

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

'87 MAY 11 P3:09

Before the Atomic Safety and Licensing Board

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)
)
LONG ISLAND LIGHTING COMPANY) Docket No. 50-322-OL-5
) (EP Exercise)
(Shoreham Nuclear Power Station,)
Unit 1))

**LILCO'S MOTION TO STRIKE PORTIONS OF SUFFOLK COUNTY'S
TESTIMONY ON CONTENTIONS EX 15 AND 16 — THE SCOPE OF THE EXERCISE**

Long Island Lighting Company (LILCO) hereby moves to strike portions of the "Direct Testimony of James C. Baranski, William Lee Colwell, Lawrence B. Czech, Gregory C. Minor, James D. Papile, Charles B. Perrow, Frank R. Petrone and Harold Richard Zook on Behalf of the State of New York and Suffolk County Regarding Contentions EX 15 and 16," on the grounds that (1) several witnesses are incompetent to testify on the matters involved in this proceeding; and (2) portions of the testimony go beyond the scope of Contentions EX 15 and 16.

**I. SEVERAL WITNESSES ARE NOT QUALIFIED
TO RENDER CERTAIN OPINIONS**

The Commission's regulations require that testimony, in order to be admissible in licensing proceedings, be "reliable." 10 CFR § 2.743(c). While the regulations do not specify any particular test of expertness sufficient to demonstrate the reliability of expert or opinion testimony, consistent case law makes clear that the traditional test of expertness (codified in Federal Rule of Evidence 702) -- knowledge, skill, experience training or education in relevant areas sufficient to assist the trier of fact in understanding evidence or determining facts in issue -- has been adopted for Commission proceedings.

The subject matter of Contentions EX 15 and 16 involves understanding and interpretation of a less than self-explanatory regulatory phrase -- "full participation" exercise -- through a series of documents of varying levels of regulatory dignity and their implementation through several years of regulatory practice.

LILCO does not challenge the qualifications of all of Intervenor's witnesses on this subject. However, the absence of relevant expertise on the part of the witnesses dealt with in this motion, not just with specifics of Shoreham but with the discipline of emergency planning and its relevant subset -- "full participation" exercises -- is clear, as is demonstrated in Parts I.A through I.D below. The implementation of the legal standard for expertness in other NRC cases and its applicability to compel the exclusion of the proffered testimony of these witnesses is spelled out in Part I.E.

A. Testimony Sponsored by Frank R. Petrone

LILCO moves to disqualify Frank R. Petrone as a witness on Contentions EX 15 and 16 on the ground that, despite his position as Director of FEMA Region II from 1982 to 1986, his deposition testimony, taken on December 15, 1986, reveals an utter lack of substantive knowledge regarding the matters in this proceeding.

It is evident that Mr. Petrone served his post as Regional Director by overseeing the general administration of FEMA Region II, not by getting involved in its day-to-day operations. When asked during his deposition whether the activities of Region II with respect to the evaluation of off-site emergency planning were largely conducted by staff members rather than himself, Mr. Petrone replied affirmatively:

The ongoing, every-day activities were conducted by staff members.

Deposition of Frank R. Petrone (December 15, 1986) at 29. (The specific deposition pages cited throughout this motion are collected in Attachment A.)^{1/} Mr. Petrone's

^{1/} For the Board members' convenience, the entire transcript from the Deposition of Frank R. Petrone has been included with this pleading. Since all other parties al-

lack of substantive participation is evident from his total dearth of knowledge regarding the specifics of FEMA's role in emergency planning. When asked during his deposition whether he was familiar with any documents that delineate FEMA's authority with respect to activities for off-site emergency planning, he responded, "I don't recall at this point." Deposition of Frank R. Petrone at 24.

When asked whether, during his tenure at FEMA, he had any discussions concerning the authority of Region II with respect to off-site emergency planning, he responded that he did not recall any in particular. Deposition of Frank R. Petrone at 24.

When asked whether, during his tenure at FEMA, there were criteria by which he formulated recommendations for ultimate submission to the NRC regarding off-site emergency plans, he responded:

Very difficult to recall because the criteria kept changing.

Deposition of Frank R. Petrone at 26.

When asked whether the criteria changed throughout the period during which he was at FEMA, he replied:

There were changing criteria, correct, but I just could not recall when and how and what did change.

Deposition of Frank R. Petrone at 26.

When asked whether he could recall the name of any document that might contain criteria for the evaluation of off-site plans, he said:

The only document that would come to mind is that of the document containing FEMA's 350 process and that of 0654.

Deposition of Frank R. Petrone at 26-27. After further testifying that he could not recall whether his reference to the "350 process" meant provisions of the Code of Federal Regulations, he said:

(footnote continued)

ready possess this transcript, LILCO has not provided a duplicate copy for those parties.

I cannot recall what provisions I am referring to other than the [44 CFR] 350 process in and of itself.

Deposition of Frank R. Petrone at 27.

When asked whether the "0654 document" was one he used in the course of his activities as Regional Director, he replied:

I know it was a document that my staff used.

Deposition of Frank R. Petrone at 27.

When first questioned about FEMA Guidance Memorandum 17, a document that sets forth the standard FEMA exercise objectives to be selected from in a full participation exercise, Mr. Petrone recalled nothing, and what little he did ultimately recall came only after he was handed the document:

Q. Are you familiar with a document known as Guidance Memorandum 17?

A. No, I am not.

[witness handed document for review]

. . . .

Q. During the course of your employment as regional director, Region II, did you ever have occasion to work with this document?

A. I could not recall whether or not I worked with the document.

Q. Do you know what it is?

A. Basically the document sets forth some guidance with regard to pre-exercise and post-exercise activities.

Q. Do you know whether or not this document plays any role in the review and evaluation by FEMA of off-site plans?

A. I believe it is relative to the 350 process.

Q. Do you know what significance it has with respect to that process?

A. I believe it sets time lines. As I am reading it, I believe it sets time lines in terms of the exercise.

Q. Is this document used by FEMA with respect to the evaluation

or formulation of recommendations with respect to exercises conducted for off-site plans?

A. I can't recall at this point. I haven't had a chance to extensively review it.

Q. Based upon your experience as regional director of FEMA, Region II, can you answer that question?

A. I would say it plays a role. To what extent I cannot recall.

. . . .

Q. Do you know how [the 36 standard FEMA exercise] objectives relate to the standards set forth in NUREG 0654?

A. I believe they correspond to NUREG 0654.

. . . .

Q. Did you have any occasion during your employment with FEMA to review, evaluate or make recommendations with respect to an exercise by reference to any of the [standard exercise] objectives?

A. I don't recall.

Deposition of Frank R. Petrone at 30-32.

Mr. Petrone evinces a similar lack of knowledge regarding NRC regulations that pertain to the meaning of "full participation" exercises. When asked whether he was currently familiar with any NRC regulations relating to off-site emergency planning he replied:

I could not recall at this point.

Deposition of Frank R. Petrone at 28. When asked whether he had been familiar with NRC regulations concerning off-site planning during his tenure as Regional Director he said:

I would say I was familiar to the extent that my staff was very familiar with it.

Deposition of Frank R. Petrone at 28.

When asked whether or not any of the standards set forth in NUREG-0654 are reflected in NRC regulations, Mr. Petrone replied:

I could not specifically recall, but I believe they are.

Deposition of Frank R. Petrone at 29.

Finally, when asked a question that touches the very core of the issue raised by Contentions EX 15 and 16 -- whether every standard FEMA exercise objective needs to be tested for an exercise to be a "full participation" exercise -- Mr. Petrone answered:

I mentioned earlier that I was not fully familiar with Guidance Memorandum 17, and fully comfortable with all the objectives, so at this point I would have to answer to that question that I really don't know at this point.

Deposition of Frank R. Petrone at 94. Indeed, at the time of his deposition, Mr. Petrone had no opinion on the issues he would later testify on. See Deposition of Frank R. Petrone at 168-69.

In short, Mr. Petrone's deposition testimony is replete with statements that show that, despite his position as Regional Director, beyond the question of state and local participation, he knows little or nothing about anything regarding the issue in this proceeding, namely whether the scope of the Shoreham Exercise comports with NRC requirements for full participation exercises. Yet, in his direct testimony on Contentions EX 15 and 16, filed three months later, Mr. Petrone remarkably purports to render expert opinions on matters that he knew nothing of, or could not recall, during his deposition. This is glaringly illustrated by comparing portions of the direct testimony sponsored in whole or in part by Mr. Petrone with portions of his deposition transcript:

Direct Testimony

pp. 8-12 (detailed discussion of NRC regulatory scheme pertaining to emergency planning, including 10 C.F.R. § 50.47 and Part 50 Appendix E)

pp. 11-15 (detailed discussion of what

Deposition Testimony

pp. 26-27 (could not recall any NRC regulations regarding off-site emergency planning)

p. 35 (defines the term "full

the term "full participation" exercise means in light of NRC regulations)

p. 25, lines 1-5 (practice in New York State to test as many elements of a plan as possible during an initial exercise); p. 44 (describing experience with other NYS full participation exercises)

pp. 28-29 (familiarity with FEMA's standard exercise objectives and how they relate to NRC's Appendix E requirements, and with Guidance Memorandum 17)

pp. 34-35 (familiarity with Guidance Memorandum PR-1 and its interpretation as it bears on the meaning of full participation)

pp. 140-41 (knowledge of regulations

participation" exercise as simply meaning "full participation of state and local government"); p. 37 (cannot recall whether the terms "full participation" and "full scale" are used interchangeably)

p. 42 (could not recall how many full participation exercises held in Region II during his tenure as Regional Director); p. 44 (could not recall whether Region II full participation exercises were adequate to test Emergency Plans); p. 29 (did not know whether the 17 full participation exercises conducted in Region II since 1981 tested every objective set forth in Guidance Memorandum 17); p. 95 (could not answer whether all NUREG-0654 criteria were reflected in objectives for the 17 full participation NYS exercises)

p. 30 (not familiar with Guidance Memorandum 17; does not recall ever having seen it; could not recall whether had ever worked with it); p. 31 (could not recall whether or to what extent Guidance Memorandum 17 was used by FEMA with respect to the formulation of recommendations with regard to off-site exercises); p. 32 (could not discuss whether or how the 36 standard FEMA exercise objectives relate to NRC regulations pertaining to emergency planning; did not recall whether, during his tenure at FEMA, he had occasion to evaluate an exercise by reference to the standard FEMA exercise objectives); p. 34 (could not recall precise meaning of the term "guidance memorandum" or "internal structure of FEMA"); p. 37 (not familiar with revisions to Guidance Memorandum 17)

pp. 35-36 (could not recall documents or provisions other than NUREG-0654 and 44 C.F.R. Part 350 that were used by FEMA concerning the evaluation of exercises of off-site plans)

p. 116 (not familiar with regulations

relating to the ingestion pathway EPZ)

p. 154 (knowledge of recovery/reentry activities tested at the Exercise)

p. 49 (decision not to include siren sounding made by LILCO); p. 144 (it was determined by LILCO and/or FEMA prior to the Exercise not to include ingestion pathway activities)

p. 97 (discussion of ambulances and ambulettes under the LILCO Plan)

concerning the frequency or necessity of testing ingestion pathway activities in a full participation exercise)

pp. 119-20 (did not recall whether the Shoreham Exercise scenario included recovery/reentry)

pp. 82, 84 (did not know what steps were taken to develop objectives for the Shoreham Exercise or who was responsible for development of the scenario; admitted that he had no direct involvement in the development of the objectives or the scenario); p. 99 (did not review any drafts of the objectives or scenario)

pp. 58, 66-69 (did not have any direct involvement in the review of the LILCO Plan); p. 131 (unfamiliar with responsibilities of ambulance/-ambulette companies under the LILCO Plan)

Counsel for Suffolk County has previously objected to LILCO's use of deposition testimony to disqualify witnesses in its Motion to Strike on Contention EX 50. The reason given was that the depositions were taken early on in the proceedings when the knowledge of the witnesses was ostensibly limited "because they had just been retained." Tr. at 4204-05. That objection is inapposite here. Mr. Petrone cannot avail himself of the explanation of unfamiliarity with Shoreham at the time of his deposition. For four years previous to the exercise he had directed the FEMA region which contains Shoreham, and occupied that position thereafter until he removed himself from it, in a dispute over the policy concerning the very exercise he claims to be an expert on. Since then (within weeks after his deposition) he has gone to work as a \$54,000-per-year assistant County Executive for Suffolk County with specific responsibility for coordinating the County's opposition to the plant. In short, he has occupied positions both before and since the Exercise which presumed his expertise. Absent a disability not claimed for him, LILCO and this Board are entitled to assume that that

expertise was on full display in his sworn deposition testimony, and the extent of his expertise can fairly be evaluated on the strength of that testimony.

No amount of tutoring between the time Mr. Petrone's deposition was taken and the time the direct testimony was filed could make Mr. Petrone anything but a synthetic expert on Contentions EX 15 and 16, nor could his recollection have become so "refreshed," given his lack of substantive involvement during his tenure at FEMA. This is what his deposition testimony makes clear, and the Board need not wait for voir dire to find Mr. Petrone incompetent to testify. Nothing in Mr. Petrone's training -- or in his actual experience -- qualifies him as an expert here.

B. Testimony Sponsored by Gregory C. Minor

LILCO moves to disqualify Gregory C. Minor as a witness on Contentions EX 15 and 16 on the grounds that his expertise, as revealed by his resume and by his deposition testimony, relates to the safety and design of nuclear systems, not to broad aspects of emergency planning.

As is set out in detail below, Mr. Minor sponsors testimony ranging broadly over emergency planning policy issues relating but not ever limited to those involved in the concept of a "full participation" exercise. However, the vast majority of the publications and previous testimony listed in Mr. Minor's resume deal with technical subjects relating to nuclear reactor safety. See Resume of Gregory C. Minor at 3-8 (Attachment 1 to Suffolk County Testimony on Contention EX 36). That Mr. Minor is an expert in nuclear engineering rather than emergency planning is confirmed by his deposition testimony:

- Q. Would it be fair to characterize your expertise as a nuclear engineer, in your judgment?
- A. My educational background is electrical engineering and electronics. My experience throughout my . . . 26 years of experience has been almost entirely related to nuclear matters. And, so by experience I would say yes, I'm more of a nuclear engineer than an electrical engineer.

Deposition of Gregory Minor (December 2, 1986) at 46. Indeed, throughout the history of the emergency planning litigation Suffolk County has consistently offered Mr. Minor as an expert on narrow technical issues such as shielding factors (Tr. at 12,320, July 11, 1984) and plant safety during a strike by LILCO workers (Tr. at 15,598, August 29, 1984) rather than on broader planning issues. See also Dep. Tr. of Gregory C. Minor (August 18, 1982) (accident assessment and radiological monitoring); (October 7, 1983) (risk analysis, consequence analysis, radiological monitoring instrumentation); (August 24, 1984) (strike issues: plant safety during cold shut down).

Several statements in his deposition testimony further illustrate Mr. Minor's lack of expertise in the emergency planning area:

Q. Have you ever participated in developing any scenarios for nuclear emergency drills or exercises?

. . . .

A. No, I have not.

Q. Have you worked in some other capacity on the scenarios for nuclear emergency drills or exercises?

A. No. I have reviewed some of them, but I have not participated in the preparation of them.

Q. Have you reviewed scenarios for nuclear emergency drills other than Shoreham drills?

A. I have looked at other plant scenarios. I can't even recall which plants they were

. . . .

Q. Have you ever participated as a player, as someone responding to the postulated emergency --

A. No. I have not.

Q. -- in a nuclear drill?

A. No, I have not.

Q. Have you ever attended a drill or exercise?

A. No, I have not.

. . . .

Q. Do you have any specific degrees, or have you done a significant amount of course work in emergency response, either radiological or non-radiological?

. . . .

A. Well, in terms of course work, because emergency response is what you do in response to a base of knowledge given a particular situation that exists. It's not something you take very extensive course work in. You train yourself for the responsibilities you have in the drill or the exercise or the emergency response, then you use your other training and knowledge to implement that.

Q. Have you ever participated in that sort of training program that you have just described?

A. No, I have not.

Deposition of Gregory C. Minor at 14-18.

Indeed, Mr. Minor testified during his deposition that the only issue he would testify on relating to Contentions EX 15 and 16 would be ingestion pathway. Deposition of Gregory C. Minor at 5, 12. Yet the direct testimony he subsequently sponsors or co-sponsors covers the gamut of issues in Contentions EX 15 and 16, issues that are far broader than his expertise would warrant. See Direct Testimony at pp. 11-15 (how one would assess whether an exercise satisfies NRC's "full participation" requirement); pp. 15-16 (type of performance perceived important in full participation exercise); p. 28 (familiarity with FEMA's standard exercise objectives); pp. 28-29 (relation of standard exercise objectives to full participation requirement); pp. 51-52 (provisions of LILCO Plan pertaining to public education); pp. 72-73 (LILCO Plan provisions pertaining to schools); p. 80 (opinion that Shoreham Exercise was not "full participation" because of inadequacy of school preparedness); pp. 86-88 (inadequacy of demonstrating protection of special facility residents); p. 133 (Exercise did not include a reasonably comprehensive test of LILCO's bus plan). Thus, not only is Mr. Minor not an expert on emergency

exercises for nuclear plants, but he gives testimony for which he was not designated as a witness, on subject areas in which he has never previously demonstrated expertise.

Moreover, Mr. Minor is incompetent to testify even on the narrow issue of ingestion pathway as it relates to the meaning of a "full participation" exercise. Although, given his technical engineering background, he might be competent to judge whether, if protective action recommendations had been made, they were satisfactory (e.g., the efficacy of a dose calculation), he is not qualified to render an expert opinion on the totally distinct policy question of whether ingestion pathway activities must be included in an exercise for it to be "full participation." The Board need not wait for voir dire to find Mr. Minor incompetent to testify here. That his deposition was taken at an early stage in the proceedings is irrelevant given that his background is, always has been, and always will be, technical in nature. Given this technical engineering background, he is simply not qualified to testify on the issues involved in Contentions EX 15 and 16 no matter what tutoring he may have been given between the time his deposition was taken and the testimony filed.

C. Testimony Sponsored by Harold R. Zook

LILCO moves to disqualify Harold R. Zook as a witness on Contentions EX 15 and 16. His self-described background as a "career law enforcement officer," with "expertise in law enforcement training and evaluation of personnel and performance training," see Deposition of Harold R. Zook (January 15, 1987) at 11, 57, does not qualify him to render expert testimony on the emergency planning issues involved in Contentions EX 15 and 16. Moreover, his publications confirm the truly narrow, and totally distinguishable, nature of his expertise. The articles he has written deal with such pure law enforcement topics as "tactical operations, countersniper tactics, recommendations for the use of sniper weapons, forensic science as it relates to sniper activities, utilization of helicopters, and counterterrorism tactics." See Deposition of Harold R. Zook at 56, 57.

Indeed, when asked during his deposition about how Contentions EX 15 and 16 relate to his expertise, he responded: "Only that they might relate to certain law enforcement training functions or training functions and the performance of personnel in positions that could be related to law enforcement." See Deposition of Harold R. Zook at 11-12, 56. The issue in Contentions EX 15 and 16, however, is whether the scope of the Shoreham Exercise makes it a "full participation" exercise within the meaning of NRC regulations. Thus, Mr. Zook's expertise bears no relation whatever to the wide-ranging direct testimony he sponsors. See Direct Testimony at pp. 8-10 (discussion of NRC's regulatory requirements); pp. 30-32 (relation of standard FEMA objectives to scope of full participation exercise); p. 34 (familiarity with FEMA GM PR-1); p. 72 (how LILCO Plan deals with schools); pp. 141-48 (ingestion pathway discussion); pp. 151-52 (regulatory requirements for recovery/reentry).

Mr. Zook's lack of expertise in the area of nuclear emergencies is clear from his deposition testimony. When asked whether he has ever been involved in emergency planning activities, Mr. Zook replied:

Not in a nuclear power plant.

Deposition of Harold R. Zook at 40. One alternative experience he does mention is emergency planning for a possible bleacher accident at a stadium, see Deposition of Harold R. Zook at 41, an endeavor that hardly makes him an expert in emergency planning for a possible radiological emergency. Nor does his experience with exercises relating to emergencies such as floods, tornadoes or aircraft crashes, see Deposition of Harold R. Zook at 45, make him an expert on what the scope of an exercise for a nuclear facility should be.

Mr. Zook also admits an utter lack of familiarity with the regulatory criteria and guidance documents that are the very foundation of off-site emergency planning for nuclear plants. When asked whether he had any knowledge of FEMA's responsibilities

concerning evaluation of off-site emergency response organizations for nuclear power plant emergencies, Mr. Zook replied:

I had no concept of that until I started reading some of these documents and saw that FEMA was involved in it. Prior to that I had no knowledge of it.

Deposition of Harold R. Zook at 60. When asked whether he was familiar with NUREG-0654, he replied that he was not. Deposition of Harold R. Zook at 58. By his own admission, his only familiarity with FEMA -- prior to preparing for the testimony in the Shoreham proceeding -- was gained when he attended a seminar at a FEMA facility in Gaithersburg dealing with law enforcement officers' response to natural disasters. Deposition of Harold R. Zook at 59. When questioned about FEMA Guidance Memoranda 17 and EX-3 he said he was not familiar with them. Deposition of Harold R. Zook at 60, 61.

Indeed, when asked his opinion regarding the issues raised in Contentions EX 15 and 16, he could not even recall what those issues were:

Q. Mr. Zook, do you have an opinion about the issues raised in Contentions 15 and 16?

A. Could I see the contentions?

Deposition of Harold R. Zook at 71. Later, he mistakenly confused these issues with the sampling issues involved in Contention EX 21. Deposition of Harold R. Zook at 71, 113. When asked the question whether it was his understanding that all items listed in Contentions EX 15 and 16 needed to be tested in order for an exercise to be "full participation," he answered:

I would have to see what those items are.

Deposition of Harold R. Zook at 110.

Finally, when asked whether he knew what a "full participation" exercise was, his circular answer was:

A full participation exercise, as I would define it, would be an exercise of sufficient scope where conclusions could be made as to its being properly conducted and whether the standards of public health and safety had been maintained.

Mr. Zook did not know the NRC definition of the term "full participation," and conceded that his opinion on the meaning of that term was limited at that point to his own understanding. Deposition of Harold R. Zook at 110. Mr. Zook's personal opinion is meaningless of course, and not admissible as expert testimony. Whatever "education" he may have received between the taking of his deposition and the filing of the direct testimony does not make his subsequent opinion any more expert.

Mr. Zook may be an expert on law enforcement or training matters. However, he is not an expert on any aspect of radiological emergency planning, much less that of the meaning of the term "full participation" exercise on its applicability to the facts of the Shoreham Exercise. His testimony should be stricken.

D. Testimony Sponsored By William Lee Colwell

LILCO also moves to disqualify William Lee Colwell as a witness on Contentions EX 15 and 16. Despite his prolific experience in law enforcement, and his august position as Associate Director of the FBI, this expertise does not qualify Dr. Colwell to render an expert opinion on whether the scope of the Shoreham Exercise was adequate to satisfy NRC requirements for a "full participation" exercise. When asked during his deposition which disciplines he considered himself to be expert in, he replied:

. . . I consider my knowledge pretty broad in the area of management. I think I have a broad experience in making assessments and evaluations of programs. I consider that I have a broad knowledge of the so-called public administration area and the criminal justice system.

Deposition of William Lee Colwell (December 30, 1986) at 64.

Dr. Colwell concedes that he has "no idea what [FEMA's] standards are," Deposition of William Lee Colwell at 97, and that he has never been involved in emergency planning for nuclear power plants:

Q. Have you ever planned for an emergency in a nuclear power plant?

A. No.

Q. Has anyone whom you supervised been involved with -- has anyone which you supervised planned for an emergency of a nuclear power plant?

A. What kind of emergency?

Q. Well, let's take a nuclear emergency, radiological emergency.

A. What kind of nuclear emergency?

Q. Let's assume that there was a problem at the nuclear plant in which they were concerned about a possible breach of the containment. Have you ever been involved with planning -- has anyone whom you supervised planned for that kind of an emergency?

A. Probably. I don't recall specifically, but maybe.

Deposition of William Lee Colwell at 65. It is also obvious from his deposition testimony that he is not familiar with NRC regulations pertaining to emergency planning:

Q. Have you reviewed any of the regulations referenced in Contention 15?

A. I have not. Are you speaking of the Code of Federal Regulations?

Q. Have you ever reviewed 10 C.F.R. Section 50.47?

. . . .

A. I may have in the past. I doubt it. I don't know.

Deposition of William Lee Colwell at 92-93.

Dr. Colwell also confessed an unfamiliarity with regulatory documents that are the foundation of any offsite emergency response organization or FEMA exercise:

Q. Are you familiar with NUREG-0654, that's a FEMA document?

A. Not that I am aware of.

Q. Are you familiar with FEMA Guidance Memorandum 17?

A. No.

. . . .

Q. Do you expect that you are going to review FEMA Guidance Memorandum 17 prior to preparing your testimony?

A. I can't answer that, I don't know what is contained in it. I would rely on counsel to, in part, to point me to pertinent references.

Deposition of William Lee Colwell at 79-81.

Further, when asked his view regarding the scope of the Shoreham Exercise, he responded "[w]hat do you mean by scope?" Deposition of William Lee Colwell at 71. When asked to state his opinion on an issue that lies at the heart of Contentions EX 15 and 16 -- whether every aspect of an off-site emergency response organization must be tested during a full participation exercise -- he stated:

I don't believe that I am qualified at this point to say that

Deposition of William Lee Colwell at 95. The same conclusion applies at this point. Whether information may have been provided to Dr. Colwell between the taking of his deposition and the filing of the direct testimony, it does not make him an expert qualified to enter judgments or judgment as an expert witness on the rarefied issue of the meaning of the concept of a "full participation" exercise under NRC regulations.

E. The Proffered Witnesses Do Not Satisfy the
Commission's Tests for Qualification as
Experts in Their Proposed Areas of Testimony

Each of the witnesses referred to above demonstrated, in depositions taken only a few weeks before the filing of their testimony on Contentions EX 15 and 16, profound ignorance of the structure of the Commission's regulations governing the interpretation of the specialized concept of a "full participation" exercise. Each of them demonstrated comparable ignorance of the contents of the FEMA documents and practice which complement and add meaning to the NRC's regulations. Indeed, none other than

Frank Petrone had even had any previous involvement with emergency planning as a discipline. None of them had any involvement with the Shoreham Exercise except Mr. Petrone, who at least in his deposition disclaimed any involvement with its development and execution.

Contentions EX 15 and 16 involve, in addition to details of the Shoreham Exercise, the interpretation of the relatively esoteric term "full participation" exercise. This inquiry implicates complex issues involving years of interagency practice and fine questions of interpretation of two agencies' documents of varying levels of regulatory dignity. Knowledge of the derivation, application and interpretation of the term as reflected in the exercises conducted since 1980 and the documents structuring them is the relevant body of information on this issue. None of these witnesses, each by his own admission on deposition, possessed any knowledge of these matters at the time of his deposition, scant weeks before filing this testimony.

The Commission's regulations themselves do not specify a standard regarding the degree of expertness required to qualify a person to present opinion testimony. Commission decisional law on the issue of qualification of expert witnesses, however, adopts the traditional test of expertness, that set out in Federal Rule of Evidence 702:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise.

See Duke Power Co. (William B. McGuire Nuclear Station, Units 1 and 2), ALAB-669, 15 NRC 453 (1982). That decision illustrates the importance of the applicability of a proffered witness' knowledge to the issues at hand in a case. There, the Appeal Board sustained the Licensing Board's exclusion of the testimony of one Jesse L. Riley, a chemist with a master's degree, on matters involving the ability of a containment structure to resist a hydrogen explosion. Mr. Riley, through a chemist with an advanced degree, did

not claim to being a structural engineer, nor to have had extensive training in, or professional involvement with, relevant disciplines and theories of combustion, flame propagation and explosives. 15 NRC at 475. Counsel for the party proffering Mr. Riley as an expert premised that proffer, as stated in its brief to the Appeal Board, on Mr. Riley's "asserted ability to 'understand and evaluate' matters of a technical nature due to his background of 'academic and practical training' and 'years of reading AEC and NRC documents.'" Id.

The Appeal Board found that Mr. Riley's general background, including unquestioned scientific competence in areas not directly relating to his proposed testimony, was not enough: that notwithstanding his acknowledged areas of scientific endeavor and competence, he did not possess any "special 'knowledge, skill, experience, training or education' germane to the matters which his proposed testimony addressed." Id. (Emphasis supplied). It also noted the strength of the Licensing Board's own background in assessing its evident conclusion that Mr. Riley's testimony would not satisfy the test of Federal Rule of Evidence 702 -- that the testimony be of material assistance to it as trier of fact^{2/} -- and held that the Licensing Board had not abused its discretion in refusing to allow Mr. Riley to present opinion testimony on containment strength and hydrogen generation and control.

^{2/} At McGuire, the expertise noted by the Appeal Board was based on the Licensing Board's educational background: each of the Board members, including the Chairman, possessed a doctorate in a scientific discipline (though the Appeal Board decision makes no assertion that these degrees encompassed disciplines germane to the issues covered by Mr. Riley's proposed testimony). 15 NRC at 475 n. 48. In the instance case, at least equivalent Board expertise in the relevant discipline -- emergency planning -- exists, education totally aside. Previous to this proceeding, Judge Shon has participated in two of the most substantial emergency planning proceedings in the NRC's history (Indian Point and Shoreham); Judge Paris has participated in the Indian Point proceeding; and Judge Frye has presided over another extensive emergency planning proceeding, that for the Zimmer plant.

The rationale of the McGuire decision has been recently applied and confirmed by the Appeal Board in proceedings involving Philadelphia Electric Company's Limerick plant. Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681 (1985). There, the Licensing Board had permitted some selected aspects, and excluded others, of the testimony of one John Walsh, a meteorologist, on the consequences of a natural gas pipeline rupture and explosion, based on its evaluation of his expertise. The Appeal Board's review of the Licensing Board's decision on admission of Mr. Walsh's testimony notes the following factors: (1) that the discipline of meteorology includes study of multiple phenomena underlying weather and atmospheric behavior, including atmospheric dispersion; (2) that Mr. Walsh had taken graduate level courses in meteorology, physics and mathematics; (3) that Mr. Walsh had worked as a professional meteorologist for two decades and had done research in atmospheric dispersion; (4) that he had performed accident analyses previously involving over a dozen nuclear power plants, including analyses of natural gas or petroleum pipelines near these plants; and (5) that the scope Mr. Walsh's testimony relied upon by the Board was limited to matters relating to "formation and dispersion of a flammable mixture within the atmosphere -- matters clearly within [Mr.] Walsh's expertise." 22 NRC at 732.^{3/}

Thus ALAB-819 reinforces the proposition that it is both the Board's prerogative and duty to examine the qualifications of witnesses and to winnow out proffers of testimony in areas where expertise does not exist. Indeed, in the consolidated radon-emissions cases the Appeal Board retroactively excluded, sua sponte, reliance on testimony previously admitted by a Licensing Board, on the basis of its review of the

^{3/} The Board had earlier determined that Mr. Walsh was not qualified to testify on certain other areas outside the legitimate scope of his expertise, for instance, whether the pipeline's pumps would shut down in the event of a pipeline accident. 22 NRC at 733.

qualifications of the sponsor of that testimony. Philadelphia Electric Co., et al. (Peach Bottom Atomic Power Station, Units 2 and 3) and consolidated dockets, ALAB-701, 16 NRC 1517, 1523-25 (1982).

The concept of expertness thus implies a pre-existing degree of competence in a relevant specialized area at the time a project or inquiry is undertaken. However, none of the witnesses whose testimony is sought to be excluded here demonstrated, in depositions taken shortly before the filing of their testimony, any expertise on the bases recognized by Federal Rule of Evidence 702 -- knowledge, skill, expertise, training or education -- sufficient to qualify him as an expert on the discipline of emergency planning for nuclear plants, much less on the detailed and arcane subset of that field relevant to Contentions EX 15 and 16 and dealt with in their testimony. Indeed, in their depositions they for the most part expressly disclaimed any expertise in the area. Thus at that time there was no possible basis for their knowledge to be of value to the trier of fact, as required by Rule 702.

If they have by now become "expert" it must be by the process of having supervised and directed the production of a piece of testimony they are now sponsoring. LILCO submits that preparation of a given piece of testimony is not the process of "education," "training" or "experience" contemplated as the basis for qualification as an expert to sponsor that testimony, nor does it confer the "knowledge" or "skill" contemplated by the concept of expertness.

The basis for disqualification here is thus significantly different from that asserted in previous motions to strike, which have been premised primarily on the unfamiliarity of witnesses with the specifics of the Shoreham case. There, the Board has typically accepted the argument that the recent retention of persons acknowledged to possess substantial knowledge about a general subject-matter area could excuse their lack of specific knowledge of Shoreham-related matters at the time of deposition. In

the present situation, by contrast, the witnesses (with the exception of Frank Petrone) disclaimed not only knowledge of Shoreham specifically but knowledge of the subject matter of the contention -- the content of NRC and FEMA emergency planning documents and the history of their interpretation in the conduct of nuclear emergency preparedness exercises. And Mr. Petrone, though in a position to be knowledgeable, is not in fact.

The deposition testimony is sufficiently clear on these issues that voir dire testimony is not necessary, since it must either cast doubt on the accuracy of answers given at one time or another, or illuminate the synthetic nature of the knowledge recently acquired by these witnesses.

Nor are Intervenor's prejudiced by the exclusion of the witnesses whose testimony is proposed to be stricken. In all significant areas of their testimony on Contentions EX 15 and 16, the testimony is also sponsored by witnesses whose credentials on this testimony LILCO does not challenge. Thus Intervenor's still have a vehicle, and a legitimate one, to present their views. The testimony of the witnesses sought to be struck is simply surplusage.

F. Conclusion

For the reasons stated above, LILCO respectfully requests that the Board disqualify Frank R. Petrone, Gregory C. Minor, Harold R. Zook and William Lee Colwell as witnesses on Contentions EX 15 and 16, and consequently (1) strike those portions of the Direct Testimony sponsored solely by them and (2) remove them from any panel where they co-sponsor testimony.

II. PORTIONS OF THE TESTIMONY GO BEYOND THE SCOPE OF CONTENTIONS EX 15 AND 16

According to the Board's December 11, 1986 Memorandum and Order (Ruling on FEMA's Motion for Reconsideration of and Intervenor's Objections to October 3, 1986

Prehearing Conference Order), "[t]he issues litigable under EX 15 and EX 16 are limited to whether the scope of the exercise meets the Commission's regulatory requirements for full participation exercises." Memorandum and Order at 14 (emphasis supplied). See also Prehearing Conference Order (Ruling on Contentions and Establishing Discovery Schedule), at 11-12 (October 3, 1986); ALAB-861, Memorandum and Order at 17-18 (March 2, 1987).

LILCO moves to strike certain portions of Suffolk County's testimony on the ground that it goes beyond the scope of Contentions EX 15 and 16, and is therefore irrelevant, for the following reasons: (1) some of the testimony deals with whether or not emergency functions were satisfactorily demonstrated at the Exercise, rather than with the "scope" issue of whether or not they were tested during the Exercise; (2) some of the testimony addresses the merits of FEMA's review of the Exercise rather than whether a given function was tested; (3) portions of the testimony refer to a FEMA Guidance Memorandum that post-dates the Shoreham Exercise; (4) some of the testimony references a Contention that was not admitted; (5) some of the testimony is duplicative of Intervenor's testimony on Contention EX 21; and (6) some of the testimony amounts to a generic challenge to FEMA practice.

A. Exercise Objectives Tested Versus Objectives Demonstrated

In its December 11, 1986 Order, the Board framed the issue in Contentions EX 15 and 16 as follows: "If [the Exercise] is found not to comply with the Commission's regulations concerning the scope of a full participation exercise, it may constitute '... a deficiency which precludes a finding of reasonable assurance that protective measures can and will be taken, i.e., a fundamental flaw in the plan.'" Memorandum and Order at 13, quoting CLI-86-11, 23 NRC 577, 581 (1986). Accordingly, the sole issue to have been addressed in this testimony is whether the scope of the Shoreham Exercise -- the number and type of exercise objectives tested -- meets the Commission's requirement

for full participation exercises. As FEMA witnesses have repeatedly pointed out, the issue here is not whether the Exercise objectives were satisfactorily demonstrated during the Shoreham Exercise. See Deposition of Roger B. Kowieski, Thomas Baldwin and Joseph H. Keller, January 29, 1987, at 237-40; Direct Testimony of Thomas E. Baldwin, Joseph H. Keller and Roger B. Kowieski concerning Emergency Planning Exercise (March 20, 1987) at 94. In the following portions of their Direct Testimony, Intervenor ignores this distinction, and LILCO thus moves that they be stricken:

- p. 30, lines 7-20 through p. 31, lines 1-3 (mere inclusion of all standard exercise objectives would not constitute a full participation exercise)
- p. 32, lines 4-23 (discusses "satisfaction" of objectives; mere fact that FEMA includes exercise objectives does not mean that the full participation criteria are satisfied).
- B. Some of the Testimony Addresses the Merits of FEMA's Review, and Not Whether a Given Function Was Tested

Again, the issue in this proceeding is whether the scope of the Shoreham Exercise meets NRC's requirements for "full participation" exercises. It is not whether FEMA properly evaluated the Exercise. Accordingly, the following numerous passages dealing with the merits of FEMA's review should be stricken as irrelevant:

- p. 27, lines 15-17 starting with "Furthermore" (FEMA only observed and evaluated a limited number of persons mobilized)
- p. 40, lines 8-16 (FEMA did not evaluate the operability of sirens or WALK Radio's personnel or equipment)
- p. 46, lines 1-8 (FEMA evaluation never addressed public notification system due to omissions in Shoreham Exercise)
- p. 50, lines 7-9, the phrase "and FEMA's inability to evaluate important and observable portions of LILCO's Plan"
- p. 51, lines 2-12 (FEMA did not evaluate adequacy of public education materials)
- p. 68, lines 4-10 ending with "children" (FEMA did not conform to normal practice in evaluating schools at Shoreham)

- p. 69, line 14 starting with "FEMA" through p. 70, lines 1-3 (FEMA acquiesced in limited school demonstration)
- p. 75, lines 18-24 through p. 76, lines 1-7 (FEMA evaluator never observed any actions by bus drivers)
- p. 76, n. 33 (FEMA's conclusion regarding schools is unsupportable)
- p. 77, lines 8-16 through p. 78, lines 1-3 (criticizes FEMA evaluation of bus drivers)
- p. 79, lines 14-16 ending with "limited" (FEMA did not evaluate schools except the Shoreham-Wading River School District)
- p. 80, lines 7-21 starting with "Finally" (FEMA's evaluation of school preparedness is too limited)
- p. 82, lines 4-17 (FEMA's evaluation of school officials is too limited)
- p. 83, lines 1-10 (FEMA departed from normal procedure with regard to evaluating school officials)
- p. 84, lines 11-12, the phrase "and observed and thoroughly evaluated (which they apparently were not)" (relates to school demonstrations)
- p. 87, lines 7-11 (FEMA did not evaluate LERO's ability to communicate with special facilities inside or outside the EPZ)
- p. 87, lines 16-17, the phrase "FEMA evaluated only one ambulance and one ambulette during the entire Exercise"
- p. 100, lines 12-19, starting with "FEMA" (FEMA did not evaluate patient evacuation procedures)
- p. 102, lines 12-22 (FEMA's evaluation of hospital procedures was deficient)
- p. 103, lines 11-18 (FEMA did not observe availability of special facility relocation centers)
- p. 108, lines 13-18 starting with "Even" through p. 109 and n. 49 (FEMA did not verify availability of emergency vehicles)
- p. 108, n. 48 (FEMA did not evaluate availability of reception facilities or communications between ambulances and medical facilities)
- p. 112, lines 12-23 (FEMA evaluation of ambulance activities was deficient)

- p. 113, lines 1-9 (FEMA's limited observations do not support its conclusions)
- p. 114, lines 12-23, beginning with "Further" (FEMA's evaluation is insufficient)
- p. 117, lines 11-16, beginning with "FEMA found" (FEMA does not specify how Coast Guard objective was satisfied)
- p. 119, n. 53 (Degree of FEMA evaluation of LERO/Coast Guard communication is not clear)
- p. 120, n. 54 (FEMA had considered closer evaluation of Coast Guard performance)
- p. 121 through p. 122, lines 1-6 (FEMA failed to evaluate Coast Guard performance in first-hand manner)
- p. 137, lines 1-9 ending with "No. 143" and n. 62 (FEMA's bus evaluation was deficient)
- p. 138, lines 2-9 ending with "Emergency" (FEMA's evaluation of bus activity did not provide adequate basis for conclusions)
- p. 138, lines 17-23 through p. 139, lines 1-3 (FEMA's bus evaluation did not conform to its evaluation at other plants)
- p. 147, lines 5-14 through p. 148, lines 1-3 (FEMA did not observe ingestion pathway PAR's)
- p. 154, lines 10-14 (FEMA did not review recovery/reentry activities)

C. References To FEMA Guidance Memoranda
Post-dating the Exercise Are Irrelevant

FEMA Guidance Memorandum EV-2, "Protective Actions for School Children," was issued on November 13, 1986, nine months after the date of the Shoreham Exercise. It did not apply and could not have to the Exercise. The following portions of testimony referring to this document should thus be stricken as irrelevant to this proceeding:

p. 66, n. 27, p. 67, lines 9-29

Attachment 6.

D. References to Contention EX 20 Should Be Stricken

In its October 3, 1986 Prehearing Conference Order, the Board denied the admission of Contention EX 20, stating that:

This contention, in essence, states that FEMA 'did not review' the features and participants which the previous contentions complained were not exercised. We reject it as being adequately covered by Contentions EX 15 and 16, which we are admitting.

Memorandum and Order at 13.

Accordingly, the following portions of testimony referencing Contention EX 20 should be stricken as going beyond the scope of the admitted contentions:

p. 89, lines 5-8, beginning with "In addition"

p. 89, lines 10-11, the phrase "except for those portions of Contention EX 20 which are found in Attachment 5 (sic) to this testimony"

p. 125, lines 1-4.

E. Some of the Testimony Should Be Stricken as Duplicative of Intervenors' Testimony on Contention EX 21

At numerous places, Intervenors' testimony strays beyond the issue raised by Contentions EX 15 and 16 -- whether given objectives were tested -- and argues, instead, that FEMA could not have reached certain conclusions since it evaluated too small samples to draw meaningful conclusions. This testimony duplicates testimony presented by other Intervenor witnesses on Contention EX 21. This Board has previously stated that it intends to hear evidence only once on each admitted factual issue. See Prehearing Conference Order (Ruling on Contentions and Establishing Discovery Schedule), p. 30 (October 3, 1986). Accordingly, the following passages should be stricken as irrelevant and duplicative:

- p. 74, line 4 through p. 78, line 13 (demonstration of early dismissal from schools [Contention EX 21.C])
- p. 87, lines 12-20 (sample size of ambulance/ambulettes for evacuation of the mobility-impaired population [Contention EX 21.D])
- p. 105, line 18 through p. 108, line 3 (samples used to draw conclusions about ability to evacuate mobility-impaired [Contention EX 21.D])
- p. 110, line 3 through p. 111, line 16 (FEMA observation of ambulances/ambulettes for evacuation of mobility-impaired [Contention EX 21.D])
- p. 133, line 2 through p. 135, line 32 (sample size of buses for evacuation of EPZ residents without cars [Contention EX 21.B]).

F. The Structure of the LERO Organization

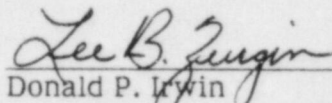
At several places, Intervenors seek to revisit issues involving the organizational structure of LERO. As LILCO has previously argued in its motion to strike Intervenors' testimony on Contention EX 50, Motion at 27-31, the organizational structure of LERO has been repeatedly challenged and found to be appropriate and acceptable. The Board granted this motion to strike to the extent that the testimony on organizational structure was not directly tied to the exercise. Tr. 4332-33.

In their testimony on Contentions EX 15 and 16, Intervenors rely on organizational theory to argue (1) that since LERC workers have little or no "real life" emergency experience, the Exercise needed to be as "realistic as possible" (pp. 17-18); (2) that LERO's structure requires an exercise to include "all key players and potential interactions" (pp. 18-21); and (3) that it is important to include all key facilities and potential sources of problems in a community in an exercise (pp. 21-23, 83). None of these complaints relates to Exercise activities, instead, they are broad brush attacks on the LERO organization, on the way FEMA conducts exercises and on the NRC regulations that require them. Accordingly, the following passages should be stricken:

p. 17, line 17 through p. 23, line 17

p. 83, line 11 through p. 84, line 3.

Respectfully submitted,

A handwritten signature in cursive script, reading "Lee B. Zeugin", is written over a horizontal line.

Donald P. Irwin
Lee B. Zeugin
Marcia R. Gelman

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DATED: May 8, 1987

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

----- -x
In the Matter of: :
LONG ISLAND LIGHTING COMPANY : Docket No. 50-322-OL-5
(Shoreham Nuclear Power Station, :
Unit 1) :
----- -x

DEPOSITION OF FRANK PETRONE

New York, New York

Monday, December 15, 1986

ACE-FEDERAL REPORTERS, INC.

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1 A. Yes.

2 Q. When did you receive the appointment?

3 A. I think the actual appointment came
4 sometime in January '82.

5 Q. That was to the position of regional
6 director, Region II, is that correct?

7 A. Yes.

8 Q. You held that position for how long?

9 A. Approximately four and a half years,
10 a little bit more than four years.

11 Q. Until February of this year, 1986?

12 A. April.

13 Q. During your tenure as regional
14 director of Region II of FEMA, what were the
15 responsibilities of FEMA with respect to off-site
16 radiological planning?

17 A. To the best of my knowledge, the
18 responsibilities were that of working with state
19 and local government with respect to off-site
20 emergency planning around fixed nuclear facilities.

21 Q. What were your responsibilities in
22 particular as regional director with respect to
23 these FEMA activities?

24 A. My responsibility was to oversee the
25 various operations that dealt specifically with

1 the programs.

2 Q. To whom did you report?

3 A. I reported to the director of the
4 agency.

5 Q. Where is the director's office
6 located?

7 A. Washington, D.C.

8 Q. Were there any documents that you
9 reviewed or which were shown to you at any time
10 which delineated the authority of Region II with
11 respect to FEMA's activities for off-site planning?

12 A. I don't recall at this point.

13 Q. Did you have any discussions with
14 anyone during your tenure at FEMA concerning the
15 authority of Region II with respect to off-site
16 planning?

17 MS. LETSCHE: Could I have a
18 clarification? Are you talking about off-site
19 planning for fixed nuclear facilities?

20 MR. DAVIES: Yes.

21 A. I would assume yes. Specifically I
22 could not tell you.

23 Q. You don't recall any in particular?

24 A. No, I don't.

25 Q. Do you recall the substance of the

1 Q. What was the basis upon which the
2 regional office formulated a recommendation?

3 A. Following a long technical review and
4 recommendations submitted through the RAC
5 Committee.

6 Q. During the time you were with FEMA,
7 were there criteria by which you performed your
8 review and formulated a recommendation?

9 A. Very difficult to recall because the
10 criteria kept changing.

11 Q. Do you know of any documents which
12 set forth any criteria used for that purpose?

13 A. To the best of my knowledge, I can't
14 recall.

15 Q. Did the criteria change throughout
16 the period of time that you were with FEMA?

17 A. There were changing criteria, correct,
18 but I just could not recall when and how and what
19 did change.

20 Q. Can you recall the name of any
21 document which would contain or which did contain
22 during this period of time criteria for the review
23 and evaluation of off-site plans?

24 A. The only document that would come to
25 mind is that of the document containing FEMA's 350

1 process and that of 0654.

2 Q. When you refer to the 350 process,
3 are you referring to provisions of the Code of
4 Federal Regulations?

5 A. I cannot recall what provisions I am
6 referring to other than the 350 process in and of
7 itself.

8 Q. When you referred to 0654, are you
9 referring to that document which is known as NUREG
10 0654 REP 1?

11 A. I believe so.

12 Q. Was that a document you used in the
13 course of your activities as regional director?

14 A. I know it was a document that my
15 staff used.

16 Q. Does that document contain criteria
17 by which off-site plans are evaluated?

18 A. To the best of my knowledge, it does.

19 Q. Other than that and the provisions of
20 section 350, are you aware of any other documents
21 which contain criteria for the evaluation of
22 off-site plans?

23 A. Not to the best of my knowledge and
24 my recall at this point.

25 Q. Do you know when NUREG 0654 first

1 came into existence?

2 A. I could not recall that.

3 Q. Do you know what it is? Do you know
4 how it came into existence?

5 A. Not specifically, no, I don't.

6 Q. Do you know whether or not that
7 document has a title other than NUREG 0654 FEMA
8 REP 1?

9 A. No, I don't.

10 Q. Have you ever seen that document?

11 A. I believe I have seen it, yes.

12 Q. Do you know whether or not the
13 document contains standards which apply to off-site
14 planning?

15 A. To the best of my knowledge, yes.

16 Q. Are you familiar with any regulations
17 promulgated by the NRC with respect to off-site
18 planning?

19 A. I could not recall at this point.

20 Q. During your time as regional director,
21 Region II of FEMA, were you familiar with
22 regulations of the NRC concerning off-site
23 planning?

24 A. I would say I was familiar to the
25 extent that my staff was very familiar with it.

1 Q. Were the activities of Region II with
2 respect to the evaluation of off-site planning
3 activities largely conducted by staff members
4 rather than by yourself as regional director?

5 A. The ongoing, every-day activities
6 were conducted by staff members.

7 Q. What were your responsibilities as
8 regional director with respect to those activities?

9 A. I would oversee those activities.

10 Q. Did you yourself ever engage in an
11 evaluation of an off-site plan by reference to any
12 of the standards in NUREG 0654?

13 A. I recall being involved in
14 evaluations of plans.

15 Q. What involvement do you recall?

16 A. The basic reports that would come
17 from my staff, their extensive reviews and their
18 recommendations.

19 Q. Do you know whether or not any of the
20 standards set forth in NUREG 0654 are reflected in
21 regulations promulgated by the NRC?

22 A. Could you repeat that, please.

23 (Record read.)

24 A. I could not specifically recall, but
25 I believe they are.

1 Q. Are you familiar with a document
2 known as Guidance Memorandum 17?

3 A. No, I am not.

4 MR. DAVIES: I ask the reporter to
5 mark as Exhibit A a multi-page document bearing on
6 the front page the heading "Guidance Memorandum 17,
7 Revision 1, Technological Standards."

8 (Petrone Exhibit A marked for
9 identification, as of this date.)

10 Q. I ask you to review that document and
11 tell me when you have done so.

12 (Witness complies with request.)

13 Q. Have you reviewed that document?

14 A. Briefly.

15 Q. Have you ever seen it before?

16 A. I don't recall seeing it specifically,
17 no.

18 Q. During the course of your employment
19 as regional director, Region II, did you ever have
20 occasion to work with this document?

21 A. I could not recall whether or not I
22 worked with the document.

23 Q. Do you know what it is?

24 A. Basically the document sets forth
25 some guidance with regard to pre-exercise and

1 post-exercise activities.

2 Q. Do you know whether or not this
3 document plays any role in the review and
4 evaluation by FEMA of off-site plans?

5 A. I believe it is relative to the 350
6 process.

7 Q. Do you know what significance it has
8 with respect to that process?

9 A. I believe it sets time lines. As I
10 am reading it, I believe it sets time lines in
11 terms of the exercise.

12 Q. Is this document used by FEMA with
13 respect to the evaluation or formulation of
14 recommendations with respect to exercises
15 conducted for off-site plans?

16 A. I can't recall at this point. I
17 haven't had a chance to extensively review it.

18 Q. Based upon your experience as
19 regional director of FEMA, Region II, can you
20 answer that question?

21 A. I would say it plays a role. To what
22 extent, I cannot recall.

23 Q. Referring to attachment 1 which
24 follows page 5 of Exhibit A, do you know what the
25 36 items set forth under attachment 1 are?

1 A. To the best of my knowledge, they
2 represent the various objectives and elements that
3 are to be evaluated in an exercise of state and
4 local government.

5 Q. Do you know who formulated those
6 objectives?

7 A. No, I can't recall that.

8 Q. Do you know how those objectives
9 relate to the standards set forth in NUREG 0654?

10 A. I believe they correspond to NUREG
11 0654.

12 Q. Do you know how those objectives
13 relate, if at all, to any of the regulations of
14 the NRC concerning planning and the exercise?

15 A. I could not tell you at this point
16 how they relate individually.

17 Q. Did you have any occasion during your
18 employment with FEMA to review, evaluate or make
19 recommendations with respect to an exercise by
20 reference to any of the objectives set forth in
21 attachment 1 of Exhibit A?

22 A. I don't recall.

23 Q. You don't recall ever having done
24 that?

25 A. I don't recall. It has been a long

1 A. It is a term I think that was
2 utilized for just about every program in terms of
3 guidance memorandum, namely guidance, the key, I
4 think.

5 Q. Is guidance memorandum a term that is
6 applied to certain kinds of communications within
7 FEMA?

8 A. I can't recall the internal structure
9 of FEMA at this point.

10 Q. Do you know whether or not there are
11 particular subject areas to which the use of the
12 term "guidance memorandum" is reserved?

13 A. Not to the best of my knowledge.

14 Q. Do you know whether or not there are
15 particular levels of policy to which the term "guidance
16 memorandum" is reserved?

17 A. To the best of my knowledge, I don't
18 believe it is reserved, but again, I don't really
19 recall.

20 Q. Referring to the two pages that
21 follow that memorandum, have you seen those before?

22 A. I don't recall.

23 MR. DAVIES: The first of those pages
24 is a document which bears a heading "Joint
25 Exercise Procedures." The second bears a heading

1 which I think is "Milestones For Exercise,
2 Information and Critique."

3 Q. Does that seem correct to you?

4 A. Your eyes are better than mine. I
5 can't make this out.

6 Q. Do you have any recollection of
7 having seen this document before?

8 A. No, I don't.

9 Q. Other than this document or NUREG
10 0654 or part 350, are you aware of any other
11 documents which were promulgated by, used by or
12 referred to by FEMA or any persons within FEMA
13 concerning the evaluation of planning or of
14 exercises of plans?

15 A. I couldn't recall at this point.

16 Q. Are you familiar with the term "full
17 participation exercise"?

18 A. Yes.

19 Q. What does that term mean?

20 A. To the best of my knowledge and
21 recollection, it means a full participation of
22 state and local government.

23 Q. In what, sir?

24 A. In the planning and exercising of
25 fixed facilities, nuclear facilities.

1 Q. Are you aware of any documents which
2 set forth criteria by which full participation may
3 be measured?

4 A. At this point in time I can only
5 recall the 350 process as you have stated it,
6 presented it here.

7 Q. By "here" you are referring to
8 Guidance Memorandum 17, Exhibit A?

9 A. Yes.

10 Q. Are you familiar with the term
11 "full-scale exercise"?

12 A. At this point in time somewhat, yes.

13 Q. What does that term mean?

14 A. To the best of my recollection, it
15 means the full participation of state and local
16 government in an exercise that measures the
17 various objectives and elements as delineated by
18 the 350 process in NUREG 0654.

19 Q. Do you use the terms "full-scale" and
20 "full participation" interchangeably with respect
21 to exercises of off-site plans?

22 A. Do I use them interchangeably, is
23 that the question?

24 Q. Yes.

25 A. At this point I would use them, at

1 this point in time I would use them
2 interchangeably.

3 Q. During your time with FEMA did you
4 use those terms interchangeably?

5 A. I might have, but I really can't
6 recall specifically.

7 Q. Do you know whether other
8 representatives of FEMA use those terms
9 interchangeably?

10 A. I can't recall.

11 Q. Are you aware of any amendments or
12 revisions or drafts of changes to Guidance Memo 17,
13 Exhibit A?

14 A. No, I am not, to the best of my
15 recollection.

16 MR. DAVIES: I ask the reporter to
17 mark as Exhibit B a multi-page document described
18 as a draft bearing a date of 8/15/86 with the
19 heading "Guidance Memorandum EX-3."

20 (Petrone Exhibit B marked for
21 identification, as of this date.)

22 Q. Have you had an opportunity to review
23 Exhibit B?

24 A. Yes.

25 Q. Have you seen this document before?

1 Q. The one in Tom's River is Oyster
2 Creek?

3 A. To the best of my knowledge, yes.

4 Q. What was the one in Oswego?

5 A. I don't recall the exact name at this
6 point.

7 Q. Those plants all had full operating
8 licenses when you joined FEMA?

9 A. I believe they did, yes, to the best
10 of my knowledge.

11 Q. During the time that you were
12 employed as regional director, Region II FEMA,
13 were there any full-scale exercises held within
14 your region?

15 A. Yes, there were.

16 Q. Do you know approximately how many?

17 A. I can't recall how many. I would say
18 several.

19 MR. DAVIES: I ask the reporter to
20 mark as Exhibit C a two-page document promulgated
21 by the Federal Emergency Management Agency
22 entitled "Fact Sheet" and dated 2/10/86.

23 (Petrone Exhibit C marked for
24 identification, as of this date.)

25 Q. I will ask you to look in particular

1 MS. LETSCHE: Note my objection again
2 to that question. If you are going to continue to
3 ask about other exercises, I would like to have a
4 continuing objection to anything other than
5 questions going to the February 13, 1986 exercise
6 of the LILCO plan for the Shoreham plant.

7 Q. The question is how many of the 17
8 involved participation by state and local
9 governments?

10 A. To the best of my knowledge, all.

11 Q. Did these exercises involve plans
12 which had been reviewed against the criteria of
13 NUREG 0654?

14 A. To the best of my knowledge, I believe
15 so.

16 Q. Were they exercises which were
17 conducted to determine whether or not the plan
18 satisfied the objectives of NUREG 6054?

19 A. To the best of my knowledge, I
20 believe so.

21 Q. Do you know whether or not the
22 exercises as conducted were adequate to test the
23 plans?

24 A. I could not recall at this point.

25 Q. Do you recall what your involvement

1 were during the period from '82 until you left
2 that office with respect to Shoreham?

3 A. To the best of my recollection, FEMA's
4 activities were based in making decisions as to
5 whether or not to proceed with plan reviews and
6 then ultimately to proceed with exercise
7 development and actual exercise.

8 Q. What was the role that you played as
9 regional director with respect to those activities?

10 A. I oversaw the actual activity and the
11 actual workings of the various technical
12 professionals that were involved in the process.

13 Q. Did you consult with any FEMA
14 employees in Washington with respect to these
15 activities?

16 A. Constantly.

17 Q. Did you seek approval from FEMA
18 officials in Washington with respect to these
19 activities?

20 A. To the best of my knowledge, I did.

21 Q. Were there issues or particular
22 activities with respect to which the approval or
23 authority of FEMA employees in Washington was
24 required?

25 A. I can't recall specifically, but I

1 document which I will ask the reporter to mark as
2 Exhibit E, which is a document on the letterhead
3 of FEMA dated June 23, 1983.

4 (Petrone Exhibit E marked for
5 identification, as of this date.)

6 Q. Did you assist in directing a
7 technical review of the transition plan in June of
8 1983?

9 A. I assisted to the extent that my
10 staff had assisted and had been involved. Other
11 than that, I had no direct involvement.

12 Q. Did you make recommendations to FEMA
13 headquarters following that technical review?

14 A. I believe I made recommendations. I
15 can't recall exactly what they were.

16 Q. Were the two pre-conditions which are
17 set forth on the second page of Exhibit E
18 pre-conditions which were contained in your
19 recommendation?

20 A. To the best of my knowledge, I
21 believe so, yes.

22 Q. Were those pre-conditions
23 pre-conditions which reflected the views of FEMA
24 Region II at that time with respect to LILCO's
25 plan?

1 (Petrone Exhibit F marked for
2 identification, as of this date.)

3 Q. Have you seen this document before?

4 A. I don't recall.

5 Q. Do you recall having discussions in
6 June, July or August of 1983 with FEMA
7 headquarters concerning FEMA's policy with respect
8 to non-governmental plans?

9 A. I vaguely recall having discussions
10 that centered around the legal authority concern.

11 Q. Did Region II make any
12 recommendations to FEMA headquarters concerning
13 FEMA's policy with respect to the review of
14 non-governmental plans?

15 A. On several occasions, and if I can
16 vaguely recall on several occasions, it was the
17 position at that point in the region that we
18 should not proceed with review without
19 governmental entities involved.

20 Q. Did Region II take a position with
21 respect to whether a non-governmental plan could
22 be considered adequate when reviewed against NUREG
23 0654 standards?

24 A. I believe that region took a position
25 that it could not be with regard to the legal

1 authority concerns that existed.

2 Q. Did Region II take a position
3 concerning the question whether a plan, a
4 non-governmental plan, could be implemented if
5 those required to implement it had the authority
6 to do so?

7 MS. LETSCHE: I object to the form of
8 the question on the grounds that it is vague.

9 MR. DAVIES: Would you read that
10 question back.

11 (Record read.)

12 Q. That question assumes that there is
13 not participation by state and local governments.

14 MS. LETSCHE: I still object to the
15 form.

16 A. To the best of my recollection at
17 this point, the issue was that of legal authority,
18 and if the legal authority question has been
19 resolved and Region II's position basically was
20 later on down the road that it was resolved and
21 that the plan was not implementable without state
22 and local government.

23 Q. At that time in 1983, what was FEMA's
24 position with respect to that issue?

25 A. FEMA's position was as it is written,

1 authority concern had not been resolved.

2 Q. Did Region II concur with FEMA's view
3 that it could review LILCO's transition plan and
4 certify the adequacy of the plan?

5 A. Region II's position at that time was
6 that it should not be reviewing a plan that is not
7 submitted by state and local government.

8 Q. Was it similarly the view of Region
9 II that no finding of off-site preparedness could
10 be made?

11 A. Without a submission of state and
12 local government, yes, basically.

13 Q. Did you communicate those views to
14 FEMA headquarters?

15 A. Continuously.

16 Q. Do you know whether you did so in
17 writing?

18 A. I can't recall.

19 Q. Do you recall whether you had an
20 opportunity to review Exhibit F prior to its
21 submission to the NRC?

22 A. Clarification, is this Exhibit F?

23 Q. Yes.

24 A. I don't recall. The language is
25 familiar, but I really can't recall whether I

1 opposed to proceeding with the review of planning
2 for Shoreham?

3 A. I was professionally opposed to
4 proceeding.

5 Q. Did planning by FEMA nevertheless
6 continue during the period following August 1983
7 and into 1984?

8 A. I would have to say I believe, to the
9 best of my recollection, it did, but also I was
10 not privy to whether or not they were proceeding
11 and working with the NRC. I mean I did not
12 receive all information other than information
13 that they felt was appropriate to discuss with me.

14 Q. Was the responsibility for review of
15 plans for Shoreham one which was assigned to the
16 regional office?

17 A. The responsibility was usually
18 assigned to the regional office, as far as I can
19 remember.

20 Q. If the regional office were engaged
21 in a review of plans for Shoreham, would you be
22 aware of that at this time during 1983 and 1984?

23 A. Vaguely what I can remember is that
24 the regional office had been involved in plan
25 review of a LILCO or LERO plan.

1 Q. Do you recall that in 1984 FEMA was
2 considering an exercise of the LILCO plan?

3 A. I can't recall.

4 Q. During 1984 do you know whether or
5 not any RAC reviews of LILCO plans had been
6 requested?

7 A. I really cannot be sure of dates and
8 time lines at this point, so I could not recall.

9 Q. Who was responsible for the
10 initiation of a RAC review of an off-site plan?

11 A. To the best of my recollection, it
12 was the state.

13 Q. The state would be responsible for
14 initiating?

15 A. Initiating a request for a review.

16 Q. Do you recall any requests being made
17 upon the regional office of FEMA during 1984 for a
18 RAC review of the LILCO plan?

19 A. As I mentioned prior, I cannot recall
20 dates and time lines, but I do recall that there
21 were requests for a review. To what extent and
22 what time line, I couldn't give you that at this
23 point.

24 MR. DAVIES: I ask the reporter to
25 mark as Exhibit G a document dated November 15,

1 1984 on the letterhead of FEMA.

2 (Petrone Exhibit G marked for
3 identification, as of this date.)

4 Q. Does this refresh your recollection
5 as to whether the NRC requested FEMA to conduct a
6 RAC review of revision 4 of LILCO's transition
7 plan in July of 1984?

8 A. It is a letter here stating that. I
9 wouldn't dispute it.

10 Q. Does it refresh your recollection
11 that as of November 15, 1984 that RAC review had
12 been completed?

13 A. I couldn't recall exactly when it was
14 completed, but obviously it was in process
15 sometime during that period.

16 Q. But you agree that as of November 15
17 that RAC review had been completed?

18 A. I can't recall what the time line was
19 on it.

20 Q. Was that a review against the
21 criteria of NUREG 0654?

22 MS. LETSCHE: Note my continuing
23 objection and also note that these documents all
24 speak for themselves, and I am not quite sure I
25 understand the point of going over them with Mr.

1 Petrone, in addition to my relevancy objection.

2 A. To the best of my recollection, it
3 was a review against the elements of 0654, but at
4 that point, these are things that the technical
5 staff dealt with and I had no direct, direct
6 involvement, so I really couldn't say to what
7 extent it had been.

8 MR. DAVIES: I ask the reporter to
9 mark as Exhibit H a document on the letterhead of
10 Nuclear Regulatory Commission dated June 1, 1984.

11 (Petrone Exhibit H marked for
12 identification, as of this date.)

13 Q. Does this refresh your recollection
14 as to whether FEMA was considering the development
15 of a full field exercise at this time to test
16 LILCO's plan?

17 A. I need a minute.

18 (Witness perusing document.)

19 A. I don't recall whether or not I saw
20 this, even. There was much talk about exercises
21 at different periods of time, and I just could not
22 place it in its right time frame.

23 Q. You don't recall today whether Region
24 II had been asked to consider the development of a
25 full field exercise in June of 1984?

1 the exercise?

2 A. The objectives to be attained?

3 Q. Yes.

4 A. It would be the person evaluating the
5 exercise. That would be the LERO organization.

6 Q. With respect to the exercise of the
7 LERO plan do you know what steps were taken to
8 develop objectives for the exercise?

9 A. I don't know specifically, no. The
10 staff would have known that.

11 Q. Was your staff involved in the
12 development of objectives for that plan or for
13 that exercise?

14 A. To the best of my recollection, they
15 were.

16 Q. Who in particular on your staff was
17 responsible for the development of those
18 objectives?

19 A. Mr. Kowieski and I believe Mr.
20 McIntyre.

21 Q. Was Mr. Kowieski working on behalf of
22 FEMA or RAC or both in developing objectives for
23 the LERO plan exercise?

24 A. He was working in his capacity as RAC
25 chairman.

1 A. For a full-scale exercise, yes.

2 Q. Who was responsible for the
3 development of a scenario for the exercise?

4 A. I can't recall at this point.

5 Q. Do you know what the criteria were
6 for the development of the scenario?

7 A. To the best of my recollection, the
8 objectives.

9 Q. Is it your understanding that a
10 scenario should be sufficient to satisfy an
11 evaluation of the objectives developed by RAC?

12 MS. LETSCHE: Point of clarification.
13 Are you talking about the Shoreham scenario and
14 Shoreham exercise or just in general?

15 MR. DAVIES: I am talking about
16 Shoreham.

17 A. I believe so, yes.

18 Q. What was your specific role in
19 connection with the development of objectives and
20 the development of a scenario to evaluate those
21 objectives?

22 A. I had no direct involvement.

23 Q. Do you know whether the procedures
24 utilized by RAC in developing the objectives for
25 the Shoreham exercise differed in any way from the

1 Q. With respect to the 17 full-scale
2 exercises conducted in Region II since 1981 is it
3 your view that the objectives to be met in order
4 for those exercises to be characterized as
5 full-scale needed to reflect every objective set
6 forth in Guidance Memo 17?

7 MR. ZAHNLEUTER: My objection as
8 noted before stands, but you may answer.

9 A. I mentioned earlier that I was not
10 fully familiar with Guidance Memorandum 17, and
11 fully comfortable with all the objectives, so at
12 this point I would have to answer to that question
13 that I really don't know at this point.

14 Q. Let me ask you this: With respect to
15 those 17 exercises in order that they be
16 considered full-scale exercises is it necessary
17 that the scenario developed for those exercises
18 establish for evaluation each of the objectives
19 set forth in Guidance Memo 17?

20 A. Again I mentioned earlier I was not
21 truly familiar with Guidance Memorandum 17 and
22 therefore I would have to answer that I don't know.

23 Q. Let me ask you this: With respect
24 again to each of those 17 exercises in order that
25 they be characterized or regarded as full-scale,

1 is it necessary that the objectives developed need
2 reflect each criteria set forth in NUREG 0654?

3 A. I am not familiar with every criteria
4 of NUREG 0654 as I sit here today, so I could not
5 answer the question.

6 Q. Let me ask you again with respect to
7 each of those 17 exercises whether as a pre-condition
8 to the characterization of those exercises as
9 full-scale the scenario developed for the exercise
10 need establish for evaluation each objective to
11 reflect and meet each of the criteria set forth in
12 NUREG 0654?

13 A. I am not fully familiar with every
14 criteria in NUREG 0654, so I cannot answer the
15 question.

16 Q. With respect to the Shoreham exercise
17 which was conducted in February of 1986, do you
18 know whether or not the objectives for that
19 exercise included each and every objective of
20 Guidance Memo 17?

21 A. No, I don't recall.

22 Q. Do you know whether or not the
23 objectives for the Shoreham exercise reflected
24 each and every criteria of NUREG 0654?

25 A. I don't recall.

1 A. I believe the goal was to conduct a
2 full-scale exercise as best as possible, given
3 that the exercise was limited. I think that
4 statement has been stated many, many times by FEMA.

5 Q. Did you yourself review the
6 objectives or any drafts of the objectives as they
7 were developed by RAC?

8 A. No, I did not.

9 Q. Did you review the scenario or any
10 drafts of the scenario?

11 A. No, I did not.

12 Q. Did you voice or communicate to
13 anyone any views or opinions which you held with
14 respect to the objectives?

15 A. I would talk to my staff. We would
16 discuss status in terms of how far they were in
17 developing this, but other than that, that was the
18 discussion. It was limited to that and it was
19 basically my concerns were always aired with them
20 with regard to how we were going to proceed with
21 this with regard to the fact that it was limited
22 and without the state and local government
23 participation. That was our topic of discussion
24 continuously.

25 Q. Would that response be equally

1 MS. LETSCHE: Are you talking about
2 the Shoreham exercise or are you just talking in
3 general?

4 MR. DAVIES: Full-scale exercise.

5 A. I would think some semblance of
6 ingestion pathway evaluation would be important,
7 depending on the site and depending on the area
8 that you are dealing with.

9 Q. Do you know whether or not there are
10 regulations concerning the frequency or the
11 necessity of testing ingestion pathway activities
12 in a full participation test?

13 A. I am not familiar at this time with
14 the regulation.

15 Q. Are you familiar with the provisions
16 of LILCO's plan concerning the monitoring of
17 evacuees from special facilities?

18 A. Not specifically.

19 Q. Do you believe that such activities
20 are necessary to be exercised as part of a full
21 participation exercise?

22 A. To a certain extent, yes.

23 Q. Could you tell me why you regard that
24 as a necessary important element of such an
25 exercise plan?

1 utilized in a test of elements of the plan
2 concerning the monitoring of evacuees from special
3 facilities?

4 A. I would not at this point offer a
5 sampling technique, nor would I offer a sampling
6 size, but my own feeling on that is that you can
7 only sample and you can only simulate when you
8 have full participation and agreements in place,
9 and people involved in the process that wish to be
10 involved in the process.

11 Q. Is it fair to state that the
12 reservations you are now expressing with respect
13 to this particular issue are once again
14 reservations that spring from concerns about the
15 legal authority issues?

16 A. The legal authority issues and the
17 limited participation, yes.

18 Q. In particular the absence of
19 participation by state and local governments?

20 A. And other private entities that would
21 be subject to agreements in any plan.

22 Q. Do you know whether or not the
23 scenario developed for the Shoreham exercise
24 included a demonstration of any activities
25 concerning recovery and re-entry?

1 A. I don't recall at this point.

2 Q. Is it your view that a full-scale
3 exercise would be required to demonstrate recovery
4 and re-entry activities of an emergency plan?

5 A. To the extent that the evaluation
6 would test the decision-making processes and the
7 interaction among all the players in an exercise
8 that would be responsible for bringing back a
9 community to its normalcy.

10 Q. Again are you referring to the
11 involvement of state and local governments and
12 other private entities?

13 A. State and local governments and other
14 private entities that would have the authority to
15 proceed.

16 Q. Is it your view that absent the
17 participation of state and local government, one
18 could not evaluate in an exercise recovery and
19 re-entry activities of an emergency plan?

20 A. Yes.

21 Q. Do you know whether LILCO offered to
22 FEMA a demonstration of recovery and re-entry
23 activities of its emergency plan?

24 A. I don't know at this point.

25 Q. Do you know whether FEMA normally

1 witness, but you may answer to the best of your
2 ability.

3 A. I don't believe every ambulette
4 company has to participate in one exercise. Over
5 the course of time in other exercises the goal
6 would be to have everyone participate.

7 Q. Are you familiar with the
8 responsibilities of ambulance and ambulette
9 companies under the Shoreham plan?

10 A. Under the Shoreham plan I can't
11 recall basically at this point what they would be
12 involving.

13 Q. Is a preliminary press conference
14 following an exercise a regular practice adopted
15 by FEMA?

16 A. To the best of my recollection, it
17 had been, yes.

18 Q. Is it fair to state that the
19 expression of any findings concerning an exercise
20 at such a preliminary press conference has not
21 been a practice of FEMA?

22 A. Preliminary findings have been a
23 practice.

24 Q. Has it been a practice of FEMA to
25 express findings concerning a reachable assurance

1 for sub-part M, which was stricken.

2 MR. DAVIES: I ask the reporter to
3 mark as Exhibit T copies of contentions 15 and 16,
4 and I invite counsel to look at the exhibit as
5 marked and make a comparison between that and the
6 contentions.

7 (Petrone Exhibit T marked for
8 identification, as of this date.)

9 Q. Do you have Exhibit T before you?

10 A. Yes, I do.

11 Q. With respect to contention 15, which
12 begins on the first page of the exhibit which is
13 page No. 16 and continues to page 25, I would just
14 like to ask you to state now on this record what,
15 other than that which is reflected in the exhibit
16 before you and the contentions themselves, you
17 would intend to state with respect to these
18 contentions in your testimony in this proceeding.

19 A. I haven't even had a chance to study
20 this or even to begin writing testimony. I can't
21 answer that.

22 Q. Is it your testimony that at this
23 time you have not determined upon the testimony
24 you will give with respect to contention 15?

25 A. I haven't done any work with regard

1 to the testimony that I would be giving relative
2 to contention 15 and 16. I have reviewed it,
3 period.

4 Q. So at this time you cannot tell us
5 what, if anything, you would say with respect to
6 contentions 15 and 16?

7 A. No, I will not state anything because
8 I haven't had a chance to study it and to really
9 start developing the testimony that I would feel
10 comfortable with.

11 Q. Your answer refers to 16 also?

12 A. Yes, as I said, I reviewed this twice.
13 I just read it over.

14 Q. Just so the record is clear, you are
15 not able to state here today what testimony, if
16 any, you would give in this proceeding with
17 respect to those matters set forth in contention
18 15 and with respect to those matters set forth in
19 contention 16?

20 A. That is correct.

21 Q. When were you first approached or
22 asked to be a witness in this proceeding?

23 A. Approached about two months ago.

24 Q. By whom?

25 A. Mr. Zahnleuter.

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

- - - - -X
In the Matter of: :
LONG ISLAND LIGHTING COMPANY : Docket No. 50-322-OL-5
 : (EP Exercise)
(Shoreham Nuclear Power Station, : (ASLBP No. 86-533-01-OL)
Unit 1) :
- - - - -X

DEPOSITION OF HAROLD R. ZOOK

Washington, D. C.

Thursday, January 15, 1987

ACE-FEDERAL REPORTERS, INC.

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1 expert by counsel for Suffolk County?

2 A Possibly.

3 Q Do you know why you were asked to testify in this
4 proceeding?

5 A I would assume that it was due to my background as
6 a career law enforcement officer. And I have been involved
7 in law enforcement training most of my career.

8 Q Do you know why you are being asked to testify on
9 the particular contentions that you have listed for me or
10 that you may be asked to testify on those contentions?

11 A Only that I may have some knowledge or input which
12 would be helpful to counsel in this particular case.

13 Q What do you understand the nature of that
14 knowledge or input might be that counsel would be drawing on?

15 A At this point -- as I said previously, we started
16 our review for this deposition yesterday, so I think it is
17 premature at this time -- I couldn't make that assessment at
18 this time.

19 Q So you are not sure why you were selected for the
20 particular contentions that you think you will be asked to
21 testify on; is that right?

22 A Only that they might relate to certain law

1 enforcement training functions or training functions and the
2 performance of personnel in positions that could be related
3 to law enforcement.

4 Q Mr. Zook, have you spoken with anyone who has
5 already had their deposition taken in this proceeding?

6 A Concerning -- spoken to them concerning what?

7 Q Just spoken to them at all?

8 A Yes, sir.

9 Q Who would that have been?

10 A Dr. Colwell.

11 Q What was the nature of your discussion with
12 Dr. Colwell?

13 A He and I are both teaching classes in
14 counterterrorism, and he is a professor at the University of
15 Arkansas in Little Rock, and I'm currently enrolled as a
16 student at the University of Arkansas at Little Rock. That
17 was the nature of our conversations.

18 Q What did you talk about with Dr. Colwell?

19 MR. MILLER: With respect to this case?

20 BY MS. MONAGHAN:

21 Q With respect to your discussions concerning this
22 case or your deposition.

1 statistics?

2 A No. Well, what type of statistics? I have
3 testified relative to statistics as it relates to law
4 enforcement. The uniform crime report as an example. The
5 utilization of statistics to be able to predict rather
6 accurately the high crime-rate months, the hours of the day,
7 the days of the week, that certain offenses will occur due to
8 statistics, but the involvement that I have relative to this
9 deals solely with law enforcement, and law enforcement
10 offenses.

11 Q Would you have done the statistical analysis about
12 which you testified or would that have been done by someone
13 else?

14 A I have done -- I have presented testimony on data
15 that I have assisted in the preparation of it. Not
16 necessarily that I initiated it and completed it by myself,
17 but I was a part of the team that did develop it, and again,
18 as it relates to criminal activity; and that's the limit of
19 my exposure to statistics.

20 Q Now, have you been involved in planning for a
21 response to an emergency at a nuclear power plant?

22 A Not in a nuclear power plant.

1 Q At any other facility?

2 A In the field of law enforcement, we've had several
3 exercises relative to -- well, as an example, we set up a
4 program in conjunction with a particular hospital, the
5 University of Arkansas Medical Sciences campus, and others,
6 simulating a bleacher collapse at a major sporting event
7 whereby there were 100 or more casualties ranging from those
8 that would be killed or seriously injured on down to the
9 minor injuries, and then the preparation that went into this
10 from evacuation, the removal of the people from the scene,
11 coordinating with local health care facilities and so forth.

12 Q In the course of developing those emergency plans
13 for the possibility of a collapse of a bleacher at a sporting
14 event, did you develop written plans for that?

15 A There were written plans. I was more directly
16 involved in the implementation and evaluation of it, more so
17 than in the development of the plan.

18 Q Were you evaluating the plan itself or were there
19 any drills or tests of whether the plan would work?

20 A I was evaluating the performance of the people
21 involved in it.

22 Q Who were the people involved in it?

1 contentions were; is that correct?

2 A That's correct.

3 Q Did you know before yesterday afternoon generally
4 what subject matters you might be asked to testify on?

5 A I believe it may have been discussed that I would
6 be testifying on issues relative to law enforcement training
7 or training and development of -- let's just say law
8 enforcement training. I don't recall it being anything
9 beyond that. It was very general in nature.

10 Q Have you written any articles or papers, published
11 any articles or papers? Your resume does not indicate that
12 but I just wanted to be sure.

13 A I have written articles for certain law
14 enforcement publications; that has absolutely nothing to do
15 with the issues that we're dealing with. I'm a helicopter
16 pilot, and I wrote some articles for the Arkansas law
17 enforcement organizations relative to the utilization of
18 helicopter service in law enforcement, this sort of thing.
19 But it was all tactical, primarily.

20 Q So they would not be at all related to the issues
21 in this proceeding?

22 A Nothing that I have ever written -- most of the

1 things I have written are tactical operations, countersniper
2 tactics, recommendations for the use of sniper weapons,
3 forensic science as it relates to sniper activities,
4 utilization of helicopters, counterterrorism tactics, of this
5 nature.

6 Q If you were to describe your areas of expertise
7 for me how would you describe them?

8 A Well, as I have previously stated, I have had
9 considerable exposure and experience in law enforcement
10 training, and the measurement of the, or the evaluation of
11 that training that's been presented; and then personnel
12 performance based on the training that had been received,
13 this type of activity. I would say in broad terms that I
14 might have some expertise in law enforcement training and
15 evaluation of personnel and performance training.

16 Q We have been using the term "law enforcement
17 training" quite a bit today. Could you define what you mean
18 by that term so I'm sure we have the same meaning for it?

19 A Law enforcement training, as I have used that term
20 today, deals with training in subjects that are related
21 directly or indirectly to the function of a police officer in
22 the performance of his duty.

1 Q When you say "directly and indirectly," what do
2 you mean by things that would indirectly have an effect on
3 the performance of a police officer?

4 A As an example, some of the topics is the
5 recognizing and handling of abnormal persons, a person who
6 may be emotionally or mentally disturbed. That's not a law
7 enforcement problem but that's a problem that a law
8 enforcement officer has to deal with until such time as he
9 can get competent medical personnel to take the person into
10 their custody or under their control or something like this.

11 Many times we have situations whereby -- in a
12 sniper situation, as an example, a police officer may be
13 hit. We identify procedures there on how to properly care
14 for that officer in case he gets a chest hit, and it is a
15 sucking wound into the lungs or so forth, what we can do to
16 protect that individual until he is transported or turned
17 over to competent medical authority. These are indirectly
18 related elements to enforcement of the law.

19 Q Mr. Zook, are you familiar with a document called
20 NUREG-0654?

21 A Not that I recall. No, ma'am.

22 Q Are you familiar with the Federal Emergency

1 Management Agency?

2 A I have some knowledge of FEMA.

3 Q Have you ever done any work with FEMA?

4 A I have been to the FEMA facility in Gaithersburg,
5 or wherever the facility is, some 40 or 50 miles from here.
6 I have been to that facility in a seminar.

7 Q What did the seminar concern?

8 A Natural disasters or incidents. FEMA was at one
9 time and still may be projecting information on an earthquake
10 area that has been projected, that an earthquake is going to
11 occur in the south central part of the United States, a fault
12 line which comes out of Missouri or possibly Illinois and
13 northeastern part of Arkansas, and this dealt with the law
14 enforcement officers' response and responsibility in this
15 type of incident should it occur or had it occurred. They
16 say it is going to occur.

17 Q When did you attend that FEMA seminar?

18 A I believe it was in 1984 or early '85.

19 Q Have you had any other affiliation with or contact
20 with FEMA?

21 A Not that I recall.

22 Q Do you have any knowledge of FEMA's

1 responsibilities concerning evaluation of off-site emergency
2 response organizations for nuclear power plant emergencies?

3 A I had no concept of that until I started reading
4 some of these documents and saw that FEMA was involved in
5 it. Prior to that I had no knowledge of it.

6 Q Are you familiar at all with FEMA Guidance
7 Memorandum 17?

8 A Not that I recall.

9 Q I'm going to show you a copy of Guidance Manual
10 17. Have you ever seen that document before?

11 A I don't recall ever seeing this document before.
12 Nothing looks familiar at all to me.

13 Q Do you think you would be reviewing that document
14 in order to prepare for the testimony you might be giving in
15 this proceeding.

16 A I possibly could be. I couldn't rule that out.

17 Q Would you know what contention you might be
18 reviewing that document in connection with?

19 A I don't know. This document is unfamiliar to me.
20 I have never seen it before.

21 Q Are you familiar with another FEMA guidance
22 memorandum known as EX-3?

1 A No, ma'am. Not to my knowledge anyway.

2 Q Let me show you a copy of FEMA EX-3 and let you
3 take a look at it, and you tell me whether you have ever seen
4 that document before.

5 A I don't recall ever having seen this document
6 before.

7 Q And the title on the document that I have shown
8 you is "Conducting Pre-exercise Activities and Post-exercise
9 Meetings"; is that correct?

10 A That's the title of this document, Guidance
11 Memorandum EX-3, "Conducting Pre-exercise Activities and
12 Post-exercise Meetings."

13 Q You have never seen that draft document?

14 A Not to my knowledge.

15 Q Nor the Guidance Memorandum 17 that I showed you
16 previously?

17 A I don't recall ever having seen it before either.

18 Q Are you familiar with the materials used in the
19 LILCO training program?

20 A What type materials are they? Maybe if you could
21 expand on that. The only thing that I'm primarily familiar
22 with is the post-exercise document that FEMA prepared, and I

1 MR. MILLER: Does your question include counsel?

2 MS. MONAGHAN: No. With the exception of
3 counsel.

4 THE WITNESS: No.

5 BY MS. MONAGHAN:

6 Q Mr. Zook, do you have an opinion about the issues
7 raised in Contentions 15 and 16?

8 A Could I see the contentions?

9 Q Do you recall at all what issues are raised by
10 those contentions?

11 A I think that the issues that are raised in 15 and
12 16 concern the sampling of the exercise being insufficient to
13 draw a conclusion that the health and safety of the general
14 public could be assured.

15 Q Do you agree --

16 A That's from memory.

17 Q All right, and I understand that you were only
18 informed yesterday of the contentions on which you think you
19 will be testifying?

20 A That's correct.

21 Q Do you agree that the sample size was too small?

22 A Based on what I read in the contentions, that

1 A I would have to look to see what those items are.

2 Q Do you know what a full-participation exercise is?

3 A A full-participation exercise, as I would define
4 it, would be an exercise of sufficient scope where
5 conclusions could be made as to its being properly conducted
6 and whether the standards of public health and safety had
7 been maintained. That would be my --

8 Q Do you know whether there is any legal definition
9 associated with the term "full-participation exercise"?

10 A I'm not able to quote a legal definition.

11 Q So your opinion on Contentions 15 and 16 would be
12 limited to your understanding of what full-participation
13 exercise might be?

14 A That's correct.

15 (Discussion off the record.)

16 THE WITNESS: I have seen the definition
17 identified in the Code of Federal Regulations on a
18 full-participation exercise, but I cannot quote that.

19 BY MS. MONAGHAN:

20 Q Do you recall at all what the nature of that
21 definition was or anything that was said in it?

22 A No.

1 conclusion?

2 A Any other material that may be available that
3 would address the question as it may be presented. I don't
4 know at this time, but I would not preclude anything else
5 being added.

6 Q What's your understanding of the issues being
7 presented in Contentions 15 and 16?

8 A That the sampling of this exercise was
9 insufficient to assure the safety and protection of the
10 people in the area, the general public. There was not
11 sufficient data to make an assessment from.

12 Q When you say the sampling was insufficient and
13 that there was insufficient data, can you define for me more
14 fully what you mean by that in connection with Contentions 15
15 and 16?

16 A The only thing I could say on that would be what
17 is specifically contained in the contentions and the FEMA
18 post-exercise report, the data that may have been generated
19 from either one of those two or both documents.

20 Q Why was that insufficient? Why is that data
21 insufficient?

22 A The information contained in the contentions has

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

- - - - -X
: In the Matter of: :
: LONG ISLAND LIGHTING COMPANY: : Docket No. 50-322-OL-5
: : (EP Exercise)
: (Shoreham Nuclear Power Station, : (ASLBP No. 86-533-01-OL)
: Unit 1) :
: :
- - - - -X

DEPOSITION OF GREGORY MINOR

Washington, D. C.

Tuesday, December 2, 1986

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1 A It was on the order of a month ago, but I don't
2 remember the exact date.

3 Q And, what is your understanding of what you are
4 going to testify about?

5 A The issues that I am tentatively planning to
6 testify on are the Issues 15, Subparagraph I, which is part
7 of the Contention 36, I believe; and, also Contention 37.

8 Q Okay.

9 A I guess you could say that the other way around.
10 Contention 36 is part of 15.I. I'm not sure how the ordering
11 goes there.

12 Q We hope that mystery at some point will be cleared
13 up for all of us.

14 Were you at the exercise on February 13th?

15 A No, I was not.

16 Q Have you looked at any documents that were generat-
17 ed during the exercise to try to figure out what went on at
18 the exercise?

19 A Yes, I have.

20 Q What have you looked at?

21 A I've looked at a vast part of the discovery,
22 particularly related to all radiological issues and the

1 filing on the contentions and arguments about the contentions
2 and so forth. And, I have been reviewing those as we went
3 along.

4 I can't recall any large block of documents at
5 this time that I haven't mentioned in that set. There may be
6 some, but I just can't think of them at this time.

7 Q So, is it true to say that all of the information
8 you have about what happened at the exercise has come from
9 your review of the documents that you have been referring to
10 in answer to my questions previously?

11 A Yes. As I stated, I was not at the exercise but I
12 did review this large body of documentation that came from
13 the discovery process resulting from the exercise.

14 Q I take it from your reference in answering my
15 question about what you are testifying to, the 15.I, 36 and 37,
16 that you have read the contentions?

17 A Yes.

18 Q Have you read all of the contentions that were
19 filed or just 15.I, 36 and 37?

20 A Well, I read a lot of the other contentions that
21 were filed, but I will not claim that I have read every one
22 of them.

1 you focus on in your particular editing and review process?

2 A Well, the contentions as originally drafted,
3 Numbers 35, 36 and 37 I believe. And those were the ones
4 that I was particularly interested in.

5 Q I take it that having read 15.I, 36 and 37 and
6 having edited, at least 35 also, that you agree with those
7 contentions?

8 A Yes, I do. I agree with 35 also.

9 Q Alas, 35 is gone, we think.

10 MS. LETSCHE: Yes, there is a pending objection.
11 So, we shall see.

12 BY MS. McCLESKEY: (Continuing)

13 Q Have you ever participated in developing any
14 scenarios for nuclear emergency drills or exercises?

15 A In actually preparing the scenario? Is that
16 your question?

17 Q Yes.

18 A No, I have not.

19 Q Have you worked in some other capacity on the
20 scenarios for nuclear emergency drills or exercises?

21 A No. I have reviewed some of them, but I have not
22 participated in the preparation of them.

1 Q Have you reviewed scenarios for nuclear emergency
2 drills other than Shoreham drills?

3 A I have looked at some other plant scenarios. I
4 can't even recall which plants they were. But I did get ahold
5 of a few others to see what type of scenario they had put in
6 front of the players for their exercise.

7 Q Was that in connection with other work that you do,
8 or in connection with the Shoreham work?

9 A Well, we had some of this information around the
10 office. It was quite some time ago when they were setting up
11 the exercise and I was curious about what the scenarios may
12 include, and I went to look and see what others had included.

13 Q So, your undertaking or review was in connection
14 with your Shoreham work?

15 A Yes.

16 Q Do you recall -- were these for nuclear power plants?

17 A Yes.

18 Q Do you recall which plants the scenarios were --

19 A As I said earlier, no, I do not. And, I -- well,
20 I just don't recall. I'm sorry.

21 Q Were you looking at particular aspects of those
22 scenarios in comparing them to the Shoreham scenario?

1 A Well, this is not an indepth study I'm talking about.
2 I just went and glanced at some documents that we had which
3 would indicate what type of emergency drill or exercise they
4 had at other plants.

5 My general conclusion was that they were reasonably
6 similar.

7 Q Similar? I'm sorry.

8 A My first look was to see what they were. After the
9 drill, my conclusion was that they were generally similar.

10 Q Similar to the Shoreham drill?

11 A Yes.

12 Q Have you ever been an evaluator at a nuclear
13 emergency drill or exercise?

14 A No, I have not.

15 Q Have you ever participated as a player, as someone
16 responding to the postulated emergency --

17 A No, I have not.

18 Q -- in a nuclear drill?

19 A No, I have not.

20 Q Have you ever attended a drill or exercise?

21 A No, I have not.

22 Q We have all been familiar for quite some time with

1 your background and resume, and I just have a couple of quick
2 questions.

3 MS. McCLESKEY: Let's go off the record a minute.

4 (Off-the-record.)

5 BY MS. McCLESKEY: (Continuing)

6 Q I believe I was saying I just had a couple of
7 questions about your background particularly related to
8 scenario and drill and exercise work.

9 Do you have any specific degrees, or have you done
10 a significant amount of course work in emergency response,
11 either radiological or non-radiological?

12 MS. LETSCHE: I don't know what you mean by
13 emergency response work.

14 MS. McCLESKEY: Emergency ^sre₁ponse.

15 BY MS. McCLESKEY: (Continuing)

16 Q Mr. Minor, do you know what I mean by emergency
17 response?

18 A Well, in terms of course work, because emergency
19 response is what you do in response to a base of knowledge
20 given a particular situation that exists. It's not something
21 you take very extensive course work in.

22 You train to prepare yourself for the responsibilities.

1 you have in the drill or the exercise or the emergency re-
2 sponse, then you use your other training and knowledge to
3 implement that.

4 Q Have you ever participated in that sort of train-
5 ing program that you have just described?

6 A No, I have not.

7 Q What about in radiation protection?

8 A I've had some background in that area from my work
9 both at the Hanford reactor and the SEFOR reactor in
10 Arkansas and my work with General Electric.

11 Q What about meteorology or any kind of atmospheric
12 dispersion calculations?

13 A My only connection with that has been related to
14 probabilistic risk assessments we have done on some plants
15 and the fact that you have to make those kind of assumptions
16 in order to create the different sequences that you are going
17 to analyze and sum up as a risk curve for the plant.

18 And, in that you have to assume stability factors and
19 dispersion characteristics for the plume.

20 Q What about environmental sampling?

21 A I have not been involved in that directly. Of
22 course, I'm aware of what goes on in that process. But, I

1 taking your undergraduate degree in engineering?

2 A It was.

3 Q Were you enrolled in that power option?

4 A Yes, I was.

5 Q Would it be fair to characterize your expertise as
6 a nuclear engineer, in your judgment?

7 A My educational background is electrical engineering
8 and electronics. My experience throughout my -- whatever it
9 has been, 26 years of experience has been almost entirely
10 related to nuclear matters.

11 And, so by experience I would say yes, I'm more
12 of a nuclear engineer than an electrical engineer.

13 MR. CUMMING: For the record, since I'm not making
14 this an exhibit, this is an eight page document.

15 BY MR. CUMMING: (Continuing)

16 Q Mr. Minor, on Page 3 there is a list of your
17 publications and testimony. Are you familiar with the term
18 with respect to scientific publications or technical publica-
19 tions, "peer group review?"

20 A Yes.

21 Q What does that mean, in your judgment?

22 A It is generally used with the publication of

TRANSCRIPT OF PROCEEDINGS

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

-----X
: In the Matter of: Docket No. 50-322-OL-5
: (EP Exercise)
LONG ISLAND LIGHTING COMPANY :
: (ASLBP No. 86-533-01-OL)
(Shoreham Nuclear Power Station, :
Unit 1) :
-----X

DEPOSITION OF WILLIAM LEE COLWELL

Washington, D. C.

Tuesday, December 30, 1986

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1 A It would include -- it would have included a
2 number of things and terrorism is one of the most visible and
3 highest areas of concern of the public today. And so that
4 would have been one of them.

5 Q In what disciplines do you consider yourself to be
6 an expert?

7 A What do you mean by "disciplines"?

8 Q Well, for example, at universities there are a
9 number of departments or disciplines, such as anthropology,
10 sociology, statistics, human performance. What disciplines
11 would you characterize yourself as being an expert?

12 A May I answer that and tell you what I teach? I
13 consider my knowledge pretty broad in the area of
14 management. I think I have a broad experience in making
15 assessments and evaluations of programs. I consider that I
16 have a broad knowledge of the so-called public administration
17 area and the criminal justice system.

18 Q Do you consider yourself an expert on statistics?

19 A No.

20 Q What about sociology?

21 A No.

22 Q Have you ever been involved in planning for the

1 emergency of a nuclear power plant?

2 A What do you mean "involved"?

3 Q Have you ever planned for an emergency in a
4 nuclear power plant?

5 A No.

6 Q Has anyone whom you supervised been involved with
7 -- has anyone which you supervised planned for an emergency
8 of a nuclear power plant?

9 A What kind of an emergency?

10 Q Well, let's take a nuclear emergency, radiological
11 emergency.

12 A What kind of nuclear emergency?

13 Q Let's assume that there was a problem at the
14 nuclear plant in which they were concerned about a possible
15 breach of the containment. Have you ever been involved with
16 planning -- has anyone whom you supervised planned for that
17 kind of an emergency?

18 A Probably. I don't recall specifically, but
19 maybe.

20 Q In connection with your work in Arkansas, have you
21 been involved at all in planning for an emergency at either
22 Arkansas 1 or 2?

1 A Okay.

2 Q Dr. Colwell, you have indicated that you have
3 developed some preliminary views on the FEMA exercise at the
4 Shoreham plant; is that correct?

5 A I said "views." I don't know -- I don't recall if
6 I used the word "preliminary."

7 Q Did the views that you have developed deal with
8 the scope of the exercise?

9 A What do you mean by "scope"?

10 Q By "scope," I mean whether the exercise included
11 all of the parts that it should have included, all of the
12 elements that should have been demonstrated in the exercise.

13 A I don't, -- I think the whole FEMA assessment deal
14 -- arguably you could say it dealt with the scope of the
15 exercise, the contentions that I have seen. Most of them in
16 some way touch on the scope of the exercise, either specific
17 areas or in broad general terms.

18 Q Based on your review of the contentions in the
19 FEMA exercise report, do you have any views on whether the
20 scope of the exercise was appropriate or inappropriate?

21 MR. MILLER: Ms. Monaghan, let me repeat, I think
22 it would be far more efficient, we have particular

1 C, procedures for public education and
2 dissemination of information on a periodic and timely basis
3 were found, at least in the author's view, to be deficient.

4 Q Is it your understanding that the procedures
5 themselves were found to be deficient in 15?

6 A That's what is said here. As I said previously,
7 that is what I am dealing with right now at this time, just
8 based upon what is written in this contention.

9 Going on, each one of the other items, subitems is
10 the same. I would answer the question, continue to answer
11 the question in that manner.

12 Q So it's your understanding that Contention 15
13 alleges that there is a fundamental flaw in the LILCO plan.
14 Do you know what the basis is for the allegation that there
15 is a fundamental flaw?

16 A It's based on the references that are contained in
17 these contentions, this contention and the subparts.

18 Q Do you know what the nature of the fundamental
19 flaw is that is being alleged there?

20 A It's not -- I would assume that what is stated
21 here, it's not in accord with regulations.

22 Q Have you reviewed any of the regulations

1 referenced in Contention 15?

2 A I have not. Are you speaking of the Code of
3 Federal Regulations?

4 Q I think Contention 15 references the Code of
5 Federal Regulations; in particular 10 CFR Section 5047. Have
6 you reviewed that portion?

7 A Not in connection with this case.

8 Q Have you ever reviewed 10 CFR Section 5047?

9 A I may have in the past. I doubt it. I don't
10 know.

11 Q You don't have a present recollection of having
12 reviewed that?

13 A I don't have a present recollection of it, but I
14 could have, because, in my previous capacity with the FBI,
15 there were frequent references. You had to go to the Code of
16 Federal Regulations for various items.

17 Q In connection with your work with the FBI, did you
18 have occasion to review the regulations of the Nuclear
19 Regulatory Commission?

20 A I don't recall specifically, but I am sure some
21 reference was made to them at some point in time.

22 Q In connection with preparing for the testimony

1 that. Let me go back.

2 In connection with the FEMA exercise of an
3 off-site response organization, is it your opinion that every
4 aspect of the organization should be tested during an
5 exercise?

6 A Would you state that, in connection with the FEMA
7 exercise?

8 Q Right. Is it your opinion that every aspect or
9 every function of that organization should be tested or
10 evaluated during that exercise?

11 A I don't believe that I am qualified at this point
12 to say that. I haven't reviewed what their standards are for
13 review of an off-site location.

14 Q So you would base your opinion on what FEMA
15 standards for review would be?

16 A That would be a part of the development of my
17 opinion, yes.

18 Q What else would be a part of the development of
19 your opinion?

20 A It would be -- it would have to be governed by the
21 environment in which the off-site location was operating in,
22 density of population, escape routes, so to speak, or avenues

1 if there is a particular subpart of Contention 50 you want to
2 point us to.

3 MS. MONAGHAN: No. There is no particular
4 portion.

5 THE WITNESS: Again, my -- I think it's premature
6 for me to state, for me to state a view regarding the
7 training program that has been used.

8 BY MS. MONAGHAN:

9 Q Dr. Colwell, why would it be premature for you to
10 make a statement at this point in time?

11 A Because I have not reviewed the -- I am not
12 satisfied with the extent of my review at this point.

13 Q Are you familiar with NUREG-0654, that's a FEMA
14 document?

15 A Not that I am aware of.

16 Q Are you familiar with FEMA Guidance Memorandum 17?

17 A No.

18 Q Are you generally familiar with what FEMA is, the
19 Federal Emergency Management Agency?

20 A Yes.

21 Q Have you ever worked with FEMA?

22 A Yes.

1 Q What kind of work have you done with FEMA?

2 A It's classified. It's a classified program.

3 Q Can you tell me at all generally what the work was
4 that you would have done with FEMA without delving into the
5 specifics?

6 A It involves a part of the responsibilities of FEMA
7 as a federal emergency management agency.

8 Q Does it involve a particular kind of emergency?

9 A It involves emergencies, yes, a particular
10 category of emergencies, yes.

11 Q Does it involve radiological emergencies?

12 A I said it was classified earlier. I don't feel
13 comfortable in further defining and I am not trying to be
14 evasive. To do so would put me under -- give me problems
15 that I don't want to invite.

16 Q I understand. Okay. Have you ever dealt with
17 FEMA in connection with their responsibilities for reviewing
18 and evaluating emergency plans for nuclear power plants?

19 A Not directly or personally.

20 Q Have you dealt with them --

21 A It may have been discussed at some point but not
22 as the main topic of discussion for me.

1 Q Have you reviewed any of the -- strike that. Let
2 me go back.

3 Do you expect that you are going to review FEMA
4 Guidance Memorandum 17 prior to preparing your testimony?

5 A I can't answer that. I don't know what is
6 contained in it. I would rely on counsel to, in part, to
7 point me to pertinent references.

8 Q Are you familiar with materials used in the LILCO
9 training program?

10 A For presentations, no.

11 Q Do you expect that you will review those materials
12 prior to preparing your testimony?

13 A I might. It would certainly be something that I
14 might consider.

15 Q Are you familiar with the LERO player documents
16 that were generated during the exercise?

17 A No. I have seen the references to them.

18 Q But you have not reviewed any of those documents?

19 A That's correct.

20 Q Do you expect that you will review those materials
21 prior to preparing your testimony?

22 A I might.

LILCO, May 8, 1987

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In the Matter of
LONG ISLAND LIGHTING COMPANY
(Shoreham Nuclear Power Station, Unit 1)
Docket No. 50-322-OL-5

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I hereby certify that copies of LILCO'S MOTION TO STRIKE PORTIONS OF SUFFOLK COUNTY'S TESTIMONY ON CONTENTIONS EX 15 & 16 -- THE SCOPE OF THE EXERCISE were served this date upon the following by hand as indicated by one asterisk (*), by Federal Express as indicated by two asterisks (**), by telecopy as indicated by three asterisks (***) or by first-class mail, postage prepaid.

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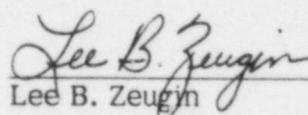
DATED: May 8, 1987

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