar results. Controversy could have (and should have) ended voluntarily when the full significance of the various results became known. However, reason did not prevail and hearing time was devoted to meaningless pursuit of precision, strenuous efforts to find error however small and to debug LILCO's computer program. Tr. 20472-73 (Urbanik).

The Board concludes that the hospital ETEs provided by LILCO are accurate. We conclude this not only because LILCO fully disclosed the bases for its analysis but also from evidence supplied by Intervenors. LILCO Testimony, ff. Tr. 20586, at 4-14 (Driekorn, Lieberman). A common method for confirming the validity of a technical finding is to attempt to reproduce it by an independent method. This is what Intervenors did for LILCO by independent modeling and computation. We do not believe that any gross error that could have a disabling impact on emergency decisions lies latent in LILCO's programs because Intervenors scrutinized LILCO's results, found only small errors, and confirmed their own ETE's rather than refuted LILCO's. Tr. 20802-803 (Hartgen). Intervenors' conclusion that LILCO's ETEs are "close enough" was well founded on the record of this

proceeding. Tr. 20789-91 (Hartgen); Governments' Proposed Findings 156.

G. Sensitivity Analyses

The remaining question of whether sensitivity analyses should be included in the plan with LILCO's hospital ETEs is related only peripherally to the issue of their bases and accuracy. While such analyses are sometimes useful for the purpose of emergency planning, they have no potential for either confirming or disproving the underlying bases for the ETE model since they are obtained by repetitive runs of the model using different input parameters. Had the Board known that sensitivity analyses were to become the central issue of the proceeding, it likely would not have approved that change in scope of litigation because it does not address the issue that was remanded. The totality of evidence now gives rise to an inference that the sensitivity issue was a fallback position adopted when it became evident prior to trial that Dr. Hartgen's independent calculations tended to confirm rather than refute LILCO's results. However, there was no clear basis for that inference during trial and we shall decide the matter because we permitted a record to be developed on it.

Intervenors urge the Board to order the inclusion of sensitivity analyses for hospital ETEs into the LILCO plan.

They cite inherent uncertainty in average traffic speeds as the principal reason for doing so and cite a prior Board Order as precedent.[15] 21 NRC 644 (1985) at 794-95.

Intervenors' argument that we should issue such an order in this case because we did so in a prior decision is not persuasive. In our prior decision, we ordered the inclusion of sensitivity analyses in the plan because we had relied upon them to decide the issues then before us. We observed: "Suffolk County and the State have proved that scientific uncertainty exists in the evacuation time estimates. LILCO has reasonably estimated the magnitude of uncertainty." We saw our action however as causing an incremental improvement in the plan not involving any ultimate issue of its success or failure. Id. The required

---

[15] Dr. Hartgen cited a number of other subjective variables that could produce uncertainty in ETEs in his prefiled testimony such as hospital capacity, number of patients, evacuation routes, and queue formation. Some were ruled outside the scope of litigation prior to trial. Intervenors did not substantively brief the remaining matters in their proposed findings beyond bare mention of a subject we had previously ruled outside the scope of litigation. We consider these matters to be outside the scope of litigation or abandoned and, in either case, not in need of resolution. There is no cause for the Board to pursue any of these issues further on the basis of possible public health significance because we assume Intervenors selected their best case when they chose to feature traffic speeds, which are influenced by these variables, as the principal source of uncertainty in ETEs. We infer therefore that no significant uncertainty that might arise from these other factors has been overlooked. Tr. 20654-60 (Driekorn, Lieberman).

data already existed and no undue burden was imposed by including it in the plan. The uncertainty referred to in that decision was in the context of resolving highly subjective contentions regarding the impact of possible adverse human behavior on evacuation times for about 150,000 people within the entire EPZ . We did not find that projected travel speeds in the overall EPZ were per se so uncertain as to warrant additional fine tuning of LILCO's plan. In the present case, we deal with the possible evacuation of some 500 hospital patients, most of which would be evacuated after the EPZ evacuation was complete if the order were given. No issues of subjective human behavior are involved. The issue to be decided now is not similar to the one we confronted when we issued our previous order. Intervenors' assertion that we should now observe an uncritical consistency with a previous decision is without merit.

NUREG-0654 provides some guidance and rationale for the use of sensitivity analyses. NUREG-065[illegible] 4 at 4-6,4-7. It requires analyses of the major sour[illegible]riation in ETEs that could reasonably arise. Analyses of ETEs under normal versus adverse weather conditions are required, for example. Further, it prescribes generally that "the relative significance of alternative assumptions shall be addressed . . . ." Reasonableness is required, however, and the guidance cannot be read as an invitation to indulge in

random or speculative sensitivity analyses that involve any permutation of input variables that might be postulated.

H. Conclusions

In this proceeding the relative significance of possible variation in assumed evacuation travel speeds was addressed exhaustively by both parties. The facts produced by that inquiry show that hospital ETEs are not sufficiently sensitive to reasonable variation in possible travel speed to effectively influence emergency decision making. This is so because the reasonable bounds of uncertainty for evacuation travel speeds are relatively narrow and because (as we show below) a decision to evacuate hospitals is not itself highly sensitive to uncertainty in ETE's.

We found in our Partial Initial Decision that LILCO plans to reach a protective action decision for hospitals based only in part on dose estimates under sheltering or evacuation. In an emergency it will first order sheltering of hospital patients and will subsequently consider the advisability of evacuation. Before deciding to evacuate it will consult with medical authorities to evaluate the possible health impact on hospital patients of the evacuation. We found it reasonable for LILCO to plan for sheltering as the principal response, and evacuation as a back-up response, largely because of the additional

considerations that might be required to protect the health of hospital patients in an emergency. 21 NRC 644, 841-46 (1985). Under LILCO's plan, evacuation of hospitals will be considered in an emergency where a decision to evacuate all or part of the EPZ has already been made. We infer that, without additional guidance, the natural propensity of the decision maker might be to also evacuate the hospitals without further analysis. The advice the plan gives however, is to consider other factors which include both the health impacts of evacuation and those of projected radiation doses before ordering evacuation. Hospital ETEs have only an incremental role to play in that decision. We continue to believe that this is a reasonable plan which in no way forecloses evacuation as a possible protective action.

It is clear in context, however, that the decision to evacuate hospitals will be based substantially on consideration of factors other than ETEs alone. Tr. 20652-54 (Driekorn). While ETEs may have some role to play in decision making, other factors will dominate. Nevertheless, NRC regulations and guidance require that specific ETEs be computed for hospitals. LILCO has fulfilled that requirement. We find, however, that the precision in ETEs demanded by Intervenors has no useful role to play in an evacuation decision for hospitals in the Shoreham EPZ where that decision will be secondary to one

already made for the EPZ. LILCO's expert in emergency planning thought that uncertainty in ETEs on the order of 1 to 1 and 1/2 hours would have little influence on the decisions to be made for hospitals. Tr. 20654 (Driekorn). We agree. Dr. Hartgen thought that the residual uncertainty in any one ETE was not less than one hour. Tr. 20803 (Hartgen). Any lingering doubts related to a continuing concern for consideration of a broader range of sensitivity analyses based on extreme assumptions. The Board concludes that the reasonably possible variation in average vehicle speeds in an evacuation is not a major source of variation in ETEs for hospitals.

Finally, we consider whether there is any merit to the more extreme bounds of uncertainty asserted by Intervenors. We find their assertions have little merit because they are based on flawed and misleading evidence. The Board has long since lost its status as neophytes in the assessment of Long Island traffic disputes, and we are by now not inclined to patience with arguments based on citation of inapplicable literature, alternative analyses based on speculative input assumptions, narrowly cast argument on the meaning of "average" or general assertions of comprehensive error and unreliability.

The Board agrees with Staff, for example, that there is no ambiguity on the meaning of "average speed". Tr.20485-88 (Urbanik). Even without the Staff's explanation, we never

had any trouble understanding that average speed in the context of a modeling exercise means the overall portal to portal average for a population of vehicles. It is elementary that the average takes account of the fact that instantaneous speeds at any time during a trip might fall to zero or show more variation than overall trip averages. We do not accept the view that short term extremes that could be observed somehow imply that average speeds could be substantially different from those based on experience.

Neither do we accept Intervenors' assertion that average trip speed should be 6 miles per hour for hospital evacuation because we adopted that figure in our Partial Initial Decision for speeds within the EPZ. We accepted that figure for a full EPZ evacuation which, we found would take about 5 hours. It was an average for the full road network which included urban streets and intersections as well as expressways. It did not apply to expressways alone. LILCO used 6.7 mph in its hospital ETE analysis where hospital evacuation overlapped in both space and time with the EPZ evacuation. LILCO Rebuttal Testimony, ff. Tr. 20586, at 16. (Driekorn, Lieberman). This was proper. It was misleading, however, for Intervenors to assert without supporting evidence that that speed will persist on expressways in a hospital evacuation long after the EPZ evacuation is complete. New York Testimony, ff. Tr. 20692, at 18; New York Surrebuttal, Att. 4.(D) (Hartgen); Tr.

20628-30 (Lieberman). We similarly do not accept a citation to literature suggesting to Intervenors that 8 miles per hour is a likely average expressway speed. That number was picked off the geometric midpoint of a non-linear function arbitrarily and without basis, and it applied to a jammed condition or facility closure. New York Testimony, ff, Tr. 20692, at 13, Att. 7, Fig. 3-4 (Hartgen); Tr. 20744-47 (Hartgen); Tr 20804 (Hartgen); Tr. 20810 (Lieberman). Finally, we reject Intervenors' citation of literature which applied to a highway ramp for a four second duration as evidence that general average expressway speed could be substantially lower than LILCO assumed for the full duration of an evacuation. New York Testimony, ff. Tr. 20692, at 14 (Hartgen); Tr. 20750-53 (Hartgen); Tr. 20488-89 (Urbanik).

The most the record will support is that overall average speeds for a population of hospital vehicles might vary from base estimates by something less than 5 miles per hour. That much variation produces only small changes in ETEs by the estimates of both parties. The Board concludes that inclusion of such sensitivity analyses in LILCO's plan would not enhance decision making capability for hospitals and we therefore decline to issue such an order.[16]

---

[16] Our disposition of the sensitivity issue also (Footnote Continued)

Intervenors' credibility in this part of the proceeding was diminished by insistence that LILCO's evacuation times are unreliable or likely longer when the evidence showed that their own ETEs tended to confirm rather than refute LILCO's. LILCO's results, which are supported by the Staff, are based on observation and experience available to all traffic engineering professionals. We doubt that the ordinary experience of professionals on a subject so mundane as vehicle speeds can in good faith be as variable as was asserted in this proceeding. Neither can we find merit in the pursuit of a sensitivity issue on the basis of a previous Board decision which clearly stated that sensitivity had no bearing on the ultimate success or failure of the plan. The scope of the remanded issue was narrowly defined by the Board to permit exploration of the fundamental bases for the estimates. When it became evident that there was no factual cause for controversy within the defined scope of the proceeding, the good faith course would have been to settle or withdraw the issue.

(Footnote Continued)
disposes, without further analysis, Intervenors corollary demand that LILCO be ordered to provide on-line sensitivity analyses during an actual accident which would necessitate estimation and reporting of travel speeds during an evacuation. Governments' Proposed Finding at 164. Such a suggestion would be unsupportable in the regulations even if we had found cause to order the insertion of precalculated sensitivity analyses into the plan.

This is not the first time in the Shoreham case that the parties have had the opportunity to explore the fundamental basis and accuracy of ETEs. By now, we would expect some understanding that the planning goal of NRC's guidance is to make accurate estimates, whatever they may be, and not to achieve some preconceived performance standard for speed of evacuations or to adopt ETEs that are "conservatively" long. In assessing the estimates, the Board is not permitted to look in only one direction for possible error in a misguided pursuit of conservatism. We must equally consider the possibility that evacuation times might be shorter than LILCO found.

In a predictive problem having intrinsic uncertainty of estimated variables, it constitutes reasonable assurance of quality to find that the estimates are derived objectively and are unbiased, (i.e. not deliberately lengthened or shortened) and that the variance is not unreasonably large. In this case there is no evidence that LILCO deliberately or inadvertently selected parameters that would unrealistically lengthen or shorten the results it obtained. Neither is there evidence that the bounds of uncertainty are unreasonable. LILCO based its estimates on actual experience with traffic under likely conditions of congestion. We conclude therefore that the results it obtained were unbiased and that the uncertainty in its ETEs

constitutes intrinsic predictive uncertainty which does not prohibit a finding of adequacy of the ETEs it presented.

I. Decision

The Board finds that LILCO has sustained its burden of proof concerning the bases and accuracy of hospital ETEs and that the Intervenors' peripheral demands for inclusion of sensitivity analyses in the plan are without merit. The remand instructions of the Commission have been fulfilled and the issue is resolved in LILCO's favor. The Board concludes that LILCO's ETEs for hospital evacuation are adequate to meet the standards and criteria of NRC's regulations.

IV. REALISM DISCOVERY AND SANCTIONS

A. Introduction

The development of emergency response plans and preparedness for the Shoreham nuclear plant with cooperation from State and County governments has shifted during the past six years to one of unyielding, and frequently bitter, opposition. The result has been a major expenditure in time and resources by all participants in this proceeding. The controversy over whether an adequate emergency plan is feasible for the ten mile emergency planning zone (EPZ) of the Shoreham facility has produced the main litigative battleground between New York State, Suffolk County and the Town of Southampton (Intervenors) on the one hand, and the Long Island Lighting Company (LILCO) on the other. Except for eight contentions involving the realism principle, and three other issues resolved in other sections of this opinion (school bus drivers, emergency broadcast system, and hospital evacuation), questions concerning the adequacy of emergency planning have been decided in LILCO's favor. See Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), LBP-85-12, 21 NRC 644 (1985).[17]

---

[17] In previous decisions, all technical health and (Footnote Continued)

In this part of the Board's decision, we find the Intervenors in default, bring litigation of the realism contentions to an end, dismiss Intervenors from the proceeding, and find that, absent the sanction of dismissal, a decision on the merits of the issues would have been rendered in Applicant's favor.

B. Background

The realism contentions have their origin in the decision of Applicant to develop its own Utility emergency plan after Intervenors resolved to discontinue participation in such planning and to oppose the Utility's license application. After failing to preclude a continuation of licensing proceedings on the Applicants emergency plan,[18] the Intervenors were successful in obtaining a favorable ruling on its legal authority contentions which alleged that certain of Applicant's proposed emergency activities were prohibited by State law. LBP-85-12, 21 NRC 644, 895-900 (1985). The Board's decision, supported by the Appeal

---

(Footnote Continued)
safety issues have similarly been adjudicated in LILCO's favor. See Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), LBP-83-57, 18 NRC 445 (1983) and LBP-84-45, 20 NRC 1343 (1984).

[18] Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), CLI-83-13, 17 NRC 741 (1983).

Board, rejected Applicant's realism argument that, in an actual emergency, Intervenors would authorize the Utility to perform the unauthorized functions. These determinations were, in turn, reversed and remanded by the Commission. CLI-86-13, 24 NRC 22 (1986). The Commission ruling, founded on the presumption that, in a radiological emergency, State and local governments would cooperate with a utility sponsored emergency plan and act to protect the health and safety of the public, was subsequently amplified and adopted in a new regulation. 10 C.F.R. 50.47(c)(1), 52 Fed. Reg. 42078 (November 3, 1987).

The Commission has made it clear that the responses of New York State and Suffolk County in a radiological accident are of critical importance in the evaluation of the utility's emergency plan. The Commission has stated:

> The County appears to assert (Motion 2) that, in the event of a radiological accident at Shoreham, County personnel could not lawfully make use of the LILCO plan, even if this was under the circumstances the best way to protect the safety of the citizens of Suffolk County. We find this assertion too preposterous an abrogation of the County's obligations to its citizens to be taken seriously.[19]

Despite the Commission's conclusion, the consistent position of the State and County has been that, although they would respond in an emergency, they would not follow

---

[19] 24 NRC 36, 40 (January 30, 1986).

LILCO's plan nor would they cooperate with LILCO. Similarly, they refused to provide any description at all of the efforts which they might undertake, stating that to do so would be purely speculation:

> Q. You have stated that Suffolk County will have no plan for an accident at Shoreham and that you would not follow LILCO's Plan. What if the NRC were to license Shoreham anyway?
>
> A. . . ., it is unproductive to engage in make-believe by pretending how the County would act under the hypothetical circumstances of an accident at Shoreham after that plant were somehow licensed by the NRC. For reasons stated above and the attached affidavit, we would never follow LILCO's Plan or coordinate in any way with LILCO. Nor do I know what resources would be available.

Halpin (Suffolk County Executive) Testimony on Behalf of Suffolk County Concerning Contentions 1-2, 4-8, and 10 at 7-8 (Apr. 13, 1988).

> I cannot speculate what specific actions the State would take, when they would be taken, or what resources might be available in the hypothetical situation that the NRC were to license Shoreham to operate at levels above 5% power, the courts were to uphold that licensing decision, and there were a serious accident at the plant that required an offsite emergency response.

Axelrod (Chairman, New York State Disaster Preparedness Commission) Testimony on Behalf of the State of New York at 3-4 (Apr. 13, 1988).

In memoranda dated February 29 and April 8, 1988, the Board provided its interpretation of the new Commission rule

as guidance on the realism contentions.[20] We stated, inter alia, that the effect of the new rule "is to place a responsibility on state and local governments to produce, in good faith, some adequate and feasible (emergency) response plan that they will rely on in the event of an emergency or it will be assumed in the circumstance of this case that the LILCO emergency plan will be utilized by Intervenors here." See LBP-88-9, 27 NRC 355, 368 (1988).

In both of its Memoranda and Orders, the Board stated there was a presumption in the new rule (10 C.F.R. 50.47(c)(1), that the State and County would follow or rely on the LILCO plan which presumption was rebuttable by timely evidence that a different but adequate plan would be followed. See February 29 Order at 2 and April 8 Order at 22. The Board stated further that a failure on the part of the governments to present a case for analysis and evaluation could result in a finding of default and hence in an adverse ruling on the contention to which it was applicable. February Order at 4 and April Order at 25.

---

[20] Confirmatory Memorandum and Order (Ruling on LILCO's Motions for Summary Disposition of Contentions 1, 2, 4, 5, 6, 7, 8 and 10, and Board Guidance on Issues for Litigation), February 29, 1988 (unpublished), and Memorandum (Extension of Board's Ruling and Opinion on LILCO Summary Disposition Motions of Legal Authority (Realism) Contentions and Guidance to Parties on New Rule 10 C.F.R. 50.47(c)(1)), LBP-88-9, 27 NRC 355 (1988).

Although Intervenors' filed testimony in response to these orders, that filing was not responsive to the Commission's concerns on the realism issue and was part of a filing objecting to the Board's orders interpreting the new rule, supra and, in turn, this precipitated a number of pleadings and responses from all parties. These filings included concurring recommendations from LILCO and Staff that since Intervenors' testimony failed to produce some positive evidence of a Governmental response to an emergency for the Board to analyze, the contentions should be dismissed. LILCO also complained that its discovery efforts had been hampered and stalled by State and Suffolk County counsel for Intervenors.[21]

In a May 10 conference with counsel, the Board found that Intervenors' counsel's objections to deponents' questioning during discovery were obstructing the discovery process, and ordered that depositions of witnesses Halpin and Axelrod resumed, and ruled that all emergency plans in New York State requested in interrogatories are relevant to the proceeding. See Tr. 19381-84 (Gleason). In a subsequent Bench Order, May 26, the Board also ordered continuation of depositions, of additional officials,

---

[21] See Governments Objection to Portions of February 29 and April 8 Orders of April 13, 1988, LILCO's Response of April 22, 1988, Supplemental Response of May 2, 1988 and Staff Response of April 28, 1988.

requested by LILCO that had been terminated unilaterally by Intervenors' counsel and, compelled responses to relevant interrogatory queries. The Board declined to reconsider its decision interpreting the new rule. Although it was now evident that, in addition to failing to respond to the Commission's concerns, the Intervenors were also actively frustrating the legitimate efforts of LILCO and Staff to discern what their emergency response might be. The Board refused to dismiss the contentions or hold the Intervenors in default at that time for not presenting a response case for evaluation, and ruled that Intervenors would be allowed to cross-examine on any matter in the proceeding not previously litigated or adjudicated.[22]

C. Suffolk County Emergency Operation Plan

On May 27, the Board was advised by LILCO's counsel of Intervenors' submission in discovery of a previously undisclosed 760 page document labeled as a New York State-Suffolk County Emergency Operation Plan (EOP). LILCO

---

[22] The Board indicated that such examination would be permitted on LILCO's emergency interface with a best efforts assumption of State and County responses as well as on any unresolved issues raised by the Licensing Board or Commission. See Tr. 20432-36 (Gleason) and Board Memorandum and Order, June 21, 1988 (unpublished).

requested time to review the material, the opportunity to depose a number of State and County officials who presumably possessed information on the document, and indicated that a potential integration with LILCO's emergency plan required study and a possible change in testimony. Intervenors' response capability and the nature of such response in a nuclear incident at Shoreham have been for some years the critical issues in this proceeding and the production at that late date of a document evidencing an emergency response preparation and organization had to be critically viewed. Consequently, we requested written responses from the parties on the character of the document. Tr. 20535, et seq. On June 3, the Board ordered additional discovery (of persons to be selected by LILCO) in connection with the newly produced emergency plan. Tr. 20840 (Gleason)

D. Intervenors' Notice on Remand Proceeding

On June 10, immediately prior to a telephone conference requested by Applicant to deal with a continuing impasse on Board ordered discovery, a filing was received from Intervenors labeled "Government's Notice that the Board Has Precluded Continuation of the CLI-86-13 Remand" June 9, 1988, (Intervenors' Notice).

Intervenors' assertions, not clearly delineated in the filing, suggested that due to the Board's interpretation of

the new rule on February 29 and April 8, 1988--of which Intervenors had earlier unsuccessfully sought reconsideration--the remanded proceeding of CLI-86-13 and the Board ordered discovery of officials on LILCO's proposed interface procedures, with the possible exception of Halpin and Alexrod, could not go forward.

Intervenors' Notice became the priority subject of the telephone conference. On questioning, the position of the County and State was manifest that since both governments had stated repeatedly that they would not cooperate with LILCO on emergency planning or follow its plan, they could not legally have their officials deposed on issues of interfacing with LILCO's plan. In Intervenors' view, this did not constitute a willful refusal to proceed as much as a legal constraint that prevented them from participating. The Board interpreted Intervenors' motion as an unjustified refusal to comply with the Board's orders on the realism issue, stated that discovery went beyond any interface issues and ruled that, as a result, under Commission policy guidance, appropriate sanctions would be imposed. These would include either dismissing the realism contentions or rendering a default judgment on the merits in Applicant's favor. The Board requested briefs from the parties on the proposed sanctions (received on June 15) and retained jurisdiction of the separate matter concerning the Suffolk County Emergency Operation Plan. See Board Telephone

Conference, Tr. 20847, et seq., June 10, 1988. Despite these rulings, Intervenors continued to stonewall LILCO's discovery requests.[23]

As a result, LILCO requested a telephone conference to deal with what it characterized as a "studied disregard of the legitimate authority" of the Board. That conference was held on June 24. Tr. 20899.

In the conference and a related conference on June 29, the Board decided that in order to safeguard all parties' rights prior to resolving these issues, a focused hearing with appropriate witnesses selected from recommended lists advanced by LILCO and Intervenors would be held. The hearing (July 11, 12, 14 and 19, 1988) considered the

---

[23] On June 16, pursuant to a LILCO request, the Board issued subpoenas for depositions of two former County officials who had been advised not to appear by counsel for Suffolk County. In a June 17 telephonic conference, the Board ordered Intervenors to produce the deponents requested by LILCO in its June 15 brief, and compelled answers to a third set of interrogatories. Intervenors filed an appeal notice of the Board's June 10 decision on sanctions, a June 20 motion to vacate, and alternatively, a June 28 motion to stay the Board's decision retaining jurisdiction of the discovery abuse issue. On the following day, Intervenors filed a motion to quash the subpoenas. Prior to filing its motion to vacate and/or stay, Intervenors' counsel advised LILCO it did not intend to comply with the Board's June 17 Order on discovery pending a Board decision on reconsideration and clarification motions it intended to file and that its motions would also cover discovery of the subpoenaed witnesses. See D. Irwin's letter to Board, June 20, 1988. Both Appeal Board and this Board subsequently dismissed Intervenors' motions as premature. See Appeal Board Order, June 27, 1988 (unpublished) and Licensing Board Order, June 30, 1988 (unpublished).

production or non-production of emergency plans and the circumstances surrounding any non-production.[24]

E. Intervenors Position on Sanctions

In filings of June 15, July 26 and August 1, Intervenors presented their arguments why no sanction should be imposed.[25] These are summarized below.

1. The evidence of the hearing on possible discovery abuse demonstrates that neither County nor State were unresponsive to LILCO's discovery and document requests and

---

[24] The parties were not required to prefile testimony, and were permitted to cross-examine the witnesses after the Board concluded its questioning. Since prehearing discovery had not been provided for the proceeding, to secure the parties' rights, they were not restricted by the scope of questions on direct examination. Intervenors recommended six (6) witnesses for the hearing, LILCO nineteen (19) and the Board designated the appearance of twelve (12). The witnesses, present or former officials who had or should have had knowledge of any State and/or County emergency plans existing during discovery periods, were sequestered during the proceeding. One witness, Norman Kelly, a LILCO employee, was alleged by Intervenors to have received a copy of the EOP in 1985. Intervenors were directed to answer LILCO's third set of interrogatories and to produce any documents related to emergency plans. See Telephone Conference, Tr. 20931, et seq., June 29, 1988.

[25] Governments' Response to Board Order of June 10, 1988 Concerning the CLI-88-13 Remand (Intervenors' June 15 Response); Suffolk County and State of New York Supplement to June 15 Filing (Intervenors July 26 Supplement); Governments' Reply to July 26 Supplement Filed by LILCO and the NRC Staff Seeking Imposition of Sanctions (Intervenors August 1 Reply).

that any non-production of the County EOP was inadvertent. Further, there was no harm or prejudice to LILCO from an inadvertent non-production of the EOP since LILCO was furnished in discovery the bulk of the emergency planning documents in 1982 and 1983 which did exist. LILCO knew of the existence of the EOP in 1982 and 1983 and also participated in an annual hurricane conference where the EOP was discussed. Its own employee, Kelly, received a copy of the EOP from a personal contact in 1985-86 and finally, it was only after LILCO received the EOP through Kelly and the State Disaster Preparedness Plan and Radiological Preparedness Plan had been furnished, that LILCO raise questions in 1987 about government responses and capabilities. See Intervenors August 1 Reply at 74-82.

2. The Board's erroneous interpretation of 10 C.F.R. § 47 (c)(1) and application to facts and evidence of the case made it impossible to proceed with the remand and was responsible for not complying with discovery orders. See Intervenors July 26 Supplement at 36-37 and August 1 Reply at 84-85.

3. Neither a dismissal of the contentions or of Intervenors from the proceeding or any other sanction is warranted under the circumstances of the case. Intervenors previously produced their two witnesses, Halpin and Axelrod, for deposition and continued to offer them. During the April time frame, Intervenors produced 11 additional State

and County witnesses for deposition, and testimony at the discovery abuse hearing demonstrated that the persons LILCO sought to depose could only provide information duplicative of Halpin and Alexrod testimony. See Intervenors' Reply at 82-88.

4. Although Intervenors challenge the imposition of any sanction under the circumstance of this case, it argues that dismissal from the proceedings is unwarranted, because it is the ultimate sanction, which is reserved for the most severe transgressions. Citing NRC cases as precedent for refusing such sanctions even where the failure to comply with Board discovery orders has been indicated, Intervenors contend that federal courts require that bad faith must be shown in such cases. Here, Intervenors submit there is no evidence of bad faith and when a party cannot comply through legal constraints, such as exists in this case, no such sanction can be imposed. See Intervenors August 1 Reply at 88-91.

Overall, the relative importance of the unmet discovery obligation in this case is small, Intervenors argue, since there is no basis to conclude that the depositions sought by LILCO would provide additional material information on Intervenors' best efforts response, and there is no evidence of any pattern of improper behavior. Finally, in Intervenors' view, the totality of the circumstances do not justify sanctions where, as here, Board orders, exceeding

the Board and NRC's legal authority, in fact, caused the discovery impasse requiring testimony about actions that officials could not legally take.

Winnowing the arguments against sanctions by Intervenors, the position that none is justified relates to the view that their performance in meeting discovery obligations prior to June 9 was acceptable and afterwards, in not complying, was excusable. The Applicant was accordingly, not prejudiced by any non-production of the Suffolk County Emergency Operating Plan: LILCO should be held responsible itself for its non-use, and the Licensing Board carries the burden of creating the discovery refusal through its issuance of erroneous orders.

F. Discovery Responsibility

Before addressing Intervenors' arguments based on the hearing relating to the EOP as well as the Commission's standards governing the imposition of sanctions, we need to confront Intervenors' justification for refusing to proceed with discovery allegedly because Board's orders required them to take actions which are legally precluded. Intervenors' position is totally unacceptable. The Board's rulings did not curtail or coerce any particular discovery responses. We note again the Board's bench ruling of May 26 (Tr. 20433 (Gleason)) and supporting Memorandum of June 21

at 6 where we stated the realism contentions would not be dismissed due to a failure of Intervenors to produce, in their testimony, some evidence of an emergency response plan. We noted there the new rule, 10 C.F.R. 50.47(C)(1), did not compel, nor could it compel, Intervenors to produce a particular response plan for Shoreham or produce an emergency plan for any other crisis. Board Memorandum and Order, June 21, 1988 at 6. In order to reach an informed decision with regard to the effectiveness of LILCO's emergency plan, the Commission needs to know the extent to which Intervenors will respond in an emergency. Intervenors' Notice, coming as it did, following Intervenors' unsuccessful attempt to obtain reconsideration of the Board's Orders, can only be viewed as a part of an overall plan to thwart that inquiry and subvert the Commission's process for political ends.

The obligation every litigant faces to provide (through discovery) information on matters in controversy is a responsibility that can neither be ignored or evaded. As the Supreme Court has stated, "Mutual knowledge of all relevant facts gathered by both parties is essential to proper litigation." By eliminating the element of surprise at hearings, discovery educates in advance the basic value

of party claims and defenses.[26] Discovery through deposition and oral examination of any person is authorized by the Commission's Rules of Practice and to protect parties from abuse, Licensing Boards can control and restrict improper use by granting protective orders. See 10 C.F.R. 2.740 a-c, 2.40 a(a).

It is unarguable that the fair and expeditious consideration of issues in nuclear license application proceedings require respect for and compliance with the rules of discovery. In its "Statement of Policy on Conduct of Licensing Proceedings", the Commission has pointed this out:

> fairness to all involved in NRC's adjudicatory procedures requires that every participant fulfill the obligations imposed by and in accordance with applicable law and Commission regulations.

To be able to obtain evidence or secure information on the existence of evidence and to provide opposing parties the same option is interchangeably then a privilege and duty of each Applicant and Intervenor in NRC administrative proceedings. To secure those rights and responsibilities in achieving the legitimate objective of discovery--the

---

[26] Hickman v. Taylor, 329 U.S. 495, 507 (1947); 4 Moore's Federal Practice 26-60.

[27] CLI-81-8, 13 NRC 452 (1981).

narrowing of issues, and expediting the hearing of contested matters--licensing boards are provided by NRC Rules of Practice, with the authority required, to properly regulate hearing procedures. See 10 C.F.R. 2.718.

G. Sanction Authority

In order to manage the course of proceedings and assure that discovery procedure is effective, the Commission provides the requisite authority to impose appropriate sanctions on parties not fulfilling their participatory responsibilities. 37 Fed. Reg. 15131 (July 28, 1972). The failure of any party to appear at a hearing or comply with any discovery orders can constitute a default, the consequence of which authorizes licensing boards to make such orders in regard to the failure as are just including finding the facts in accordance with the claim of the party obtaining the order. 10 C.F.R. 2.707. The sanctions available to assist Boards in the responsible management of licensing proceedings cover a wide range of options similar to those authorized by Rule 37 in the Federal Rules of Civil Procedure. As the Commission points out, such sanctions can

extend from a simple warning for the miscreant to dismissal, in more severe cases, from the proceeding.[28]

In the Commission's policy statement, supra, Boards are requested to consider in the selection of appropriate sanctions, the "relative importance of the unmet obligation, its potential for harm to other parties on the orderly conduct of the proceeding, whether its occurrence is an isolated incident or a part of a pattern of behavior, the importance of the safety or environmental concerns raised by the party, and all the circumstances." Sanctions of a more serious nature are generally reserved for the most critical failures of parties fulfilling their discovery obligations. Wisconsin Electric Power Co. (Point Beach Nuclear Power Plant, Unit 1), ALAB-719, 17 NRC 387, 392 (1983). The practice in federal courts, with which the Commission's policy is consistent, may also be reviewed. Id. Also Cincinnati Gas and Electric Co., et al. (Wm. H. Zimmer Nuclear Power Station, Unit 1), 15 NRC 1538, 1542 (1982).

H. Findings on Commission Policy

It is the Board's opinion that any fair evaluation of Intervenors conduct in refusing to comply with the Board's

---

[28] Statement of Policy on Conduct of Licensing Proceedings. CLI-81-8, 13 NRC 452, 454 (1981).

discovery orders of May 26 and June 3 calls for the imposition of the severest sanctions available. A review of factors to guide us in the selection of sanctions, as set forth in the Commission's Policy on Conduct of Licensing Proceedings, demonstrates that, in the circumstances of this case, Intervenors have crossed a legislative rubicon.

The critical issue in this proceeding is what activity the State and County would perform in the event of an accident at Shoreham.[29] The importance of discovery in being able to plumb the ramifications of the County EOP with State and County officials, in light of previous uniform discovery replies that any State and County response would be "speculative," cannot be overestimated. Recent testimony from Dr. Axelrod, the State's top official responsible to the Governor on disaster and emergency matters, suggests that the Governor's decision to oppose the Shoreham facility was not based on a State technical evaluation of an emergency plan for Suffolk County. The Applicant is entitled to explore, therefore, through State witnesses, whether that decision may have been more of a political edict as the testimony now standing implies. See Tr.

---

[29] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-86-13, 24 NRC 22, 28 (1986); LBP-87-26, 26 NRC 201, 216 (1987); Board Memoranda and Orders, February 29, 1988 at 4 (unpublished) and April 8, 1988, LBP-88-9, 27 NRC 355, 371.

21699-707. We also reference, as an area for potential exploration, evidence relating to Dr. Axelrod's belated concerns for safety vulnerability within New York State after having disconnected, on advice of counsel, dedicated emergency communication lines with LILCO. See Tr. 21710-12, 15-18 and LILCO Disc. Exh. 41. This discovery hearing testimony is referenced to establish the fact that LILCO would have been able to pursue important and relevant areas of questioning with other State and County witnesses, if discovery had been permitted to proceed in the case.

The potential for harm to other parties and the orderly conduct of the proceeding through Intervenors' behavior here is incalculable. As one example, to be unable to pursue any inquiries on the Suffolk County emergency plan and the resources available to support it, forces LILCO, the Staff and the Board to evaluate critical issues only through the screen of its two pre-selected State and County witnesses. This limits the value of discovery in uncovering any available information supporting or contradicting Intervenors' litigative positions, and is obviously unfair, prejudicial, and not serving the ends of justice.

The impact of the discovery refusal on the orderly conduct of this proceeding needs little emphasis here. It not only has caused a collateral proceeding on discovery abuse considerations to occur, but diverted the attention of

other parties and the Board from the realism issues that were scheduled to be litigated.

The Board views Intervenors' conduct as the culmination of a pattern of behavior designed to prevent the Commission from reaching an informed conclusion with respect to the adequacy of LILCO's emergency plan.

The importance to safety of the realism contentions cannot be overemphasized. Yet, although they created the situation which made these contentions important, Intervenors refuse to contribute to their resolution. Their prefiled testimony, reiterating their previous recalcitrance, offers no help. As stated by Intervenors, their best efforts response is to not cooperate in any manner with LILCO's emergency effort. See Governments' Objections to Portions of February 29 and April 8 Orders in the Realism Remand and Offer of Proof, at 17 (April 13, 1988).

This is not the first occasion where Intervenors actions have precipitated the imposition of a sanction. Onsite emergency planning contentions were dismissed, by the Licensing Board, after Intervenors' refused to participate in Board ordered public prehearing examinations.[30]

---

[30] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-82-115, 16 NRC 1923 (1982).

Throughout the protracted period of this proceeding, Intervenors have provided little evidence of a motivation to have this controversy (whether an adequate emergency plan meeting NRC regulatory standards could, or could not be, developed for the Shoreham facility) resolved on the merits, and in a timely manner. They have chosen to ignore here the Licensing Board's decision in 1983 which stated:

> . . . if the County seeks to have its findings adopted (the inadequacy of LILCO's emergency plan and the non-feasibility of developing adequate emergency planning for Shoreham), it must litigate before us the facts which it believes support its view that it is not feasible to implement emergency preparedness actions which would meet NRC regulatory requirements in the event of a radiological emergency at the Shoreham Nuclear Power Plant.[31]

In the place of presenting a positive case to evidence the non-viability of an emergency plan, Intervenors instead have persistently relied on statements of non-cooperation with the Applicant and County resolutions and policy statements that an adequate emergency plan was not possible. This persistency has been in the face of NRC statements and federal case law that the adequacy of emergency planning is the jurisdictional responsibility of the Commission.[32]

---

[31] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), 17 NRC 608, 643 (1983).

[32] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-83-13, 17 NRC 741, 743 (1983);

(Footnote Continued)

Not only have the Intervenors refused to provide any information on State and County emergency resources so that the feasibility of emergency plans could be appraised, although urged to do so by the Commission and Licensing Board (and such information the record now shows Intervenors possess), but procedural mechanisms have been consistently utilized in delaying the Board and Commission in carrying out its licensing responsibilities. Such activities include, but are not limited to, the following: County opposition based on executive privilege to discovery requests for emergency planning documents (16 NRC 1144); objection to Board procedure for expediting review of emergency planning contentions (16 NRC 1667); motion to terminate emergency proceeding on basis of County resolution that no emergency plan could be adopted (17 NRC 593); challenge to LILCO's financial qualifications (20 NRC 426); efforts to cancel exercises to test emergency preparedne s plan (24 NRC 36); and a refusal to permit discovery on EBS issues [33].

(Footnote Continued)
Citizens for an Orderly Energy Policy v. County of Suffolk, 604 F. Supp. 1084, 1095 (E.D.N.Y. 1985).

[33] Intervenors' refusal to permit discovery to LILCO in the EBS issue would be sanctionable in the ordinary case. We reject as dilitory the suggestion, as Intervenors contend, that the Board would order unilateral discovery for the benefit of only one party. The Board interprets that argu in this case as additional evidence of a strategy

(Footnote Continued)

We also note the actions of the State and County to frustrate LILCO's attempt to obtain relocation centers, its disconnecting emergency telephones and returning them to LILCO, supra, returning LILCO's delivered copies of its emergency plans (except those needed for litigation purposes), ex parte communication from the Governor to the Commission on closing Shoreham and ceasing its operation (May 15, 1988), and the passage of County law establishing criminal penalties for any person participating in emergency exercises and simulating governmental functions (enjoined by court order).[34] Although the activities participated in by Intervenors may be considered individually as lawful conduct during contested litigative proceedings, in combination they represent a pattern of substantial and continual actions to undermine LILCO's efforts to develop an adequate emergency plan and frustrate federal review. This prevents the fair adjudication of the merits of LILCO's plan. It is established by Federal rule that the NRC must consider the

---

(Footnote Continued)
for obstructing the factual resolution of the issues. We did not decide the EBS issue on the basis of Intervenors' refusal because LILCO's motion was adequate to demonstrate compliance with NRC regulations and it was uncontroverted by material facts. See Letters, Missal to Irwin, June 10, 1988, and Sisk to Missal, June 13, 1988; Attachments to LILCO's Brief on Appropriate Remedy for Failure to Comply with Board Orders, June 15, 1988.

[34] See Long Island Lighting Co. v. County of Suffolk, 628 F. Supp. 654, 666 (E.D.N.Y. 1986).

adequacy of a Utility emergency plan. CLI-83-13, 17 NRC 741, 743 (1983). However, Intervenors' actions come perilously close to constituting interference with the federal governments exclusive power to regulate matters of radiological safety. Neither State nor local governments may be allowed to frustrate or impede the NRC's responsibility and ability to evaluate a Utility's radiological emergency response plan. We are forced to conclude that not only are Intervenors unwilling to contribute to the resolution of the important realism issues, but have actively sought to frustrate the Commission's efforts to arrive at an informed judgment.

Finally, the Commission asks Boards contemplating the issuance of sanctions, to consider all of the circumstances and to tailor the sanctions to mitigate the harm caused by a party's failure to fulfill its discovery obligations. We see no indications in the events that led up to, surrounding or subsequent to Intervenors' Notice (June 9) to the Board which mitigate against a determination of willful, bad faith refusal to comply with this Board's orders on discovery. No protective order was requested under 10 C.F.R. 2.740(c), no advance warning was provided that Intervenors did not intend to comply with the Board's orders and no subsequent offer of compliance was made beyond the unacceptable proffer to provide its two realism witnesses. The fact that Intervenors refusal to comply was made to coincide with the

proximate start of the realism hearings and immediately after an emergency plan for Suffolk County had surfaced and was premised on two month-old orders of the Board interpreting a Commission regulation are additional factors that combine to compel the issuance of the most severe sanction.

In noting that Intervenors have been claiming for several years, that no adequate plan can be developed for Shoreham and that the LILCO plan is inadequate, the Commission has stated:

> "They are entitled, as litigants before us, to advocate that position. They are not, however, entitled to obstruct our inquiry into the facts necessary to enable us to resolve that assertion." [35]

We find that neither the New York Governor's policy statement nor the resolution of Suffolk County that LILCO's emergency plan will not be utilized and that no County emergency response plan for the Shoreham facility will be developed, provide justification for Intervenors' claim of an inability to comply with Board ordered discovery. This Board has already found, based on a lengthy record, that, an emergency plan for Suffolk County was not impossible to implement; such assertions by Intervenors are no longer an

---

[35] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-86-14, 24 NRC 36, 40 (1986).

issue.[36] A Licensing Board decision, affirmed by the Commission, has also ruled that Suffolk County's resolution cannot be used to prevent the evaluation of LILCO's emergency plan.[37]

We find, accordingly, that Intervenors' refusal to comply with the Board's orders to be an act of willful disobedience and, under the circumstances here, as constituting bad faith. We conclude that Intervenors' conduct warrants the imposition of the most severe sanction available to Licensing Boards.[38]

---

[36] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-85-31, 22 NRC 410, 427 (1985).

[37] Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-83-22, 17 NRC 608, 637 (1983) and CLI-83-13, 17 NRC 741, 742 (1986).

[38] We have no disagreement with the NRC case law cited by Intervenors (August 1 Reply at 89) although the factual situations differ: the Byron case involved a delay in discovery participated in by the Applicant and the Board, the Kerr McGee case, inadequate interrogatory answers, and the Duke Power case, non-responsive interrogatory answers. None concerned an outright refusal to participate in Board ordered discovery. Cases in the Federal Courts simply demonstrate that willfulness was a prerequisite for severe sanctions. In the Rogers case cited, the party in that controversy made a good faith effort to comply with the discovery order by producing as many of the requested documents as possible and sought waivers from the Swiss Government which had confiscated the records. See Rogers case at 201-03. There are no redeeming features in the case at hand. Here we have circumstances where there is no allegation or evidence of any penalty for government witnesses testifying at depositions, the refusal to participate in discovery was willful, and there were no subsequent offers to remedy the refusal. Being filed on the

(Footnote Continued)

In tailoring sanctions to meet the circumstances of disobedience to Board Orders, we have considered the Staff's recommendation to merely dismiss the realism contentions at issue here. Although this sanction is not as severe as dismissal of a party (Applicant's Recommendation), it nevertheless has applicability where the sanction can curb the harm complained of and where it operates as a deterrent of future reproachable conduct. We note, however, that a prior finding of default and dismissal of contentions as a sanction did not have the intended effect of curbing the harm or deterring reproachable conduct. In evaluating the two sanctions, the entire record of this proceeding was reviewed for the probative significance it imports.

I. Hearing on Discovery Issues

The critical questions raised by the hearing testimony on non-production of emergency documents are the following:

1. Did the EOP exist at any period prior to May 24, 1988?

(Footnote Continued)
eve of scheduling a hearing on the merits of the realism issues, and following in close sequence, notice of a previously undisclosed existing County Emergency Operation Plan, Intervenors' action can only be considered as constituting bad faith.

2. If the EOP existed, was it produced in discovery prior to that date. If not, what were the reasons for its non-production?

3. Were other emergency related documents not produced?

4. Was the non-production of any emergency documents prejudicial to LILCO's position in the proceeding?

Existence of EOP Prior to May 1988

The Intervenors contend the evidence inconclusive as to when an integrated document termed the EOP first existed. However, it alleges, the evidence is indisputable that a Suffolk County 1981 Disaster Preparedness Plan, which was then and now "the heart of the present-day EOP" existed and was provided to LILCO during discovery. See Intervenors Supp. of June 15, 1988 at 4-13.

LILCO asserts that the preponderance of the evidence suggests that the EOP existed in its present or virtually present form and substance as of 1982-83. See LILCO Supp. at 26-28. The Staff submits that the testimony indicates that at least parts of a County emergency plan existed by 1982. See Staff Comments at 2-3.

The Board finds that the EOP existed basically in its present form by 1983. As the Applicant points out, only 40 pages of the 750 page document handed to LILCO as the

Suffolk County EOP on May 25 had no dates to indicate their time of incorporation in the EOP. All the remainder were either prior to 1984 or updates of existing material. See LILCO Disc. Exh. 9. As further support for this conclusion, testimony from R. Jones, a Suffolk County employee responsible for monitoring and updating the County emergency plan, corroborates the existence of the plan (Tr. 21317-21376-79, 21383, 21389-90. Intervenors' argument that dates affixed to a document convey no particular information on the time a particular document was incorporated in the EOP does not stand up against more probative information. And in fact, all parties appear to agree that the substantive sections of the EOP were at least in being, at an early date. Moreover, to the extent that any sections of emergency plans were added or updated after 1983, Intervenors had a duty to amend their prior discovery responses but did not do so until May 1988. 10 C.F.R. 2.740.

Was the EOP produced in discovery before 1988 or were there reasons for its non-production?

Intervenors contend that the evidence reflects the likelihood that LILCO received the EOP, as it then existed, in 1982-83. In support thereof, it cites testimony of four County officials involved in discovery efforts during 1983-84, expressing beliefs the EOP was forwarded for

production, including a statement of one witness that he was told the document had been forwarded. Additionally, in Intervenors' sight, LILCO appears to have received at an early date most, if not all, of the 1982-83 version of the EOP, including a number or documents that later became part of the EOP. Also, Intervenors state a substantial part of documents LILCO alleges as not receiving related to non-emergency matters such as federal and state statutes and regulations.

Intervenors also assert that LILCO employees attended annual Suffolk County hurricane conferences where the EOP was discussed. It alleges that a LILCO employee, Norman Kelly, privately received a copy of the EOP in 1985-86 from a County official which he was asked to obtain by LILCO personnel responsible for emergency planning. Finally, since the County produced more than 7000 pages of documents in 1982-83, many relating to emergency information, any non-production of a complete EOP, if it occurred, was non-intentional, in Intervenors' view. See Intervenors Supp. at 13-24.

LILCO emphasizes that none of the County's witnesses recalls specifically the production of the EOP in discovery in 1982-83 and no counsel or County records are available to substantiate any such submittals. The records maintained by LILCO, however, indexed each of the documents received from the County by date, and a document search revealed only 161

pages produced from the 762 in the current EOP. This evidence shows, according to LILCO, that important parts of the EOP were not produced in discovery during 1982-83, including the basic plan prepared by the State of New York and a number of significant annexes. See LILCO Supp. at 10-13. LILCO concedes that its employee Kelly, a former director of Suffolk County's Department of Emergency Preparedness, received a copy of some part of the EOP in 1985-86 period, but contends there is no firm evidence of who requested the document, what it was for, or what was in it. A search of Shoreham files and interviews with LILCO personnel disclosed no knowledge or existence of either a request by Kelly's superiors for the document or the plan itself, and Kelly, himself, did not recall specifically who asked him for, or received the planning formation, and indicated the document was a lot smaller in size than the existing EOP. See LILCO Supp. at 28-33 and Weismantle Affidavit, July 18, 1988.

The Staff's position is that attachments or annexes to the EOP were not produced in discovery in 1982-83, although LILCO had the basic County emergency plan dated January 1, 1981 and probably worked with the plan in drafting the Shoreham Emergency Plan in 1982. See Staff Comments at 12-13.

The Board finds that a number of existing sections of the EOP were not produced prior to 1988. These include a

1979 Basic Plan, an updated 1985 Annex to the EOP on lines of succession to command, a 1983 Communication and Warning System, a 1985 Health Services responsibility document and generally undated sections on public information, public works responsibilities, rescue services, resources, schools and social services. See LILCO Supp. Att. 5 and LILCO Disc. Exh. 10. Importantly, they also include a radiological protection annex. See Annex K, LILCO Disc. Exh. 25.

There is no evidence that Intervenors produced this material either in the 1982-83 time period or any time prior to 1988. Statements from those responsible for having documents produced by Suffolk County expressed a belief that the EOP was submitted but actual knowledge of what was transmitted is missing. See Tr. 21451 (Bilello); 21472; Tr. 21841-44(F. Jones); Tr. 21320 (R. Jones); Tr. 21892 (Regan). And apparently no lists of the documents transferred is available. See Tr. 21846-47 (F. Jones). The files developed by Intervenor's counsel during this period, which would contain the documents produced, were subsequently transferred to Suffolk County and have not been located to date. Tr. 21849-50 (Letsche). On the other side of the document production issue is the evidence of a detailed index of documents received and maintained by LILCO. See LILCO Supp. at 29-30 and Att. 5. And there is testimony by the County's employees that the emergency plan later

produced was basically the same as the one existing in 1982-83. See Tr. 21384-90 (R. Jones); Tr. 21901-03 (Regan).

The Board is unable to determine the causes for the plans non-production. Intervenors' counsel have conceded that the EOP would have been produced if it had come to their attention, if, in fact, it was not produced. See Tr. 20816, 20870 (Lanpher). The information contained therein was relevant to the issues being contested and responsibility for the documents non-production and subsequent failure to amend prior responses has to rest at State and County doorsteps. The lack of some notation in the County's files recording the EOP's transmittal, missing counsel's files that would have accounted for the EOP's production or non-production, and a complete index of LILCO's files maintained in the normal course of business are circumstances which dictate the conclusion that the EOP was not produced as counsel concedes it should have been.

Were other emergency-related documents not produced?

LILCO lists a number of documents, including other County emergency plans and a Resources Manual for EBS procedures in Suffolk County, which it alleges were only delivered late in the proceeding. See LILCO Supp. at 11-13, 22-23, and Att. 3. The State, LILCO contends, failed to

produce or authenticate the core State radiological plan and the SEMO guidance document. See LILCO Reply at 23-24.

The Staff alleges that, in addition to being slow to authenticate the New York State Radiological Emergency Plan and the State Disaster Preparedness Plan, the State did not produce, until very late, the Suffolk County Emergency Preparedness Directory. Tr. 21160-61 (Zahnleuter). LILCO obtained independently a document labeled New York State Local Government Plan Guidance for Radiological Ingestion Exposure Pathway, August 27, 1987, LILCO Disc. Exh. 5, Tr. 21026-31; New York State Health Department's Radiological Procedure, Tr. 21063, et seq.; LILCO Exh. 7 and the Brookhaven National Laboratory Emergency Response Plan. See Staff Comments at 10-11. The Intervenors contend that all documents were produced in compliance with document requests and Board Orders. See Governments' Reply at 40-48.

The Board finds that, although a conclusive decision cannot be rendered, the record demonstrates the emergency-related documents, not timely produced, other than the EOP, were, in fact, documents relevant to the litigation.

Was non-production of emergency-related documents prejudicial?

The Applicant contends that harm to its position has occurred and that timely disclosure of documents would have

conserved "years of expense in terms of time and energy incurred by it and other regulatory agencies." The knowledge concerning resources available to respond to an emergency at Shoreham, if known earlier, according to LILCO, might well have concluded the proceeding favorably to LILCO and eliminated the political and financial controversy that has imperiled both the Shoreham project and LILCO's corporate existence. See LILCO Supp. at 51-52 and Reply Brief at 12-13. Also LILCO Response at 17, June 1, 1988, ff. Tr. 20832.

In addition to their arguments concerning the production of the EOP which we have rejected, Intervenors argue that LILCO produced no evidence to establish any resultant prejudice even assuming some inadvertent non-production. See Intervenors' Supp. at 7 and 25-26. The Staff asserts the evidence, although showing a "spotty or piecemeal" discovery compliance record, did not establish a willful concealment of the EOP by either the County or the State. See Staff Comments at 5, 10. However, in their view, the failure of Intervenors to produce all the attachments and annexes to the plan and to deny the existence of any plan that could be applied to Shoreham hindered LILCO's efforts to fully determine the nature of State and County resources for their best effort responses. See Staff Comments at 12-13. Also Tr. 20826 (Reis).

We conclude that great prejudice unquestionably resulted from the failure to produce the EOP in a timely manner. The question of available County plans to accommodate emergencies, even non-nuclear in nature, has been involved in the Board's consideration of the adequacy of emergency planning for Shoreham since 1982. See Prehearing Conference Order, July 27, 1982 at 23-24 (unpublished). The production of plans concerning non-nuclear emergencies was requested again in 1983 and 1988 and inquiries as the existence of State and County plans that would aid in coming to grips with an accident at Shoreham have been a central thrust since the Commission remand in CLI-86-13, 24 NRC 22, 31 (1986).

The Licensing Board, in denying LILCO's first, second and third motions for summary disposition of the realism issue, highlighted an intent in having developed the responses Intervenors would make if called on during an emergency at Shoreham. LBP-85-12, 21 NRC 644, 912 (1985) (PID); LBP-87-26, 26 NRC 201, 216 (1987). See also LBP-88-9, 27 NRC 355, 367-68 (1988). The ability of the State and County to provide emergency resources for any potential accident at the Shoreham facility was an issue entitled to be pursued by LILCO and the Staff before the first motion for summary disposition was filed and evidence on emergency resources was required to be furnished by Intervenors. The harm from non-production of Intervenors'

emergency plans extends beyond prejudice to LILCO as it affects the NRC adjudicatory process itself.

In 1984, LILCO, with knowledge of the EOP, could have formulated its first summary disposition motion on realism with more certitude of State and County emergency responses; and with additional certitude improve its prospects for having its motion granted. Instead, the Board denied LILCO's motion on grounds that: "Any proposal which introduces the highly undesirable element of uncertainty as to how the various entities will react, is inadequate." PID at 912. Intervenors have acknowledged that Governments' emergency planning information was requested by LILCO and that it should have been produced in the 1982-83 time frame. The Commission subsequently reiterated that the actions Intervenors would take in an emergency was a central issue in the case. Supra. LILCO's second and third motions for summary disposition were predicated on the Commission's order or the revision to 10 C.F.R. 50.47(c)(1) that followed, but were rejected by the Board for substantially the same reasons as the first. No evidence was placed before the Board that would show what the Governments' response would be in an emergency. That LILCO consistently attempted to have those resources disclosed even to the present is apparent from reviewing its deposition efforts. It is equally apparent that Intervenors have resisted disclosure of that critical information. See Depositions of

Czech, Papile and Baranski at 85-133 (April 29, 1988); Axelrod Deposition at 65-107 (May 2, 1988); Hulpin Deposition at 31-38, 56-78.

The Board concludes that LILCO's first, second, and third motions for summary disposition on the realism issues were decided on the basis of an unnecessarily incomplete record. Intervenors had both the capability and the duty to supply relevant information and to amend their responses on their own non-nuclear emergency planning but did not do so. 10 C.F.R. 2.740(e)(2). It is immaterial to the issue of sanctions, and fruitless to now consider, whether those decisions would have been different if we had had complete information on County and State emergency planning before us. Essentially, we are concerned that the process that took place reflects adversely on the integrity of the adjudicatory process itself when it is revealed after a decision is rendered that important issues might have been decided differently had the Board been in complete possession of available relevant facts. Here, three motions in succession were so decided. This is a matter of extreme gravity. Disrespect for the adjudicatory process cannot be permitted; dismissal of the affected contentions alone is not an adequate remedy when the adjudicatory process itself is tainted by the actions or omissions of a party.

The Board rejects Intervenors' defense that LILCO was merely dilatory in not using information available to it or

that the County and State capabilities were irrelevant to the resolution of issues. It calls for an unacceptable stretch of our imagination that existing orginized emergency resources and personnel could be utilized for every crisis within Suffolk County except one involving a nuclear radiation emergency at the Shoreham facility. Neither can we accept that competent counsel on either side would fail somehow to recognize the likely importance of a County emergency plan in resolving the realism issue. We conclude that LILCO would have unquestionably used the EOP to support its motions for summary disposition if the plan was in its possession.

A knowledge of County and State resources and emergency responsibilities not only would have assisted LILCO in developing its utility plan, but it is an essential ingredient in the Commission's review of that plan. The failure to timely produce the EOP was prejudicial to LILCO even to the point of threatening its corporate existence. It was equally prejudicial to the public interest in having an informed decision by the government entity with responsibility to pass on the adequacy of that plan.

J. Conclusions

After review of the entire record on the sanction issues, the Board reaches the following conclusions:

1. Intervenors unjustifiably obstructed discovery on the realism issues in April and May 1988 by presenting non-responsive witnesses for deposition, by obstructing LILCO's questioning of witnesses in depositions, by not providing substantive answers to Interrogatories, and by a consistent refusal to provide information on the means by which Intervenors would respond to a radiological emergency at Shoreham.

2. Intervenors' notice to the Board of June 9, 1988 that neither discovery nor the proceeding itself could go forward because of erroneous prior Board orders constitutes a willful defiance of the Board's authority to rule on issues and to conduct a fair and orderly proceeding. 10 C.F.R. 2.718. The Board believes this action by Intervenors, in itself, warrants imposition of the ultimate sanction.

3. An integrated County emergency response plan, not disclosed until May 1988, could have been produced in substantially its present form as early as 1982. Intervenors failed an obligation to produce the integrated EOP when requested and to amend their responses thereafter. 10 C.F.R. 2.740.

4. Prejudice from non-production of the EOP was substantial to LILCO. LILCO's corporate existence was placed in jeopardy by adverse rulings on summary disposition motions that were not based on a complete record and

expenditure of resources in time and money were probably unnecessarily wasted.

5. Intervenors' omission in not producing the EOP earlier tends to reflect adversely on the integrity of the adjudicatory process itself because important decisions were made on the basis of an incomplete record.

The actions, omissions, and consequences recited herein deserve sanctions from the Board. Considered separately, some would warrant only dismissal of Intervenors' contentions or the rendering of a decision on the merits in LILCO's favor. Collectively however, our findings reveal a sustained and willful strategy of disobedience and disrespect for the Commission's adjudicatory processes. The total behavior seriously impacted a timely and fair resolution of the realism contentions and other emergency planning issues. Previous sanctions for disobedience did not curb the present harm and it is not mitigating, in our judgement, that Intervenors have litigated most of the other contentions in this case with due regard for discovery rules and the Board's authority to regulate the proceedings. The strategy of non-cooperation and obstruction was deeply entwined with legitimate practice. Intervenors created the situation which gave rise to the realism contentions, which were sufficient in themselves to block issuance of an operating license if there were further rulings adverse to LILCO. Fair practice in their resolution was of

extraordinary importance in the case. Thus disobedience and disrespect for the Commission's processes, although narrowly and selectively applied, had an important prejudicial impact on factual inquiry concerning the adequacy of LILCO's emergency plan.

The Board concludes that Intervenors' actions were willful, taken in bad faith, and were prejudicial to LILCO and the integrity of the Commission's adjudicatory process. The sanction of dismissal as parties to the proceeding is the only appropriate penalty. The State of New York, the County of Suffolk, and the Town of Southampton are hereby dismissed from this proceeding.[39]

Although the sanction here decreed resolves the realism issues, neither time nor authority limitations permit the Board to address the issue of whether the non-production of the Suffolk County EOP was a willful obstruction of the Commission's discovery process. We believe it would be in the best interests of the parties and the Commission to refer this question to NRC's Office of Investigations for further review.

---

[39] In regard to any challenges to an exercise recently held on the Applicant's emergency plan, an interested person can petition the Commission for a hearing on any alleged deficiencies.

K. Review of Applicant's Prima Facie Case

The sanction of dismissal of the parties, terminating the controversy on the realism issues, does not provide for an adjudicatory resolution of the central issue of this proceeding--that being whether an emergency plan for the Shoreham facility is viable in Suffolk County. Most of the contentions involved in that issue have been previously litigated in LILCO's favor, supra. The Board believes that circumstances of this dispute require us to set forth here, even though it is dicta in our decision, what would have otherwise constituted a resolution of the realism contentions on the merits. The circumstances which would have led to an adjudication of the realism contentions to Applicant's benefit, are the following:

1. The Commission directed the Licensing Board in CLI-86-13 to obtain additional information about shortcomings in LILCO's emergency plan.

2. The Commission is legally obligated to consider the adequacy of a utility plan in cases where State and/or local governments do not participate in emergency planning.

3. Neither New York State nor Suffolk County have presented testimony challenging the merits of LILCO'S testimony.

4. The prolonged public controversy in the emergency planning litigation calls for a determination on whether an

adequate emergency plan can be implemented for Suffolk County.

5. The Applicant's prima facie case, except for interface procedures, is based on the existing record.

6. LILCO's facts concerning cooperative interface activities with State and County officials would have been taken to be established as a result of Intervenors' refusal to permit discovery..

7. The questions raised by the Commission's remand concerning possible time delays in LILCO's emergency responses have been answered satisfactorily in Applicant's prima facie case.

The realism issues that were pending before the Board and requiring resolution question whether certain of the Utility's emergency plan provisions satisfy regulatory requirements.

Contention 1

Whether LILCO's emergency plan and the best efforts response of the State and County governments will satisfy regulatory requirements concerning directing traffic.

Contention 2

Whether LILCO's emergency plan the best efforts response of the State and County governments will satisfy regulatory requirements concerning blocking roadways, setting up barriers in roadways, and channeling traffic.

Contention 4

Whether LILCO's emergency plan and the Best efforts response of the State and County governments will satisfy regulatory requirements concerning removing obstructions from public roadways, concluding the towing of private vehicles.

Contention 5

Whether LILCO's emergency plan and the best efforts response of the State and County governments will satisfy regulatory requirements concerning activating sirens and directing the broadcast and contents of emergency broadcast system messages to the public.

Contention 6

Whether LILCO's emergency plan the best efforts response of the State and County governments will satisfy regulatory requirements concerning making decisions and official recommendations to the public as to the appropriate actions necessary to protect the public health and safety, concluding deciding upon protective actions which will be communicated to the public.

Contention 7

Whether LILCO's emergency plan and the best efforts response of the State and County governments will satisfy regulatory requirements concerning protective actions for the ingestion exposure pathway.

Contention 8

Whether LILCO's emergency plan and the best efforts response of the State and County governments will satisfy regulatory requirements concerning recovery and reentry.

Contention 10

Whether LILCO'S emergency plan and the best efforts response of the State and County governments will satisfy regulatory requirements concerning access control at the EPZ perimeter.

The Applicant's proposed prima facie case was allegedly based mainly on matters previously adjudicated or admitted and prior Board rulings. Those parts of the record were cited in advance of a hearing scheduling. See LILCO's Designation of Record and Prima Facie Case on the Legal Authority Issues (Contentions 1-2, 4-8 and 10), April 1, 1988.

We advised the parties in the Board's May 26 bench ruling that cross-examination on the realism contentions would be permitted on the interface or best efforts activities set forth in LILCO's emergency plan and also on questions raised by the Licensing Board and the

Commission.[40] However, in maintaining the Commission directive to use the existing evidentiary record to the maximum extent possible, no cross-examination would have been permitted on matters previously litigated or resolved by the Board. In light of the refusal of the Board ordered discovery, Intervenors would have waived any rights it had to cross-examination.

Contentions 1 and 2 are both concerned with the efficacy of the movement of traffic, in the event an evacuation is called for, within the emergency planning zone of the Shoreham facility.

LILCO's plan for controlling traffic in an emergency was previously litigated and the Board's decision affirming that the plan meets NRC adequacy standards is found in the Board's Partial Initial Decision (PID), LBP-85-12, 21 NRC 644, 697-98, 723-25, 734-38, 781-809. The plan covers an analysis of the traffic network, a traffic control plan and estimated evacuation times. It provides for the timely establishment and training of LERO traffic and route coordinators, adequate numbers of traffic guides, a communication network and key designated traffic control posts where traffic flow will be facilitated or discouraged.

---

[40] See Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP -87-26, 26 NRC 201, 224 (1987) and CLI-86-13, 24 NRC 22, 31 (1986).

The Applicant has put forth in its prima facie case and prefiled testimony, the elements of State and County support expected to be forthcoming as part of a best efforts governmental response under 10 C.F.R. 50.47(c)(1). These activities contemplate the dispatch of adequate County police to traffic control points from Police Headquarters, a transfer of traffic control by LERO guides to the police and providing police officers with prepared copies of uncomplicated traffic movements for particular controlled intersections. The testimony indicates that police could be mobilized by Suffolk County as quickly as LERO traffic guides, but failing this, LILCO guides could be given permission to direct traffic until police arrived at the scene. Inasmuch as LILCO possesses the only evacuation time estimates for the County's EPZ, it is assumed by the Applicant that the best efforts of the County Executive will be to utilize LERO's controlled evacuation on which the estimates were based. Both the County Executive and the Police Commission are to be communicated with directly by appropriate LERO officials and requested to go to LERO's emergency operations center (EOC). The Police Commission could dispatch police from the EOC if he chose not to work with the LERO Traffic Control Point Coordinator at Police headquarters. The testimony reflects that, since police can be assembled in a prompt sequence, no delay should occur due to the County's "best efforts" response. See Prefiled

Testimony - Crocker, Lieberman, Weismantle at 28-36. There are additional facts admitted by the Board in the record (26 NRC 201, 225) which testifies to the ability of Suffolk County's Police to manage and control traffic activities. See Admitted Facts 1, 3, 4, 5, 53, 59, 60, submitted in LILCO's Second Renewed Motion for Summary Disposition (March 20, 1987). The Applicant also cites testimony in the record which provides additional support of police capability to respond to emergencies. See Roberts, et al., ff. Tr. 2260, at 2-4, 35-36, 34-44, 48, 52-53; Regensberg, et al., ff. Tr. 4442 at 18; Tr. 1237-38, 1262-63; 1268 (Dilworth); Tr. 2319-21 (Roberts, McGuire); Cosgrove, et al., ff. Tr. 13083, at 19-23, 55, 63, 76-77 n. 6; Tr. 13091, 13112-16, 13208-09 (Cosgrove, Fakler) and Lieberman affidavit, LILCO Motion for Summary Disposition of Contentions 1, 2 and 9--Immateriality (December 14, 1987). LILCO's emergency plan for traffic evacuation and control are found in its implementing procedures (OPIP's) at OPIP 3.1.1, Attachment. 10, at 3-5; OPIP 3.6.1, 3.6.3 and Plan, Appendix A.

In response to a question raised by the Commission in its remand of the realism issues, concerning time delays, 24 NRC 22, 31, LILCO's prefiled testimony reflects that neither a controlled nor uncontrolled evacuation at Shoreham would likely influence protective action recommendations since such decisions are made on the basis of plant conditions. Information submitted by LILCO's traffic expert Lieberman

and found in OPIP 3.6.1, Attachment 2, indicates a difference of only 35 minutes in normal weather or 55 in adverse weather between a controlled or uncontrolled evacuation, a delay which, according to the prefiled testimony, would not seriously impact an evacuation. See Prefiled Testimony at 40-48. LILCO cites supporting data from NUREG/CR-1856 which demonstrates a listing of 12 nuclear facilities with time estimates longer than evacuation times during Shoreham's uncontrolled adverse weather conditions and also where estimates of only a 50% compliance with summer uncontrolled times at Shoreham are calculated. See Prefiled Testimony at 42-43.

The Board concludes that the Applicant's traffic control plan with the best efforts responses of New York State and Suffolk County is adequate to meet NRC's regulatory standards and evacuation criteria found in 10 C.F.R. 47(b)(10), Appendix E, NUREG-0654, Appendix 4 and 10 C.F.R. 47.(c)(1)(iii).

Contention 4 involves the removal of road obstructions during an evacuation emergency.

LILCO plans to have at least twelve (12) road crews and vehicles available for assignment to remove road obstructions in an emergency. There are also additional vehicles, owned by the Applicant, available. The plans to handle this activity have been found adequate by the Board. PID, LBP-85-12, 21 NRC 711, 809-12 and are referenced in

OPIP 3.1.1 Attachment 10 at 3. See also OPIP 3.6.3. Also see Cordaro, et al., ff. Tr. 6685, 6726, 6734-35; Baldwin, et al.; ff. Tr. 12,174 at 63; Tr. 12,802-03 (Baldwin).

The best efforts response proposed by LILCO assumes that the State and Suffolk County would either grant permission to LERO road crews to remove road obstacles, would operate under their direction, or the State or County would remove the obstacles with their own available road crews and equipment, with private commercial towing services that are under contract. No delay in removing obstacles is foreseen in the eventuality of an emergency since the use of additional resources on the part of the State or County would accelerate carrying out the activities. See Prefiled Testimony at 50-51. The ability of Suffolk County to respond to remove road obstacles has been testified to by County police officials. See Roberts, et al., ff., Tr. 2260 at 55, 57-59 and Attachment 8.

The Board concludes that LILCO's plan for removing road obstacles with the best efforts responses of New York State and Suffolk County governments is adequate to meet NRC regulatory standards and criteria as found in 10 C.F.R. 50.47(b)(10), Appendix E, NUREG-654 J. 10.K, and 10 C.F.R. 50.47(c)(1)(iii).

Contention 5 concerns the activation of sirens and directing emergency broadcast system messages.

The issues raised by this contention concern questions on whether, when, and by whom sirens will be activated, and messages communicated in an emergency and whether any delay is inherent in the best efforts response by State and County officials. The essential adequacy of LILCO's early warning system and the emergency broadcast system (EBS) has been previously accepted by the Board. PID, LBP-85-12, 21 NRC 698, 756-63 and Admitted Facts 6, 7, 14-28, 30-33. The plan provides procedures for communicating with responsible County and State officials (County Executive and State Chairman of the Disaster Preparedness Commission) and the method for activating the EBS. LILCO Plan, Section 3.3, OPIP's 3.1.1 Attachment 10, 3.3.4, 3.8.2 and 5.4.1 Attachment 10.

Issues concerning the coverage of the LERO EBS are resolved elsewhere in this decision. Both LILCO's prima facie case and its prefiled testimony at 54-56 reflect that with a best efforts response no delay will develop beyond the 15 minute notification periods authorized by the regulation. Even though Phase I onsite contentions have previously been resolved in LILCO's favor, affidavits submitted by Applicant in support of a 1987 LILCO Summary Disposition Motion reveal that the Applicant's onsite notification system has been tested satisfactorily under certain actual emergency conditions. See Affidavits of Crocker and Devlin, LILCO Summary Disposition on Realism

Contentions, December 1987. Also see PID, 21 NRC 698 at 708-09. Under the best efforts response, LILCO's plan calls for decisions to be made with the participation of State and/or County representatives, an EBS message for the plan prepared with concurrence of the County and/or State and the message to be read over the phone to WCBS and broadcast at the same time. See Prefiled Testimony at 54-58.

The Board concludes that LILCO's plan for activating sirens and directing emergency broadcast messages with the best efforts responses of New York State and Suffolk County is adequate to meet NRC's regulatory standards and criteria as found in 10 C.F.R. 50.47(b)(5), Appendix E, IV.D.3, NUREG-0654, Supp. 1, Criteria E.5 and E.6 and 10 C.F.R. 50.47(c)(1)(iii).

Contention 6 involves protective action decisions and recommendations.

Most of the issues involved in the LERO plan concerning protective action recommendations have been previously resolved in LILCO's favor by the Board. PID, LBP-85-12, 21 NRC 677, 693-94, 770-81; Admitted Facts 8, 10-13, 34-39, 44-52.

The sections of LILCO's emergency plan applicable are Plan Section 3.6, OPIP's 3.6.1 and 3.1.1 Attachment 10. These provisions set forth the method and standards for making protective action recommendations (PARs) and provide for the Director of Local Response, in coordination with State and

County officials after input from LILCO, NRC, FEMA and DOE representatives, to make the final decisions on protective actions to be implemented. PARs should be made on the basis of plant conditions and New York State and Suffolk County both have people capable of making protective action decisions. See LILCO Prefiled Testimony at 59-62.

LILCO's prima facie case and prefiled testimony evidences that the Department of Energy RAP team will monitor data and consult with LILCO and State and local governments on appropriate protective action recommendations. The protective action guidelines (PAG) in LERO's plan are the same as in the New York State plan, the sheltering and evacuation options in LERO's plan conforms to the State plan and the State has personnel qualified to make decisions based on dose projections and other data. Since the primary responsibility for accident assessment to be able to make timely protection response recommendations to State and County officials resides with the facility operator, it is highly unlikely, in a fast moving accident, that a best efforts response can do other than call for following the operator's recommendations. Consequently, this event should cause no time delay. Even in a gradually escalating accident, no appreciable delay will occur since discussions between LERO, State and County and other government officials like the DOE can take place or are

likely to take place at LERO's EOC. See LILCO Prima Facie Case at 34-36.

The Board concludes that LILCO's plan for making protective action decisions and recommendations with the proposed best efforts responses from New York State and Suffolk County is adequate to meet NRC's regulatory standards and criteria found in 10 C.F.R. 50.47(b)(10), Appendix E and Supp. Criteria J.9 and J.10, and 10 C.F.R. 50.47(c)(1)(iii).

Contention 7 concerns decisions and recommendations on protective actions for the ingestion exposure pathway.

LILCO's plan for managing, monitoring, issuing warnings, notification of food procedures, and the purchase of contaminated foods was accepted by the Board as adequate in meeting NRC standards. PID, LBP-85-12, 21 NRC 875-78. LILCO's procedures for the ingestion exposure pathway is found in OPIP 3.6.6 which contains lists of food procedures, food provisions and milk dealers for Shoreham's 50 miles EPZ. LILCO can also expect assistance from a number of federal agencies through the Federal Radiological Emergency Preparedness Plan (50 Fed. Reg. 46,542-51, Nov. 8, 1985). Additionally, LERO can expect help from the State which has similar procedures in its Radiological Emergency Preparedness Plan. The record shows that New York State is responsible for ingestion pathway response at all other nuclear plants in the State and most of Shoreham's 50-mile

emergency planning zone (EPZ) is already included within the EPZs of three other nuclear power plants. See LILCO Prima Facie Case: Prefiled Testimony at 64-65 and Attachment T. LILCO's emergency plan procedures require that permission by LERO's Director of Local Response be obtained from Suffolk County's Executive. Prior to making recommendations to the public on the ingestion exposure pathway, New York's Director of Health also needs to be contacted. Under the LILCO plan, the New York State plan and every other radiological response plan in New York State, a Recovery Action Committee with representatives from State, County, federal government, and the Utility is activated to make decisions for the public. These decisions will be based on monitoring sampling information collected by LILCO, DOE, State and County teams. The best efforts response from both State and County call for their cooperation in this necessary activity. See Prefiled Testimony at 64-67. Also see Admitted Facts 37, 40, 45, 46, 47, REPG Affidavit, February 10, 1988. The following provisions of Revision 9 to LILCO'S emergency plans are relevant to this issue: Plan Sections 3.6-1 to 3, 3.6-7a to 8a, Figure 3.6.1, Table 3.6.4, OPIP's 3.1.1 Attachment 10, 3.6.6. No time delay is expected in making protective action decisions under these procedures. See Prefiled Testimony at 67.

The Board concludes that LILCO's plan for protective action decisions and recommendations for the ingestion

exposure pathway with the best efforts responses from New York State and Suffolk County is adequate to meet the regulatory standards and criteria of 10 C.F.R. 50.47(b)(10), Appendix E, NUREG-0654, Supp. 1, Criterion J. 11 and 10 C.F.R. 50.47(c)(1)(iii).

Contention 8 concerns decisions and recommendations on recovery and reentry.

The activities involved in recovery and reentry are matters to be decided by the Recovery Action Committee and are described in OPIP 3.10.1. This committee, with representatives from the Utility, State, County and the Federal government, is similar to that used in the New York State Plan and all other nuclear emergency plans in the State. The Board previously resolved the recovery and reentry issues in LILCO's favor in concluding that the proposed criteria and plans for estimating population doses were adequate. PID, 21 NRC at 878-82.

The plan calls for the Director of Local Response to obtain the County Executive's permission prior to making recommendations on recovery and reentry to the public. A best efforts response calls for State and local officials to cooperate on decisions required to be made. No delay is expected in making decisions and recommendations on recovery and reentry matters. LILCO uses the same radiological criteria as the State for reentry and has a detailed procedure for calculating total population doses, and there

are many available agencies at the federal, State and local level to assist in recovery and reentry activities. See Prefiled Testimony at 67-70 and Prima Facie Case at 44-48. Also see Plan Section 3.10-1 to 2, 3.11-1 to 2, OPIP 3.1.1, Attachment 10 and OPIP 3.10.1.

The Board concludes that LILCO's emergency plan for making decisions and recommendations on recovery and reentry with the best efforts responses of New York State and Suffolk County governments is adequate to meet NRC regulatory standards and criteria as found in 10 C.F.R. 50.47(b)(13), Appendix E, and NUREG-0654, Supp. 1, Criterion M.1, M.3-4, and 10 C.F.R. 50.47(c)(1)(iii).

Contention 10 is concerned with establishing and maintaining perimeter access control.

LILCO's plan to assign traffic guides to all major entrances to the EPZ to discourage entry was considered adequate to meet NRC regulatory standards by the Board. PID, LBP-85-12, 21 NRC at 703, 804-05. Additional points could be manned by County police and the publication of clear information on contaminated areas will discourage people from entering. County police can also be utilized under a best efforts response to continue access control and no delay is anticipated, with adequate resources available to monitor access control. See LILCO Prima Facie Case at 48-54 and Prefiled Testimony at 70-72. Also Admitted Facts

1, 3, 4, 5, 53, 59, 60 and Plan Sections 1.4, 2.1, 2.2, Figure 2.1.2 and OPIP 3.1.1, Attachment 10.

The Board concludes that LILCO's emergency plan for perimeter access control with the best efforts responses by New York State and Suffolk County governments is adequate to meet NRC's regulatory standards and criteria of 10 C.F.R. 50.47(b)(10), Appendix E, NUREG-0654, Supp. 1, Criterion J.10.j and A.2.a and 10 C.F.R. 50.47(c)(1)(iii).

The Board finds that LILCO's emergency plan provides adequate protective measures that can and will be taken in the event of an emergency and that any deficiencies in the plans resulting from New York State and Suffolk County lack of participation therein are not significant. The Board finds that the Utility's emergency plan supplemented by the best efforts responses of the State and County provide reasonable assurance that public health and safety is not endangered by the operation of the Shoreham facility. The Board finds that the Applicant's emergency plan provisions for contentions 1, 2, 4, 5, 6, 7, 8, and 10 are adequate in meeting the NRC's regulatory requirements, standards, and criteria as found in 10 C.F.R. 50.47(b) and (c)(1)(iii), Appendix E, NUREG-0654 and Supp. 1.[41]

---

[41] The Applicant also sought resolution in its favor of Contentions 1 and 2 based on the so-called immateriality argument. Our resolution here of the entire set of realism

(Footnote Continued)

L. Conclusions of Law

Based upon review of the entire record in this proceeding, the Board concludes that

1. As to the Applicant's motion for summary disposition of the emergency broadcast system issues, there are no genuine issues to be heard on matters in dispute and the motion is therefore granted.

2. As to Applicant's plan to supply school bus drivers in the event of an evacuation, the proposed protective responses are adequate to comply with NRC's regulatory standards and criteria.

3. As to Applicant's plan for the evacuation of three hospitals during an emergency, the evacuation time estimates in the proposed protective response comply with NRC's regulatory standards and criteria.

4. On the realism contentions 1, 2, 4, 5, 6, 7, 8, 10, Intervenors are found to be in default of Board Orders on discovery and are dismissed from the proceeding. The realism contentions are, therefore, no longer "in controversy" between the parties.

5. Based on the findings of fact in this decision, and having resolved all matters in controversy, the Board

---

(Footnote Continued)
contentions makes it unnecessary to render a separate focused decision based on the immateriality argument.

concludes that, pursuant to 10 C.F.R. 2.760(a) and 50.57, the Director of Office of Nuclear Reactor Regulation is authorized to issue to the Applicant's, upon making any requisite findings with respect to matters not embraced in the initial decisions, a license authorizing the operation of the Shoreham facility.

M. Order

WHEREFORE, IT IS ORDERED, as permitted by 10 C.F.R. 2.760(a) and 50.57, that the Director of the Office of Nuclear Reactor Regulation is authorized to issue to the Applicant's, upon making requisite findings with respect to matters not embraced in this Concluding Initial Decision, the licenses authorizing operation of the Shoreham Nuclear Power Station, Unit.

Pursuant to 2.760(a), this Concluding Initial Decision will constitute the final decision of the Commission forty-five (45) days from the date of issuance, unless an appeal is taken in accordance with 10 C.F.R. 2.762 or the Commission directs otherwise.

Any party may take an appeal from this Decision by filing a Notice of Appeal within ten (10) days after service of this Decision. Each appellant must file a brief supporting its position on appeal within thirty (30) days after filing its Notice of Appeal, (forty (40) days if the

Staff is the appellant). Within thirty (30) days after the period has expired for the filing and service of briefs of all appellants (forty (40) days in the case of the Staff), a party, who is not an appellant, may file a brief in support of or in opposition to any appeal.

THE ATOMIC SAFETY AND
LICENSING BOARD

James P. Gleason, Chairman
ADMINISTRATIVE JUDGE

Dr. Jerry R. Kline
ADMINISTRATIVE JUDGE

Mr. Frederick J. Shon*
ADMINISTRATIVE JUDGE

Dated at Bethesda, Maryland
this 23rd day of September, 1988.

* Judge Shon concurs in part and dissents in part to this Decision and his opinion is attached hereto.

Judge Shon, Concurring in Part and Dissenting in Part

I concur with my colleagues on the issues herein concerning bus driver availability, hospital evacuation times, and the suitability of the EBS system. Further, I agree with the ultimate resolution of the revised "legal authority", or "realism", issues, that is, I too would find for LILCO on these matters.

I part company with my colleagues, however, on two details along the path by which they arrive at their conclusion on the legal authority issues. One of these details is minor: I am uncomfortable with the order of priority in which they have issued their "dismissal as a sanction" and "finding on the merits" decisions. I would first issue a finding on the merits, but I would note that these contentions could have been dismissed even if such a finding could not be reached. The other matter is of considerably more weight: If any dismissal is in order, I would dismiss the contentions but not the parties propounding them.

The Priority of the "Sanction" and "Merits" Decisions

My colleagues say (supra at 89):

In this part of the Board's decision, we find the Intervenors in default, bring litigation of the realism contentions to an end, dismiss Intervenors from the proceeding, and find that, absent the sanction of dismissal,

a decision on the merits of the issues would have been rendered in Applicant's favor.

I believe that in matters fraught with considerations of public health and safety we owe the public a clear decision on the merits, and we owe the public that decision up front. In addition, where, as here, the Applicant has gone to the very considerable trouble and expense of preparing a plan and litigating its worth, we owe the Applicant a clear decision in its favor, also up front.

I would much prefer the following reasoning (which may, in fact, be the equivalent of my colleagues', but, in my view, is more equitable, direct, and unequivocal): I would find on the merits for the Applicant. The reasons for this finding are, in the main, set forth contention by contention in my colleagues' opinion (supra at 133 ff). The findings for each contention differ in detail, but the fundamental reasoning is similar in each case: it is that LILCO set forth in several motions for summary disposition facts that, prima facie, would have dictated a finding in its favor, but for the complete blank in our knowledge concerning the Governments' response. When the Governments produced no direct evidence on how they would respond to an emergency and further barred us from examining that response by subverting discovery, we could only conclude that any facts they might reveal would buttress rather than controvert LILCO's case. And indeed, when the Suffolk County EOP was finally revealed, it showed that there were many resources

and many responses available to the Governments, a substantial portion of which might well have application in a radiological emergency. Thus, in my view, LILCO's prima facie case, buttressed by the Governments' recalcitrance and by the glimpse we obtained of what the Governments' capacities were, constituted overwhelming evidence that LILCO's Emergency Plan, coupled with the "best efforts" response mandated by the Commission's recent rule, would satisfactorily comply with the Commission's requirements for emergency planning. It is also clear to me that such a finding by no means deprives the Governments of due process, for they were afforded opportunity to provide evidence on their proposed actions in an emergency, and they provided what was, in effect, a nullity. Nor would they engage in proper discovery.

Having observed that, I would then proceed to note that, had we been unable to make a decision on the merits, we could also have dismissed the contentions as a sanction for the Governments' refusal to participate in discovery. We had, in fact, warned the Governments of the possibility of just such an outcome in our Orders of February 29 and April 8, 1988. Significantly, however, we did not there suggest dismissal of the Governments as parties. Even in the telephone conference of June 10, we mentioned only the options of dismissing the contentions or ruling in LILCO's favor upon them (Tr. 20862). The possibility of dismissal

as parties arose in the telephone conference of June 24. It was broached by LILCO and accepted as a possibility by the Board (Tr. 20920; 20923). That was long after the Governments' obstructive action took place.

The Scope of Any Sanction Which Might be Incurred

As I note above, I would find for LILCO on the merits. But I would also express the belief that, were a finding on the merits beyond our grasp, a dismissal of the contentions as a sanction would be appropriate. Note that I say "a dismissal of the contentions", for I do not believe that a dismissal of the parties is in order. Dismissal from the entire case goes so far beyond the four corners of the Governments' obstructive behavior that I cannot consider it a properly measured response.

While the Governments did indeed improperly resist discovery on the contentions at issue, they clearly did cooperate sufficiently to permit unequivocal resolution of the other remanded matters dealt with in this decision, and they have, through the years, been sufficiently forthcoming to permit us to produce decisions on a host of other issues. My colleagues grant that (supra at 129). The "realism" or "legal authority" issues represent a winnowing down to eight of approximately one hundred contentions originally propounded.

It is the matter of dismissal of the Governments in such a way as to preclude their participation on further issues that troubles me. I have been unable to find any clear precedent on such a sanction. Indeed, in discussing the constitutional limits on sanctions, Wright and Miller's Federal Practice and Procedure suggests that the matter of scope may not have been dealt with in the federal courts, saying:

> Another aspect of the constitutional problem does not seem to have been discussed in the federal cases though it has arisen occasionally in state litigation. It is illustrated by a state court case in which a newspaper reporter, sued for libel, willfully refused to answer interrogatories asking the names of his informants, if any, for the article he wrote. It was held error to strike his answer and to enter judgment against him for this failure. The court held that defendant could properly be punished for contempt and that the court was free to presume that the reporter had no informant or that the informant did not make the statement in question but that he could not be denied his day in court on other issues in the case to which the existence of an informant would have no relevance. To go beyond this, and bar the party on issues unrelated to his failure to disclose . . . would seem to exceed constitutional limits.

(Wright and Miller, Federal Practice and Procedure: Civil, Sec. 2283, Vol. 8 (1971), at 763-4, Citations omitted.)

The 1987 Pocket Part of this same work still finds no federal cases to cite in the matter, although it does cite one contrary ruling in a state court. The state cases, of course, are in no way binding upon us. But the concept seems to me such a sound one on its face that I believe we would ignore it at our peril. It is true that there may be situations where the reprehensible behavior of a party is so

egregious and the damage to an adversary's case so all-pervasive that the sanction of complete dismissal may be justified. But in the case at bar LILCO has suffered at most delay and inconvenience.[1] Indeed, LILCO won! The victor can scarcely be deemed to have had his case destroyed.

I recognize that my colleagues believe that two of the Governments' actions are so pervasive and so threaten the integrity of the judicial process that they justify the Governments' ouster. The first of these is the curiously styled filing of June 9: "Governments' Notice that the Board has Precluded Continuation of the CLI-86-13 Remand." In my colleagues' view that filing represented an attempt on the part of the Intervenors to wrest control of the proceeding

---

[1] It is unclear to me at the moment exactly how much of LILCO's time and money have been wasted. No doubt the total was substantial. However, even had the EOP been delivered and its significance recognized as early as 1983, it might not have affected the decision which subsequently denied LILCO's license. That is because the Commission had not yet put its imprimatur upon the "realism" and "best efforts" concepts, and we therefore could not make assumptions about State and local reactions, even given a knowledge of their resources. Clearly, had the EOP been forthcoming after the Commission issued CLI-86-13, in July of 1986 (24 NRC 22), LILCO might well have made good use of it in supporting its subsequent motions for summary disposition. But in any event the disclosure of the EOP would have had little effect on the need to litigate such matters as bus driver availability, evacuation times, or a host of other issues, either originally or on remand.

from the Board, an attempt which strikes at the very heart of the entire adjudication.

Like my colleagues (supra at 95), I am not quite certain what the filing was intended to accomplish. Certainly it was ill advised. If it was meant to stop the proceeding, or even to slow it down, clearly it failed miserably. Indeed, after the June 9 filing this case proceeded with an alacrity that it had never shown before. Within days we decided the entire case and decided it adversely to the Governments. I certainly cannot condone the filing; I, too, found it objectionable. But its net effect may well have been salutary: It brought matters to a head. My colleagues see bad faith in the filing; I see only bad judgment.

The second matter my colleagues view as pervasive misbehavior is the Governments' steadfast reluctance to disclose the EOP. The Governments, of course, claim they disclosed much or most of it early on, but that can neither be proved nor disproved. Certainly they did adopt a refractory position, claiming that any plans that they had for emergencies were irrelevant to radiological emergencies. That position was clearly untenable after the issuance of CLI-86-13, and the Governments should have taken steps to recognize that fact and supplement any earlier discovery by supplying the EOP. That, however, is at most a failure to render proper discovery on the immediate issues at hand.

Here my colleagues see behavior that "taints" our earlier decisions, both the one that formally denied the license and the earlier denials of summary disposition, since those decisions were made without full disclosure. I feel, however, that there is no certainty that those decisions would have been different, since the Commission had then not yet enunciated its "realism" and "best efforts" doctrines.

Thus I am led to the conclusion that the appropriate sanction would be dismissal of the contentions, if indeed dismissal were the only route to a decision.

But there is another troubling aspect to the dismissal of the Governments as parties. We cannot ignore the fact that the parties we dismiss <u>are</u> governments. Justice may wear a blindfold, but she cannot blink at the identity of the Governments <u>qua</u> governments. Indeed, the Commission's own rules have provided for special treatment of states for almost as long as there have been Commission rules. 10 C.F.R. 2.715(c). And in 1978 that special treatment was expanded to include similar privileges for cities and counties. 43 Fed. Reg. 17798.

Nor are these privileges inconsiderable ones. While Section 2.715(c) of the regulations is itself styled "Participation by a person not a party", it specifically accords to state and local governments many of the prerogatives of a party, even where the governments are not parties, as they are here. It asserts that the presiding

officer "will afford" such governments reasonable opportunity to "participate and to introduce evidence, [and] interrogate witnesses", and such participants may also file proposed findings and petition the Commission for review. And, in fact, these privileges are sufficient to incur the corresponding responsibilities of a party. Gulf States Utilities Co. (River Bend Station, Units 1 & 2), ALAB-844, 6 NRC 760 (1977).

So I am led to the conclusion that, in general, the Commission would not exclude state and local governments (and by parallel reasoning would not eject them once they are in a case), even where the matters at issue are not those in which such governments have special technical expertise. A fortiori, then, it seems to me unwise to reject the present Governments' participation in emergency planning, an area where the Commission's rules have traditionally given great deference to local expertise, and where the Commission has previously placed substantial reliance on state and local planning. Indeed, the statement of consideration which accompanied the Commission's latest revision of 10 C.F.R. 50.47(c) is riddled with such statements as: ". . . the ideal situation [is] one in which there is a state or local plan that meets all NRC standards"; "[c]learly it will be difficult for a utility to satisfy the NRC of the adequacy of its plan in the absence of state and local participation"; and "[t]he NRC, in common

with the Congress and FEMA, regards full state and local participation to be necessary for optimal emergency planning." 52 Fed. Reg. 42078, passim. Thus even in making the rule change which has permitted us to find for LILCO, the Commission itself was careful to give considerable deference to the role which state and local governments might play in the matters at bar.

Taken all in all, the situation seems to me to preclude our barring the Governments from participation in all aspects of this proceeding. Certainly their recalcitrance, while possibly dilatory, did not extend to all phases of the case. And the very special treatment extended by the Commission to state and local governments in its regulations, particularly in the regulations bearing on emergency planning, suggests to me that we should be even more reluctant to bar the Governments than we would be to bar parties of a different stripe for similar conduct.

I turn now to a very singular aspect of this case: the question of what the practical difference may be between the course I recommend and that steered by my colleagues.

The Effect of the Majority's Action

Both the action that I recommend and that which my colleagues have chosen result in a finding for LILCO in this

case. No further matters pend before us, and one might thus argue that the distinction I would draw--the distinction between finding for the Applicant on the sole remaining matters and dismissing the opposing parties from the case--is a distinction without a difference. Clearly the Governments can appeal their dismissal, and, if that appeal results in a reversal, continue to pursue whatever other remedies may still pend. Clearly also, if the dismissal is upheld, the aspects currently under appeal would become moot: The Governments would no longer be parties and, nunc pro tunc, it would be as if they never were. But such considerations, while important perhaps to the Appeal Board's scheduling of the matter, need not concern me here.

However, there is at least one phase of the case that has not been examined at all. I refer to the hearing that the Commission is likely to permit on the emergency planning exercise that was held in June of this year. Two of the present parties have already asked (albeit in somewhat differing ways) that a hearing be held on that subject. NRC Staff Motion for Schedule for Litigation of the June 1988 Exercise, September 9, 1988; Suffolk County, State of New York, and Town of Southampton Motion for Appointment of Licensing Board with Jurisdiction to Hear Exercise Issues, September 13, 1988. Even LILCO has tacitly assumed that such a proceeding is in order. LILCO's Response to NRC

Staff's Motion for Schedule for Litigation of the June 1988 Exercise, September 16, 1988.

If we dismiss the Governments as parties, it may be that they could not participate in the proceeding that might develop concerning LERO's performance during the June exercise.[2] Further, while I have no clear record of what happened at that exercise, I have reason to believe that the Governments followed it closely, but that no other party adverse to the granting of a license did so. Thus there would be no mechanism by which we could test LERO's performance in the crucible of adversary procedure, as we did its performance in the February 1986 exercise, only to find it wanting. 27 NRC 85. Such an outcome seems to me patently undesirable, considering the public health and safety matters at issue.[3]

---

[2] Here I deliberately choose to ignore the complex question (a question, I think, of first impression): Could the Governments, ousted from their role as parties under 10 C.F.R. 2.714, return as governments under 10 C.F.R. 2.715(c)?

[3] On September 20, 1988, after this dissent was written but before it could be issued, the Atomic Safety and Licensing Appeal Board issued ALAB-901. In the Memorandum and Order, the Appeal Board directed that "proceedings in connection with the 1988 emergency exercise at the Shoreham facility are remanded for appropriate action to the Licensing Board in Docket No. 50-322-OL-5 . . ." (slip op. at 10). What impact my colleagues' dismissal of the Governments will now have on the review of that exercise is presently unclear to me. I had, of course, previously relied upon the OL-5 Board's own determination that it no longer had jurisdiction in this case. LBP-88-7, 27 NRC 289.

The Commission's regulations do not provide for a hearing in an operating license case absent an intervenor. That, one might well assume, is because the Commission regards intervention at that stage as simply a matter of respect for due process and the rights of the intervenors, not as a matter of additional protection for the public health and safety. Nevertheless, in a case where a hearing has previously turned up fundamental flaws in an emergency plan, we should not lightly abandon the hearing procedure as a tool for testing such plans. I would hold it wiser not to waste any efforts the Governments may have already put into close examination of the exercise.

Frederick J. Shon

Mr. Frederick J. Shon
ADMINISTRATIVE JUDGE