

ORIGINAL

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of:

LONG ISLAND LIGHTING COMPANY

(Shoreham Nuclear Power Station
Unit 1)

Docket No. 50-322-OL-3

Location: Hauppauge, New York

Pages: 13,071-13,312

Date: Tuesday, July 17, 1984

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UNITED STATES OF AMERICA

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NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of: :

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LONG ISLAND LIGHTING COMPANY : Docket No. 50-322-OL-3

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(Shoreham Nuclear Power Station, (Emergency Planning)
Unit 1) :

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Court of Claims
State of New York
State Office Building
Room 3B46
Veterans Memorial Highway
Hauppauge, New York 11787

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Tuesday, July 17, 1984

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The hearing in the above-entitled matter convened
at 10:11 a.m., pursuant to recess,

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BEFORE:

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JAMES A. LAURENSEN, ESQ., Chairman
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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DR. JERRY KLINE, Member
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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DR. FREDERICK SHON, Member
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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APPEARANCES:

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On Behalf of LILCO:

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ORESTE RUSS PIRFO, ESQ.

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15

Special Counsel to the Governor

Executive Chamber

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Room 299

State Capitol

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Albany, New York 12224

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SueT 1

C O N T E N T S

2	<u>WITNESSES</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>	<u>BOARD</u>
3	Peter F. Cosgrove)					
	John L. Fakler)					
4	Michael Lipsky)	13,078	13,089			

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E X H I B I T S

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LILCO Exhibit EP-68

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L A Y - I N S

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Testimony of Peter F. Cosgrove,
 John L. Fakler and Michael Lipsky
 in Support of Emergency Planning
 Contentions 39, 40, 41, 44, 98,
 99 and 100, Training of Offsite
 Emergency Response Workers, and
 Supplemental Testimony

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Page 13,083

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P R O C E E D I N G S

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(10:11 a.m.)

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JUDGE LAURENSEN: We are back in session again.

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Before we start with the scheduled testimony on behalf of the County concerning training contentions, I wanted to review with you the agenda of items that we expect to take up some time during this week and to inquire if anyone has anything else they want to put on the agenda.

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At some point during the week, we would like to discuss with the parties the legal contentions, Numbers 1 through 10. We want a report concerning the status of court actions, a time table for the court proceedings, and recommendations or proposals from the parties concerning how these legal contentions should be resolved by this Board.

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The second thing on the agenda is looking ahead to the day in the very near future when proposed findings of fact get filed. And the things we would like to talk about there are a uniform table of contents to be agreed upon among the parties and possible page limitations on the proposed findings.

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The third item we have on the agenda is a Board inquiry at this point concerning the fact that several thousand Union employees of LILCO have been on strike for the past week. And we recall earlier discussions concerning the fact that LERO consists of hundred of Union employees

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1 of LILCO. At some point when we discuss this we wish to
2 inquire of LILCO, the NRC Staff, County and State whether
3 the strike presents an issue concerning the availability of
4 LILCO's Union employees for their designated LERO jobs which
5 should be pursued in this proceeding.

6 Fourth is the status of some previously filed
7 motions to strike on Contentions 85 and 88 which we reviewed
8 over the week-end. And we question whether or not these are
9 still viable. These are motions filed by both LILCO and the
10 County. But it was done prior to the filing of the supple-
11 mental and revised testimony last week.

12 And the last item is the schedule, of course,
13 for next week and for the remainder of this hearing. Those
14 are the five items that we have tentatively placed on the
15 agenda.

16 At this point, I will inquire whether the parties
17 have any other items that they wish to discuss some time
18 during this week that we haven't previously listed.

19 Hearing nothing further, I --

20 MR. MILLER: Excuse me, Judge Laurenson. If you
21 could just give me a second, I have a list of my own that
22 I would like to just glance at. I have just a couple of
23 comments.

24 One would be the Board's request of the parties
25 to, at some time during this week, discuss some of these

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1 matters, and I think the Board's inquiries are sound and
2 good inquiries. And in particular I think the motion of
3 the strike, the issue of the strike of LILCO employees is
4 a matter which should be addressed by the Board.

5 I think the Board has in the proper context the
6 relevancy and the significance of the strike. I might just
7 point out for the Board's information, I'm not sure if the
8 Board is aware of the significance of the number of LILCO
9 workers who are Union members and are members of LERO. And
10 it's our information, based on a letter from LILCO's attorneys,
11 that of approximately eighteen hundred LERO members twelve
12 hundred of those LERO members are Union officials, are Union
13 members.

14 JUDGE LAURENSEN: I didn't want to go into that
15 right now. I'm just listing this as an item that we are
16 aware of. And we really are doing no more at this point
17 than listing it for an inquiry before determining what, if
18 any, action we should take on this matter.

19 MR. MILLER: The other matter, Judge Laurenson,
20 is the subject of Contentions 85 and 88. I think last
21 Friday at the end of the hearing the Board requested some
22 report by the parties as to those two contentions. I am
23 prepared to state the County's position now if the Board
24 would like to hear that.

25 JUDGE LAURENSEN: Well, I don't want to hold up

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2 the witnesses we have now. The reason I listed these is so
3 that the parties would know what we intend to be discussing
4 during this week. And when we have an opportunity, I think
5 we can maybe sandwich this in, or set aside some time for
6 it.

7 Unless everybody else wants to go forward at
8 this point, I would assume that we can just hold this until
9 we get around to discussing all of these items on the agenda.

10 MR. MILLER: Judge Laurensen, there is a reason
11 I think for discussing Contentions 85 and 88 out of context
12 with these other issues. And we can do it later today;
13 that's fine. But I think we need to know what the Board's
14 position is going to be on those two contentions because of
15 the availability of Mr. Minor.

16 And we would like to resolve this matter today if
17 possible. But we can do it later today; that's fine.

18 JUDGE LAURENSEN: Well, let me inquire of the
19 other parties whether they would be prepared to go forward
20 on this, say, at the end of today's testimony?

21 MS. MONAGHAN: That would be fine with LILCO
22 provided it's done at the end of today's testimony.

23 MR. PIRFO: That's fine with the Staff.

24 MR. ZAHNLEUTER: That's fine with the State.

25 JUDGE LAURENSEN: All right. We will schedule
that specifically then for the end of this afternoon's

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session.

Are there any other items that any of the other parties believe should be placed on the agenda that I have tentatively described?

(No reply.)

All right. Let's move on. I believe that the next item on our schedule is the County's panel of witnesses on training testimony.

Mr. Miller.

MR. MILLER: Judge Laurenson, I believe that all three members of the County's panel on training have previously been sworn by the Board.

JUDGE LAURENSEN: That's correct. You are still under oath.

Whereupon,

PETER F. COSGROVE,

JOHN L. FAKLER

-and-

MICHAEL LIPSKY

were called as witnesses by and on behalf of the County of Suffolk and, having previously been duly sworn, were examined and testified as follows:

DIRECT EXAMINATION

BY MR. MILLER:

Q Gentlemen, do you have in front of you testimony

INDEXXXX

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2 entitled "Testimony of Deputy Inspector Peter F. Cosgrove,
3 Lieutenant John L. Fakler and Professor Michael Lipsky In
4 Support of Emergency Planning Contentions 39, 40, 41, 44,
5 98, 99 and 100, Training of Offsite Emergency Response
6 Workers?"

7 A (Witness Lipsky) Yes.

8 (Witness Cosgrove) Yes.

9 (Witness Fakler) Yes.

10 Q And does that testimony consist of 91 pages
11 with additional attachments to those pages?

12 A (Witness Lipsky) Yes.

13 (Witness Fakler) Yes.

14 (Witness Cosgrove) Yes.

15 Q And was this testimony prepared by you or under
16 your direct supervision?

17 A (Witness Fakler) Yes, it was.

18 (Witness Lipsky) Yes.

19 (Witness Cosgrove) Yes.

20 Q Are there any corrections or additions that you
21 would like to make to your testimony at this time?

22 (Witness Lipsky) No.

23 (Witness Cosgrove) No.

24 (Witness Fakler) No.

25 end #1

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1 Q Do you also have in front of you, gentlemen,
2 testimony entitled, 'Supplemental Testimony of Deputy
3 Inspector Peter F. Cosgrove, and Lieutenant John L.
4 Fakler, on behalf of Suffolk County Regarding Contentions
5 39, 40, 41, 44, 98, 99, and 100, Training of Offsite
6 Emergency Response Workers.'

7 A (Witness Cosgrove) Yes, I do.

8 A (Witness Lipsky) Yes.

9 Q And does this testimony consist of 21 typed
10 pages?

11 A (Witness Cosgrove) Yes.

12 A (Witness Fakler) Yes.

13 Q Was this testimony prepared by you or under
14 your direct supervision?

15 A Yes.

16 A (Witness Cosgrove) Yes, it was.

17 Q Do you have any corrections or additions that
18 you would like to make to your supplemental testimony at
19 this time?

20 A (Witness Cosgrove) No.

21 A (Witness Fakler) No.

22 MR. MILLER: Judge Laurenson, at this time,
23 the County would offer its testimony on the Training
24 issues, and its supplemental testimony regarding the training
25 issues into evidence. The County would state that at this

1 time there are Motions for Reconsideration of issues regarding
2 passages from the regular training testimony that were stricken
3 by the Board during the week of, I think, June 1st, but I am
4 not real sure.

5 And it was my understanding that the Board was
6 going to rule on the County's outstanding Motion for
7 Reconsideration in that regard. I am not sure that that
8 is something that should be resolved before this testimony
9 is admitted.

10 I would think that it should be, though.

11 JUDGE LAURENSEN: Well, we did previously rule
12 upon the Motions to Strike before we started the LILCO
13 Training testimony.

14 MR. MILLER: Judge Laurenson, for the Board's
15 benefit, the Motion for Reconsideration of passages stricken
16 from the regular training testimony of 91 pages, that Motion
17 was argued on June 12th at transcript pages 11,128 -- I am
18 sorry, at transcript 11,113 through approximately page
19 11,128.

20 In addition, at that time, Judge Laurenson, the
21 County moved in the alternative that passages -- corresponding
22 passages of the LILCO Training testimony should be stricken
23 if the Board did not grant relief to the County's request
24 for reconsideration, and that discussion is set forth on
25 transcript pages 11,128 through approximately 11,134.

1 I think all the issues are before the Board. They
2 were argued by all the parties, and I do not intend to repeat
3 arguments unless the Board would like to hear that at this
4 time.

5 JUDGE LAURENSEN: At this point, the Board is
6 not prepared to rule on the County's request for reconsideration
7 so the prior ruling stands. However, we will examine that
8 and we will notify you on our determination on the County's
9 request.

10 MR. MILLER: Judge Laurenson, the question I
11 would have is how is cross examination of the panel to
12 proceed, when as of now there are passages that have been
13 stricken, but the Board may reconsider and put those passages
14 back into the testimony?

15 JUDGE LAURENSEN: Well, as I said, the prior
16 ruling stands. That is, that for the purposes of direct
17 and cross examination at this point the testimony has been
18 stricken.

19 Now, we will obviously make the ruling while
20 the witnesses are here, so you won't have to bring them
21 back at some other time.

22 MR. MILLER: Then we admit the two pieces of
23 training testimony on behalf of the County into evidence
24 at this time, with the understanding just set forth by
25 the Board.

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JUDGE LAURENSEN: As I indicated, we have previously ruled on the Motions to Strike, and on the Motion to admit the supplemental testimony last week. Are there any other objections to this testimony that we haven't previously ruled on.

(No response.)

Hearing none, the testimony will be received in evidence and bound in the transcript following this page.

XXXXINDEX

(Above referenced document follows.)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)

LONG ISLAND LIGHTING COMPANY)

(Shoreham Nuclear Power Station,
Unit 1))

Docket No. 50-322-OL-3

(Emergency Planning)

TESTIMONY OF DEPUTY INSPECTOR PETER F. COSGROVE,
LIEUTENANT JOHN L. FAKLER AND PROFESSOR MICHAEL LIPSKY
IN SUPPORT OF EMERGENCY PLANNING CONTENTIONS
39, 40, 41, 44, 98, 99 and 100 - TRAINING OF
OFFSITE EMERGENCY RESPONSE WORKERS

I. Introduction

Q. Please state your names and occupations.

A. My name is Peter F. Cosgrove. I am a Deputy
Inspector in the Suffolk County Police Department and hold the
position of Executive Officer of the Third Precinct. Until
January 15 of this year, I was the Commanding Officer of the
Suffolk County Police Academy.

My name is John L. Fakler. I am a Lieutenant in the
Suffolk County Police Department and hold the position of
Commanding Officer of Media Services.

My name is Michael Lipsky. I am a Professor in the Department of Political Science, Massachusetts Institute of Technology.

Q. Deputy Inspector Cosgrove, please summarize your professional qualifications.

A. (Cosgrove) I have been employed by the Suffolk County Police Department since May, 1966. From February 1979 to October 1981 I was the Commanding Officer of the Department's Personnel Section responsible for, among other things, recruitment and selection, job descriptions and affirmative action. I have had a long association with the Suffolk County Police Academy, having been a lecturer at the Academy since 1972, and Commanding Officer of the Academy from October, 1981 until January 15, 1984. From December, 1972 until September, 1975, while holding the rank of Sergeant, I was assigned to the Academy's Basic Recruit Training program. As Commanding Officer of the Police Academy, I had general administrative responsibility for the operations of that facility and directed 33 full-time trainers. I also gave final approval to all curricula, certified satisfactory completion of courses to the State of New York, determined training needs, and ensured that all training programs met their objectives.

The Police Academy provides a broad range of training to 22 police agencies and several related law enforcement agencies. Included among the training programs offered by the Police Academy are New York State certified courses in criminal investigation, instructor development, radar operations, firearms training and emergency vehicle operations. The Police Academy also offers New York State certified programs in basic police training, supervisory training and in-service training. These programs include, among other things, training in the subject areas of traffic direction and control, community relations and crowd control, radio usage, and first aid.

I have been certified by the New York State Bureau for Municipal Police as a Police Instructor, and since September, 1972, I have been an Assistant Professor of Criminal Justice at Suffolk County Community College. I give training classes for the Suffolk County Sheriff's Department, the Suffolk County Health Department and the Suffolk County Department of Social Services in the subject of interaction with members of the public. I have also conducted police training classes for the New York State Bureau for Municipal Police, the City of Kingston Police Department, the City of Yonkers Police Department, Westchester County Sheriff's Office and the City of Syracuse Police Department.

I am an active member of the New York State Law Enforcement Training Directors Association and one of 13 New York Training Zone Coordinators responsible for Nassau and Suffolk Counties. I am a member of the Training Committee of the New York State Association of Chiefs of Police and have been nominated to become a member of the six member Police Examination Review Committee of the New York State Civil Service Commission. I also serve on the Occupational Education Advisory Council of Suffolk County Community College. My qualifications are further set forth in my resume, which is Attachment 1 to this testimony.

Q. Lieutenant Fakler, please summarize your professional qualifications.

A. (Fakler) I have been a member of the Suffolk County Police Department for 21 years, and have worked for the last 16 years as a supervisor and manager of training. I am a New York State certified Police Instructor.

Until March, 1984 I held the position of Administrator of Recruit Training and Media Services at the Police Academy. In that position I supervised the planning and execution of instruction given to entry level personnel, including instruction in the areas of traffic control, crowd control,

radio usage, first aid, and instruction designed to prepare the trainee to respond effectively in dangerous and stress-filled situations. In addition to supervising the training of recruits, I also oversaw the evaluation of students' performance after training. In my immediate past and present positions, I have been and continue to be responsible for managing the production, distribution and evaluation of instructional television programs for recruit and continuous training programs. I manage a staff of 10 individuals. My qualifications are set forth more fully in my resume, which is Attachment 2 to this testimony.

Q. Professor Lipsky, please summarize your professional qualifications.

A. (Lipsky) I am Professor of Political Science at the Massachusetts Institute of Technology, where I have taught since 1969. I have conducted research and written extensively on public policy, public service workers, and the nature of public service work involving interaction with the public. In addition to my theoretical work in this area, my research and writing have focused among other things on the characteristics of public service work involving stress and quick decision making. My writings on public service workers such as police

officers, teachers, social workers and legal services lawyers have appeared in such journals as the Harvard Educational Review, the Social Services Review, the Urban Affairs Quarterly, and Public Welfare. My book, Street Level Bureaucracy: Dilemmas of the Individual in Public Services, was awarded the Gladys E. Kammerer award of the American Political Science Association for the best book on national policy published in 1980 (co-winner). It was also awarded the C. Wright Mills award of the Society for the Study of Social Problems in 1981. My resume is Attachment 3 hereto.

II. Purposes and Conclusions

Q. What is the purpose of this testimony?

A. The purpose of this testimony is to address the concerns raised in Emergency Planning Contentions 39, 40, 41, 44, 98, 99 and 100. Unless otherwise indicated, the testimony is jointly sponsored by all of us.

Q. Please summarize your conclusions.

A. The LILCO offsite training program is seriously inadequate in a number of crucial respects, which we detail in the testimony which follows.

LILCO lacks adequate provisions for training non-LILCO personnel on whose assistance LILCO would rely in the event of an emergency at Shoreham. Consequently, there is no assurance either that those individuals would realize that LILCO has assigned them emergency roles, or that they would understand and know how to perform those roles properly or effectively.

The LILCO training program, including classroom sessions, drills, and exercises, does not, and in our opinion cannot, compensate for the LILCO workers' lack of experience. Because LILCO's training program is not well designed, it almost certainly does not compensate for the significant lack of pre-training experience among LILCO's emergency workers. The LILCO training program, including drills and exercises, almost certainly does not impart the information or develop the skills necessary for inexperienced LILCO personnel to perform their assigned emergency roles. Moreover, in our opinion it is very unlikely that if LILCO's training program had been well designed and properly implemented it could adequately train or prepare LILCO's emergency personnel for an emergency at Shoreham, because, as a group, LILCO's workers do not have and will not have the post-training experience needed for an effective response to an emergency. For these reasons there is no assurance that the jobs assigned to these personnel would be

performed properly or effectively in the event of a radiological accident.

In addition, the LILCO training program does not instruct emergency personnel in the proper use of emergency equipment, including communications equipment. In fact, the training of LILCO's personnel in the use of communications equipment almost certainly has been so deficient that it is unlikely that they would be able to communicate effectively during an emergency. As a result, the emergency personnel relied upon in the LILCO Plan would not and could not respond to an emergency at Shoreham in the coordinated manner necessary to protect the public.

Finally, the LILCO program does not effectively deal with the problem of attrition among either the LILCO employees or the non-LILCO personnel relied upon for implementation of the LILCO Plan. Every organization with a significant number of workers typically experiences attrition; workers leave for any number of reasons. Indeed, LILCO's recent austerity measures apparently have already resulted in serious attrition among the LILCO employees assigned to LERO. Because the LILCO training program does not offset the effects of attrition, there is no assurance that in the event of an emergency at the Shoreham

plant a sufficient number of trained personnel would be available to implement necessary protective actions.

The foregoing flaws in the LILCO training program lead us to conclude that there is no assurance that the protective measures contemplated under the LILCO Plan could or would be implemented in the event of an emergency at Shoreham.

III. Contention 98 - Inadequate Arrangements for Training Non-LILCO Personnel

Q. Are you familiar with Contention 98?

A. Yes. The Preamble to the training contentions, and Contention 98 read as follows:

Preamble to Training Contentions. 10 CFR Section 50.47(b)(15) requires that radiological emergency response training be provided to those who may be called on to assist in an emergency. In addition, 10 CFR Section 50.47(b)(14) requires that periodic exercises be conducted to evaluate major portions of emergency response capabilities, periodic drills be conducted to develop and maintain key skills, and that deficiencies identified as a result of exercises or drills be corrected. See also, 10 CFR Part 50, Appendix E, Section IV.F.

Under the LILCO Plan, in order to provide training "to those who may be called on to assist in an emergency," LILCO must ensure that both its own personnel and the personnel of non-LILCO emergency response organizations are adequately trained, and that they participate in drills and exercises

that meet the requirements of the regulations. See NUREG 0654, Sections II.N. and O. Intervenors allege in Contentions 35 - 44 that LILCO's Plan fails to demonstrate that adequate training can and will be provided to emergency response personnel.

Contention 98. The LILCO Plan states that emergency response training and periodic retraining "will be offered" to organizations, such as schools, hospitals, nursing homes, adult homes and other special facilities, which may be called upon to "take actions during an incident" at the Shoreham plant (see Plan, at 5.1-6). However, the Plan fails to demonstrate that such training and retraining will, in fact, be provided, nor is there any description of the training that "will be offered." Further, the Plan fails to demonstrate that training and/or periodic retraining will be provided to the personnel of emergency response organizations which are relied upon by LILCO to provide essential support services during an emergency, including the U.S. Coast Guard, DOE-RAP, the American Red Cross, and ambulance personnel. Therefore, the LILCO Plan does not comply with 10 CFR §50.47(b)(15), 10 CFR Part 50, Appendix E, Section IV.F, and NUREG 0654, Section II.O. Because the Plan provides no assurance that the persons necessary to implement the LILCO Plan will be timely and adequately trained, there can be no assurance that the protective measures described in the Plan can or will be taken in the event of an emergency, in violation of 10 CFR §50.47(a)(1).

2. Do you agree with Contention 98?

A. Yes. It is our understanding that the LILCO Plan relies on the personnel of schools, hospitals, nursing and adult homes and other special facilities to implement LILCO protective action recommendations concerning school children and the patients and residents of special facilities. (Appendix A at II-19 to 21, IV-169 to 178). In addition, LILCO expects personnel of the Department of Energy ("DOE") to perform radiological accident and dose assessment functions. (Plan at 2.2-3). And, LILCO relies on American Red Cross ("ARC") personnel to operate relocation centers. (Plan at 2.2-1). However, despite the expectation that these individuals would assist LILCO in implementing its offsite response, LILCO has not arranged to provide offsite emergency response training to these groups. Instead, the LILCO Plan merely states that training "will be offered" to organizations such as schools, hospitals and nursing homes (Plan at 5.1-6), and that annual training, as indicated in Figure 5.1.1, will be provided to those groups LILCO considers to be "support" organizations. (Id.) Figure 5.1.1 does not list personnel of either DOE or the ARC as among the non-LILCO personnel to whom training will be provided. Apparently LILCO does not intend to offer training to those non-LILCO individuals.

Under the LILCO Plan, personnel of schools and special facilities are expected to perform tasks, which, we understand, are not within the scope of their normal activities, and they are expected to perform those tasks according to the schemes established in the LILCO Plan. Unless these non-LILCO individuals receive training concerning both the tasks LILCO expects them to perform and the manner in which LILCO expects the tasks to be performed in the context of a radiological emergency and the LILCO Plan, there is no assurance that these non-LILCO personnel will fulfill the roles assigned them by LILCO. First, the fact that LILCO states in its Plan that it expects the employees of schools and special facilities to perform certain tasks, does not assure that those employees know about or understand LILCO's expectations. That is, some of them may not realize that they have emergency roles. Moreover, unless the staffs of schools and special facilities as well as ARC and DOE personnel receive such training, even if these non-LILCO individuals were to respond to a Shoreham accident, there would be no assurance that they would respond in a manner compatible with the provisions of the LILCO Plan. In short, unless training actually is provided (not just "offered") to the individuals in these groups, there is no assurance that those portions of the LILCO Plan that rely on the participation of non-LILCO personnel would or could be implemented.

IV. Contentions 40, 44.E, 44.F, 99 and 100 - Inadequate Training and Experience

A. Introduction

Q. Please state those portions of Contentions 40, 44.E 44.F, 99 and 100 that have been admitted by the Licensing Board for litigation.

A. Contention 40 states:

Contention 40. There is no assurance that LILCO personnel can adequately perform the emergency functions and duties they are assigned under the LILCO Plan. The Plan calls upon LILCO personnel to perform emergency functions which, in most instances, are unrelated to their LILCO job functions. For example, LILCO meter readers are to serve as Traffic Guides (OPIP 2.1.1, at 30), Customer Relations personnel are to serve as Evacuation Route Spotters (id., at 37), LILCO maintenance foremen and mechanics are to serve as Radiological Monitoring Personnel (id., at 18), and various designers, planners and analysts are to serve as Security Personnel (id., at 61-64). There is no assurance that LILCO training will compensate for this lack of job-related experience, especially when the tasks to be performed may be accompanied by high levels of stress and fatigue involving life-threatening situations. Training alone cannot prepare people for the actual stress and trauma that accompany emergency conditions. Experience is also essential.* / Moreover, training that is not regularly applied or used will be ineffective. Thus, even if their initial training were adequate, LILCO personnel will forget what was learned during that training. Following their training, LILCO personnel will be expected to perform their

regular job functions, which have no relation to their emergency roles, rather than applying or using their emergency training. This will minimize any benefits gained through the emergency training, especially since general classroom training, exercises, and almost all drills are only repeated on an annual basis, job-specific classroom training is only repeated on a semi-annual basis, and there are no incentives for LILCO personnel to learn or to retain the emergency training provided to them. Accordingly, LILCO cannot demonstrate compliance with 10 CFR Section 50.47(b)(15), or that the emergency functions and duties assigned to LILCO personnel under the Plan can or will be implemented, as required by 10 CFR Section 50.47(a)(1).

*/ For example, doctors and police officers are required to intern as residents and to serve as rookie police officers before their training is completed.

Contentions 44.E and F read as follows:

Contention 44. The LILCO Plan fails to demonstrate that drills and exercises will adequately test the training of emergency response personnel so as to ensure that personnel are familiar with, and capable of performing, their duties under the Plan as required by 10 CFR Section 50.47(b)(14), 10 CFR Part 50, Appendix E, Section IV.F, and NUREG 0654, Section II.N. Specifically:

E. The Plan fails to describe how exercises and drills are to be carried out to allow "free play for decisionmaking." NUREG 0654, Section II.N.3. (See FEMA Report, at 14).

F. Although the LILCO Plan asserts that "official observers from Federal, State or local governments will be on hand to evaluate and critique [an] annual

exercise," (Plan at 5.2-4), there is no indication in the Plan that any such entities have agreed to send observers as required by NUREG 0654, Section II.N.4. (See FEMA Report, at 14). In addition, although the Plan describes a proposed procedure for evaluating observer and participant comments, post-exercise/drill critiques will be performed primarily by LILCO, and evaluation of critiques and decisions as to necessary actions will be made by LILCO personnel. (Plan, at 5.2-4; OPIP 5.1.1, at 10c-10h). LILCO, however, will not be able to critique adequately its own Plan, including the exercises or drills conducted under the Plan, or to evaluate and/or act upon such critiques due to its lack of expertise and objectivity. Thus, deficiencies in the LILCO Plan and implementing procedures may not be identified or corrected.

Contention 99 states:

Contention 99. In violation of 10 CFR §50.47(b)(15), 10 CFR Part 50, Appendix E, Section IV.F, and NUREG 0654, Section II.O, the training provided by LILCO to emergency response personnel (both LILCO and non-LILCO) is inadequate and, as a result, in the event of a radiological emergency such personnel will neither understand nor be able to perform properly the functions assigned to them under the LILCO Plan. There is, therefore, no assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Shoreham; as required by 10 CFR §50.47(a)(1). The specific deficiencies in LILCO's training program, each of which contributes to the overall inadequacy of the training proposed by LILCO, are set forth below.

C. LILCO's classroom training sessions have been conducted by individuals who are neither experienced in, nor

knowledgeable about, the subject areas they are assigned to teach. In addition, the teachers are not experienced or trained in teaching methods.

G. The LILCO training program provides insufficient information concerning how trainees are to perform the specific duties and responsibilities assigned to them under the LILCO Plan. Instead, the "training" consists primarily of descriptive statements of job titles, job duties, and chains of command.

Contention 100 states:

Contention 100. In violation of 10 CFR §50.47(b)(15), 10 CFR Part 50, Appendix E, Section IV.F, and NUREG 0654, Section II.0, the LILCO drill and exercise programs are inadequate and do not prepare or train LERO personnel to perform properly or effectively their assigned functions under the LILCO Plan. As a result, there is no assurance that adequate protective measures can and will be implemented in the event of a radiological accident at Shoreham, in violation of 10 CFR §50.47(a)(1). The specific deficiencies in LILCO's drill and exercise programs are as follows:

B. During drills, LERO field personnel trainees are not accompanied to their posts by instructors. Therefore, whatever activities they may have performed during the so-called "drill" have not been supervised, observed, evaluated, graded, or critiqued. This renders the "field drills" meaningless as "training."

D. Contrary to the requirements of 10 CFR Part 50, Appendix A, Section IV.F and NUREG 0654, Section II.0.2, most LERO trainees are not required to perform their LERO jobs during training drills. For example, traffic guides did not direct traffic, and bus drivers did not drive buses

over bus routes. Thus, LILCO's drill program has not provided LERO personnel with an opportunity to practice their emergency duties and responsibilities.

G. The LILCO drills contain no terminal performance standards, and, consequently, there are no objective, observable criteria to be used by instructors in evaluating the performance of individual trainees.

We agree with these Contentions. Most of the emergency response jobs assigned to LILCO personnel cannot be performed properly without extensive experience. First, either a newcomer to such a job must bring pre-training experience to the job, or he must receive training that teaches him enough knowledge and develops sufficient skills to compensate for his lack of initial experience. Second, once the formal training is complete, the new worker must receive extensive real world experience in order both to develop fully needed skills and to retain the knowledge provided in the training.

The LILCO personnel assigned to LERO have been given the job of responding to a radiological emergency. That will be a difficult job, requiring those individuals to work under crisis conditions. They will have to deal with anxious evacuees. They will have to cope with unpredictable events, exercising independent judgment perhaps without the benefit of directives from superiors. These are not the kinds of jobs that can be

performed by beginners. However, they are the types of jobs which experience is essential. Nonetheless, very few LILCO personnel have experience relevant to the emergency functions and duties they are assigned under the LILCO Plan. With few exceptions, the day-to-day jobs of LILCO personnel are unrelated to their assigned LERO emergency functions and LILCO workers were selected for LERO in a manner that almost certainly did not identify individuals with relevant experience, aptitudes or skills. Further, the LILCO training classes and drills are unlikely to provide them with the experience necessary to enable them to perform their emergency functions. Moreover, once their training is complete, the LILCO workers in LERO are not given any of the on-the-job, inservice training that we believe to be necessary. Indeed, in our opinion, LILCO's training program did not and cannot provide necessary job-related experience. LILCO's proposal to train individuals who have no relevant experience and turn them into effective emergency response personnel is unrealistic. LILCO's proposed training program, standing alone, is not sufficient to train inexperienced workers for crisis situations. These deficiencies lead us to conclude that most LILCO emergency workers probably will not understand or be able to perform properly or effectively the emergency functions and duties they are assigned under the LILCO Plan.

B. The Need For Experience

Q. Why is experience important to emergency response functions?

A. An important portion of mastering tasks with any complexity must come from performing those tasks on a regular basis. Whatever the classroom instruction or practice in drills, a worker is not fully or finally trained unless he has applied that instruction and practice in a field setting. That is why occupations as varied as police officers, teachers, doctors, and plumbers all undergo a period of apprenticeship before they are regarded as full professionals.

Experience is especially important to emergency response jobs. First, no matter how well an instructor describes what it is like to perform tasks such as crowd control or traffic control under emergency conditions, the trainee cannot fully appreciate and understand what is entailed in performing those tasks under those conditions until he really performs them. Moreover, proper performance of emergency response jobs is often dependent upon skills being applied routinely or out of habit, thus permitting the emergency worker to make decisions quickly and confidently, leaving him free to deal with the contingencies that invariably arise under emergency conditions, without undue anxiety or agonizing.^{1/}

^{1/} For example, to perform his job properly a LERO traffic guide will have to be able to direct traffic out of habit

(Footnote cont'd next page)

Experience is also necessary to proper performance of emergency jobs, because emergency workers must often perform their jobs under great pressure and anxiety. That is the nature of emergency jobs. The first time an emergency worker faces danger or has to perform in an actual emergency situation, his performance may well suffer. Frequently, what has been learned in a controlled environment such as a classroom is simply forgotten or becomes difficult to apply in an emotionally-charged situation. Indeed, some inexperienced individuals may even attempt to avoid the danger or anxiety through flight when they are first encountered on the job. With others, the pressures and anxiety that accompany emergency conditions may result in lowering the quality of performance to an unacceptable level. With most people, however, the more they are exposed to the pressures of actually performing in emergency conditions through real experience, the more they become accustomed to such conditions and the better they perform.

(Footnote cont'd from previous page)

while dealing with distractions such as drivers who stop to ask questions or to seek directions. If such a driver were to stop in the intersection next to the traffic guide and impede traffic, the traffic guide could not simply ignore the driver. But if the traffic guide cannot direct traffic out of habit, he might have to stop directing traffic to answer the driver's questions, thereby possibly causing a traffic tie-up.

In addition, experience is important to effective job performance, because continuous exposure to actual work situations permits new emergency workers to learn from more experienced workers through observation and specific "coaching" about ways to handle difficult situations. Thus, the only way to learn to perform an emergency response job competently and effectively is through working at comparable jobs under emergency conditions on a regular basis. At first the worker may not do well, but with experience he will learn to work to the limits of his capabilities despite the emergency conditions. To a great extent, this is because the worker becomes more familiar with both his own abilities under pressured or stressful conditions and the requirements of his job. LILCO workers, however, will not have this necessary experience. Because they will not have had experience in performing their LERO emergency response roles prior to being called on to respond to a real emergency, large numbers of LILCO's workers are likely to perform badly in such an emergency, and as a result, to cause harm to members of the public.

In addition to the skills required to work under actual emergency conditions, emergency workers also need experience in order to develop the necessary skills specifically related to their emergency functions and duties. Some of the jobs

demanded of LILCO personnel under the LILCO Plan will not be easy jobs to perform. Tasks such as directing traffic, using specialized equipment (such as communications equipment) and controlling crowds, all of which LERO workers are expected to perform, require specialized skills.

For example, to control crowds such as those that may exist during an evacuation at important traffic intersections, relocation centers and transfer points, the LERO workers must be able to deal calmly with people in tense situations; they must be able to spot the individuals in a crowd whose neutralization will neutralize the crowd; they must understand the psychological factors that govern crowds, including especially an understanding of how to prevent the spread of panic; and they must be able to exert physical control over panicking or distraught individuals (whose actions threaten harm to others) by using techniques that minimize injury to the aggressor as well as to the controller. Similarly, in order to direct traffic, the LERO workers must be able to execute proper hand signals and position themselves correctly, while in the middle of active traffic; they must be able to remain calm and communicate courteously, even when confronted by angry drivers; and they must be able to deal with accidents and stalled cars without losing control of the traffic flow.

An individual can only master the skills needed to perform such emergency tasks through experience. He must routinely practice such skills under controlled learning situations, and he must have the opportunity to perform those tasks under real conditions so that he can learn from his experience. Skills needed for jobs such as those assigned to many LILCO personnel under the LILCO Plan cannot be mastered by listening to lectures or watching videotapes, or even by participating in the LILCO drills. Rather, these skills can only be learned effectively if, in addition to training, there are regular, real life opportunities actually to use those skills.

C. The LILCO Emergency Workers' Lack of Pre-Training Experience

Q. Do LILCO's emergency workers bring to their training the experience necessary for the proper performance of their LERO jobs?

A. As a group, no. Under the LILCO Plan, LILCO personnel are assigned emergency functions which, in most instances, are unrelated to their day-to-day LILCO jobs. For example, under the LILCO Plan, the three individuals designated as ambulance coordinators are a "LILCO Systems Designer-Information Systems," a "LILCO Interchange Residence Coordinator," and a "LILCO Junior Plant Records Examiner-Hicksville Accounting."

Among the LILCO personnel designated as traffic guides are meter readers, customer order representatives, and a senior resource energy specialist. One of the LERO home coordinators, expected to coordinate the evacuation of the handicapped at home, is an industrial gas engineer. And, among LERO security personnel are systems analysts, information processing forms supervisors, insurance analysts and an auditor. (See OPIP 2.1.1). Because their day-to-day LILCO jobs are so unrelated to their LERO jobs, most LILCO employees assigned to LERO do not have the experience essential to enable them to perform their LERO functions.

Q. Some LILCO employees are members of LILCO's emergency restoration organization. Would their experience in that organization help them perform the emergency functions required by the LILCO Plan?

A. Almost certainly not. Despite LILCO's repeated assertions to the contrary, LILCO workers who are members of the emergency restoration organization are unlikely to have gained enough relevant emergency experience through their work with that organization to enable them to perform their LERO jobs.

Q. What is LILCO's restoration organization?

A. It is our understanding that LILCO has within its workforce an organization that it activates when adverse weather, such as an ice storm, extensively disrupts utility service.

Q. Why would experience in the restoration organization not help LILCO employees perform their LERO roles?

A. It is our understanding that LILCO's restoration organization consists primarily of three types of workers. First, there are workers who travel along electrical lines and look up at the lines and related equipment in order to locate damage. Second, there are workers who take telephone calls from the customers who call in to report storm damage. And, third, there are workers who repair the equipment that has been damaged by the storm. (Deposition of Arthur C. Seale, October 13, 1983 ("Seale Deposition", at 25-26, 30-31, 34-36.) Simply put, these jobs -- looking at or repairing electrical equipment and recording customer complaints -- are completely irrelevant to the sort of work that LERO members would have to perform during a radiological emergency. Almost all LERO jobs require skills that are not at all involved in restoration-related work.

Furthermore, it is our understanding that most of the restoration organization members who were selected for positions in LERO are in sections of the restoration organization that, to our knowledge, have not been mobilized to respond to an emergency since January, 1978. (See Seale Deposition at 71-73; Tr. at 867). Thus, even if membership in the restoration group were somehow relevant to the emergency response positions under the LILCO Plan, that membership would not provide any significant experience, because personnel are called out for emergency duty so infrequently.

D. LILCO's Training Program Does Not Compensate for the LILCO Emergency Workers' Lack of Experience

1. Introduction

Q. Is the lack of experience of LILCO's emergency personnel you have just discussed counterbalanced or offset by the training provided to LILCO's personnel under the LILCO training program?

A. No. As we stated before, a worker can possess the experience necessary to perform a difficult job by two means: he can bring experience to the job, or he can acquire experience after his training. As we have just described, LILCO's emergency workers as a group have brought almost no relevant

experience to their LERO jobs. We will discuss later in this testimony why LILCO's training program does not provide necessary post-training experience.

Generally speaking, a formal training program -- that is, a program of classes and extensive practice under controlled conditions -- if it is good, can compensate to some extent for a lack of initial experience. Even a good program, however, cannot overcome a complete absence of post-training experience.

A good training program consists of three elements. First, a good training program begins with selection, through which candidates who possess the talents and abilities necessary to learn the jobs are identified. Second, there is the formal training provided in classes and practice sessions such as drills. And, third, there is post-training experience, in which the new worker learns to apply his learning in real world situations.

LILCO's training program, however, is not a good training program. In fact, based upon our review of the LILCO training program, we believe that there are significant problems with that program with respect to each of these three elements. As a result, LILCO's training program does not overcome the substantial lack of emergency experience among LILCO's personnel.

2. LILCO's Selection Process Does Not Identify Candidates Who Are Likely to be Able to Overcome Their Lack of Experience

Our concerns begin with LILCO's process for selecting LILCO personnel to serve in LERO. Any training program, to have a realistic chance of success, must begin with a pool of trainees who have the talents and motivation necessary to learn the subject(s) being taught. The recruitment process really is an essential element of any training program. That is why almost all schools and training programs have entrance requirements. Like any production process, one cannot expect success unless one can control the "raw materials" with which one must work. The subjects of LILCO's training instruction are those people who under the LILCO Plan would be responsible for performance of emergency response functions and duties necessary to protect the public health and safety. Because of the importance of these individuals' roles, LILCO should have exercised care in selecting LILCO personnel for LERO. LILCO, however, did not do this.

~~Q. But doesn't the fact that LILCO's LERO workers volunteer for membership in LERO mean that they have the necessary motivation to perform emergency response work?~~

~~A. Even if these individuals did volunteer, they are not necessarily motivated to learn emergency response work, because they could have volunteered for reasons unrelated to the desire to be emergency workers. For example, they may have volunteered out of a desire to help LILCO survive, to please their bosses, or because of peer pressure. Indeed, because, as we will discuss in more detail below, LILCO has told its LERO workers repeatedly that it is highly unlikely that LERO would ever be activated, some may have volunteered because they thought membership in LERO would not require much of them, but ~~would be viewed favorably by their superiors.~~~~

LILCO employees are assigned emergency response jobs based primarily on what LILCO has described as an attempt to match the skills each individual is assumed to have because of his regular LILCO job with the skills assumed to be necessary for his LERO job. (See Deposition of John Weismantle, September 7, 1983 ("Weismantle Deposition"), at 66). That would seem to indicate that LILCO too has recognized the value of prior experience. However, LILCO's purported attempt to match LILCO and LERO job positions that share common skills is unsuccessful. As we discussed above, with few exceptions, LILCO personnel are assigned emergency response jobs in LERO that are unrelated to their LILCO job functions. Indeed, during his deposition, Mr.

Weismantle, the Manager of the Local Emergency Response Implementing Organization, was asked to explain why information processing systems designers were designated to be security personnel under the LILCO Plan. His response was that the job of security personnel does not have "a particular skill requirement." In fact, according to this high-ranking LILCO manager, "[m]any of the jobs in LERO simply require somebody who can think and can learn and [there are] many, many different types of people to perform them adequately." (See Weismantle Deposition, at 80).

We find this response to be starkly revealing of an uninformed attitude toward the importance of careful selection and assignment of LILCO personnel to emergency response positions in LERO. There are skills and aptitudes needed for most of the emergency positions described in the LILCO Plan, including security. A certain temperament and certain physical abilities are required to perform adequately the security functions required under the LILCO Plan. Security personnel, for example, may have to maintain order, and to do that they must be forceful, confident and physically able to impress and confront people. Many people who can think and learn cannot restrain an upset evacuee who refuses to leave the rest of his family in order to be decontaminated; therefore, because the

abilities to "think and learn" apparently are the primary criteria used to select security personnel, it is quite likely that many of LILCO's security personnel do not have the skills and abilities necessary to perform their jobs.

Similarly, some traffic guides have been selected, because they have LILCO jobs that require them to work outside offices and to "go out into the communities." (Weismantle Deposition, at 75.) First, as we discuss below, it is unlikely that many LILCO employees in LERO are familiar with the area relevant to their LERO jobs, the 10-mile EPZ. Moreover, there is more to directing traffic than familiarity with roads. For example, physical coordination and command presence are both necessary. Nevertheless, LILCO's selection process apparently does not look for individuals with these characteristics.

In addition, LILCO's so-called skill matching process appears to have ignored the fact that many of the emergency response positions under the LILCO Plan require the exercise of good judgment under pressure. This is true, for example, of traffic guides, security personnel, evacuation route spotters, road crews, ambulance coordinators, bus coordinators and staging area coordinators. Traffic guides may have to respond

to questions from angry drivers or may have to react quickly to driving behavior that snarls an intersection. Ambulance coordinators may have to allocate judiciously a limited number of vehicles to achieve a safe evacuation of homebound individuals and health care facilities. In the case of the traffic guide, bad judgment could result in a traffic jam that would stall the evacuation of large numbers of people. In the case of the ambulance coordinator, bad judgment could result in patients and homebound individuals being stranded without transportation out of the EPZ. Potential scenarios of this sort which could disrupt implementation of the LILCO Plan are possible for many of the emergency positions under the Plan.

We are not suggesting that LILCO employees do not have good judgment. But even assuming that most LILCO employees are intelligent and therefore can "think and learn," many people do not have the ability to make decisions and take actions under stressful conditions. Some people function better under pressure than others.

(Cosgrove and Fakler) We have seen police recruits and probationary officers who were able to learn most of the knowledge they needed to be police officers and thus did very well in training situations but who nevertheless failed to

become police officers because they were unable to demonstrate good judgment under actual emergency conditions.

(All witnesses) Despite the importance of being able to cope with decision making under pressure, however, LILCO apparently made no attempt to identify potential LERO members who will be able to make the right decision in emergency conditions.

In short, in our opinion LILCO is mistaken in its apparent view that almost anybody can learn and perform the emergency functions and duties described in the LILCO Plan. LILCO's inadequate selection process has resulted in at least three adverse consequences. First, as discussed above, many emergency positions have been filled by LILCO employees with no previous experience relevant to their emergency functions and duties under the LILCO Plan. Without such experience, LILCO's personnel would be able to perform their LERO jobs properly and effectively only if they receive adequate training and subsequent on-the-job experience. Second, the LILCO selection process apparently does not identify and exclude individuals who are unable to learn either what their emergency response jobs are or how to perform them. As a result, it is even more unlikely that the LILCO training program could compensate for the lack

of relevant emergency experience among LILCO personnel. Third, the selection process does not permit assessment of whether any specific individuals might be potentially ill-suited for emergency work. These deficiencies are interrelated, and are very serious with respect to a training program like LILCO's that has no post-training testing or evaluation.

3. The LILCO Formal Training Program Does Not Compensate for LERO Members Lack of Experience

Q. You have discussed the first element of a training program, the need for a selection process that finds candidates with the necessary abilities. To focus on the second element, does the LILCO formal training program compensate for the lack of experience among LERO members?

A. No, there are serious deficiencies in both LILCO's classroom and drill sessions. As we have said, if well designed and properly implemented, a formal training program could compensate for an absence of previous experience. But LILCO's program is not such a program, and therefore we believe that few LERO workers will learn their assigned emergency jobs to a satisfactory level of competence, and their inexperience will not be overcome.

Q. Please describe LILCO's training program.

A. LILCO's training program consists of classroom sessions and drills. Emergency response workers attend classes covering general topics, such as notification of emergency workers and the health consequences of radiation, as well as classes concerning specific emergency positions within LERO. LILCO has organized its classroom instruction into subject area "modules," each of which consists of a workbook or a videotape or both. At each classroom session, the instructors hand out a "workbook" and allow the students to read the workbooks and complete, in open book fashion, the self-review exercises contained in the workbooks. The instructors also show videotapes, if a videotape accompanies a classroom session, and attempt to answer trainees' questions. (See Deposition of Ronald A. Varley, October 4, 1983 ("Varley Deposition"), at 82-84.)

It is our understanding that after the classroom program is completed, LILCO holds training drills. Emergency response personnel attend those drills relevant to their emergency response positions. In addition, some trainees attend seminar sessions labelled "tabletop drills" in which they discuss their emergency roles or work through paper problems. It is our

understanding that training exercises may also be held after the drills have been evaluated by LILCO.

a. LILCO's Classroom Program is Deficient

Q. How is LILCO's classroom training program deficient?

A. To begin with, the proper performance of many LERO jobs depends on the development of skills. For example, LERO communicators and monitoring personnel must know how to use their equipment; and decontamination workers must learn complicated routines for cleaning both evacuees and vehicles. However, the LILCO classroom program does not teach emergency response workers the skills necessary to their particular emergency positions in LERO; therefore, because as a group they lack relevant experience, they almost certainly will not fully understand or know how to fulfill their emergency response jobs.

At LILCO classroom sessions, the training instructor distributes a workbook, shows a videotape, lets the students read the workbooks and answer the review questions in open book fashion, and then attempts to answer questions that came up while the students were reading. (See Varley Deposition, at 82-84). Skills simply cannot be developed by watching

videotapes or reading workbooks. Skills can only be developed through instruction, hands-on practice and experience.

Moreover, there are serious flaws in the LILCO classroom program related to the instructors and the materials themselves. As asserted in Contention 99.C, it is unlikely that LILCO personnel would learn enough in their classroom sessions to enable them to perform their emergency response roles properly or effectively, because most of LILCO's classroom instructors are not experienced in or knowledgeable about most of the LERO jobs they attempt to teach. Very few of the LILCO instructors appear to have prior experience in areas such as security, traffic control, crowd control, command and control, or communications.^{2/}

^{2/} LILCO has apparently recognized and attempted to correct this defect, because LILCO has informed the County that it also employed two former police instructors, Howard Krieger and Harry Babb, to teach courses on traffic direction. However, this instruction does not allay our concerns. First, to our knowledge these instructors taught no other classes, and therefore only a limited portion of LILCO's emergency workers were exposed to their instruction. Second, traffic control, as we discuss elsewhere in this testimony, is not something that can be taught in a classroom. Indeed even controlled practices are of only limited value. To learn to do it right, almost all trainees need experience on real streets under real conditions.

Because LILCO's instructors lack knowledge and experience in the jobs they attempt to teach, it is doubtful that they are capable of teaching the LILCO workers how to perform those jobs properly. First, it is unlikely that a LILCO instructor who had never performed a particular job, such as performing security functions, could teach someone else how to perform that job. To teach a job such as that effectively, an instructor should be able to draw from his own experience to provide examples of actions relevant to the job. Students' perception of an instructor's credibility is strengthened if he speaks from experience. Also, an instructor is better able to respond to trainees' questions if he can cite examples from his experience to clarify a point.

Further, LILCO's training program does very little to offset the lack of job-specific knowledge and experience among its instructors. Apparently, the instructors' preparation for their teaching duties is limited to a review of lesson plans and the same training materials given to the trainees. (See Varley Deposition, at 96).

First, it is a fundamental of good instruction that the instructor must know and always seek to achieve his teaching objectives, that is, the things that the students should learn

by the end of the lesson. Unless the instructor knows specifically what items of knowledge he is expected to impart or skills he is expected to develop in his students, the lesson is likely to be directionless and unfocused. Without clearly stated goals, that include indications of the level of proficiency the trainees are expected to obtain, the instructor will not know how much time or emphasis to devote to any particular point. Nevertheless, LILCO instructors are not provided objective, observable teaching goals.

It is also important to effective training that an instructor be viewed as an authority on his subject. A student is much more likely to pay close attention to an instructor, if the student believes the instructor knows the job he is attempting to teach. An instructor can acquire necessary authority through his own personal experience in the job and through access to and familiarity with pertinent resource materials. An instructor can draw on either to respond to questions and problems that go beyond the content of the materials given to the students. For example, if a student challenges the instructor and says that he is sure the instructor is mistaken, the instructor can draw on his experience or refer to listed reference materials as the authority on which he bases his view. Or, if a question is asked to which the instructor does

not know the answer, he can direct the student to reference materials in which the answer can be found. Because, as we discussed before, most of LILCO's instructors lack experience in the jobs they attempt to teach, references to resource materials would be especially important to them. ~~But the LILCO training program does not include such information for instructors. Neither lesson plans nor the other training materials contain references to authority.~~

Similarly, review by LILCO's training instructors of the training materials provided to trainees does little to overcome the instructors' lack of job-specific knowledge and experience. It does permit them to become familiar with the material they are expected to teach, but that is not enough. Since the instructors are not trained or experienced in the emergency jobs they teach, ~~and because they are given no extra materials except inadequate lesson plans,~~ they really know nothing more than the trainees. As a result, LILCO's training classes are really examples of the blind leading the blind.

Q. What is the basis for your agreement with Contention 99.G?

A. As asserted in Contention 99.G, LILCO's training workbooks and videotapes do not contain enough information to

teach workers how to perform LERO jobs. Many of the job-specific modules, both workbooks and tapes, display indifference to the kinds of problems likely to be encountered by the workers in the field. Instead, they concentrate on orienting personnel to the outlines of organizational hierarchy and technical details associated with various tasks. This may be appropriate for some simple jobs, but it is an ineffective way of teaching complex jobs such as those involved in traffic control and coordinating the evacuation of special facilities.

Telling someone what to do does not teach him how to do it. We could tell you that as part of your job you are going to speak French, but that would not teach you how to speak French. Similarly, our simply telling you that you are to direct traffic does not prepare you for that job. There are three basic steps to teaching anyone a job. The trainee first must be given the knowledge necessary to perform the job. Next he must be led to appreciate or develop the proper attitude toward the information, and then he must be allowed, through practice, to learn how to apply that knowledge.^{3/} Classroom training can be very useful for the first step imparting the

^{3/} . These three stages are described as cognitive, affective and psychomotor.

needed knowledge. However, many of LILCO's classroom materials do not impart such job-specific knowledge.

For example, Module 12, Traffic Control, (the workbook portion of which is Attachment 4 hereto) is the job specific module given to traffic guides and road crews. But it does not impart necessary information about how to direct traffic or how to remove obstructions from the middle of crowded roadways. Module 16, Security, (the workbook portion of which is Attachment 5 hereto), contains no information about how to control crowds or neutralize disruptive individuals who threaten the safety of others. Moreover, neither the videotape or workbook portions of this module instructs the trainees about how far they can or should go in using force to restrain people who disregard their directions. For example, the module does tell the trainees to keep news reporters out of the EOC, but it does not tell them how to give such orders so that they are likely to be obeyed, nor does it tell them what to do if the orders are not obeyed.

LILCO's training program appears to be based on a misunderstanding of the instructional needs of LERO workers. Apparently, some of LILCO's instructors have in the past been involved in training offsite emergency workers such as police and

bus drivers in connection with other nuclear plants. In those situations, however, unlike Shoreham, the police and bus drivers already knew how to perform their jobs, and they only needed to be trained in how they were expected to fit into the overall plan.^{4/} LILCO's situation is very different. LILCO's offsite emergency workers do not already know how to perform their response jobs. Therefore, they must be taught both how to perform their jobs and how their roles fit into the LILCO Plan. However, it is clear from our review of the LILCO classroom materials that primarily the LILCO training program only attempts to teach the workers how they fit into the overall Plan. The LILCO classroom training program does not compensate for the fact that LILCO's workers do not have experience performing the jobs assigned to them under the LILCO Plan.

~~But even in the effort to teach the trainees about the content of the Plan, LILCO's classroom materials are inadequate, because most classroom modules were designed to teach~~

^{4/} A simple analogy that illustrates the type of training needed for offsite workers at other nuclear plants where utility employees are not relied upon for almost all offsite roles, is the following. When the police mount a large operation, they develop an operation plan and brief the participants on their roles under the Plan; the participants do not need to be taught how to conduct surveillance or make arrests.

too many job functions or emergency positions. For example, the module regarding traffic control, Module 12, was intended for 15 different job categories. Module 12 was the only task-specific module for nine different job functions within LERO. But because the module was designed for too many job groups, it was not specific enough about any one job. For example, traffic guides had to listen to material about the notification and mobilization of road crews, and the road crew members had to listen to the procedures by which the evacuation route spotters would make sure their equipment was complete. In fact, Module 12 even described the reporting scheme of the portion of LERO responsible for special facility evacuations, although none of the LERO workers involved in special facility evacuations even received Module 12. A traffic guide does not need to know that the Home Coordinator is supposed to report to the Special Facilities Evacuation Coordinator. Giving trainees too much irrelevant information leads to inattention, which increases the likelihood that they will miss information that they really do need.

Similarly, the module for special evacuations, Module 13, was intended for 17 different job categories. In that module, bus dispatchers and bus drivers had to listen to the notification and mobilization process of the Director and Manager of

LERO, and descriptions of how the Health Facilities Coordinator would contact and interact with hospitals, and nursing and adult homes. That information will not help the dispatchers or drivers perform their specific jobs.

The point is that because LILCO attempts to teach too many jobs with some of its modules, those modules do not give enough specific attention to any of the individual jobs covered by those modules. This is true with respect to both the attempt to teach trainees how to perform their jobs and the attempt to teach trainees their roles under the LILCO Plan. The result is that LILCO's trainees are unlikely to receive job-specific knowledge that they will need in order to perform those jobs and to know how they fit into the overall Plan. Perhaps with experienced emergency workers, such inadequate preparation would not be a fatal flaw to a training program. But with inexperienced workers, it just is not enough.

~~In addition, some of LILCO's training materials undermine what little job-specific instructional value they do contain by presenting inaccurate or contradictory information. For example, the videotape for Module 16, Security, instructs EOC security personnel to establish a post in the lobby of the Brentwood EOC, but the same videotape shows a post established~~

outside the building. Likewise, Videotape 14, "Transportation Coordination," instructs the trainees that they will be supplied with hand-held radios, and clearly shows a hand held radio among the equipment to be supplied to bus drivers. However, LILCO will not supply its bus drivers with any radios. Moreover, other videotapes show LERO workers using hand-held radios. However, LILCO has informed the County through discovery that LERO workers will not use hand-held radios. Similarly, Videotape 12 on "Traffic Control," depicted only unrealistic traffic conditions (only a handful of cars drove through the portrayed traffic control point), and showed at length what traffic guides are to do when the Suffolk County Police arrive to assume the task of directing traffic, despite the fact that Suffolk County personnel are, by law, prohibited from implementing the LILCO Plan. The contradictory and misleading information contained in these videotapes constitutes a serious deficiency in the LILCO training program.

Q. Contention 40 states that there are no incentives for LILCO personnel to learn or to retain the emergency training provided to them. Do you agree?

A. Yes. LILCO's training materials frequently downplay the importance of the training or the need to retain the

material being taught. For example, in LILCO's videotapes the statement "In the unlikely event of an accident at Shoreham..." is repeated over and over. Similarly, the traffic guides are told:

"A recent study shows that [the population of the EPZ], plus half the residents outside the 10-mile radius, could evacuate the area in under 10 hours with no traffic flow assistance at all.... A traffic guide will be just that -- a guide. An employee filling this role would not have police authority and would only function to help drivers. Residents may or may not choose to follow the advice that is given. Again, the success of evacuation will not depend on residents obeying LILCO traffic guides."

(See Local Emergency Response Organization, Employee Information, at 4.)

In a videotape entitled "LILCO - W. Uhl, 5/16/83" that was shown to all LILCO employees, LILCO President Wilfred Uhl stated that it was possible that the Nuclear Regulatory Commission might eliminate the requirement of planning for an evacuation, "in light of recent scientific information that indicates that nuclear accidents would not produce nearly the serious consequences that we always assumed they would." Further, he repeatedly suggested that LERO would probably never be activated with statements such as the following: "Now, you know that it is extremely improbable that anything like that

[evacuating the 10-mile EPZ] would ever have to be done." And: "[i]n a severe accident of a type that has never happened in the history of nuclear power and has a very remote possibility of ever occurring there might be significant amounts of airborne radiation which would be released from the plant vent over a period of time." Mr. Uhl also said: "Now in a real accident I think Suffolk County would really become involved and would really help. I certainly think, for example, that policemen would do their jobs as they do their jobs under all sort of trying conditions." When trainees are in effect told that their "training" is a pro forma exercise essentially for show, and that they will never really have to perform the job they are supposed to learn, those trainees have no reason to take the training seriously or to retain the information they are provided. Such statements are certainly likely to reduce the attention given by trainees to the instruction. The frequent suggestions that they will never have to respond, or really do anything serious even if they do respond, likely result in many trainee's actually learning very little about how to perform their emergency jobs. The training program provides little if any motivation for substantive learning because the students are told, in essence, that the training likely will never need to be put to use.^{5/}

^{5/} Indeed, as we discuss below, they are not even given the motivation of having to demonstrate their learning through testing.

The results are apparent and predictable. For example, it is our understanding that when Suffolk County deposed three randomly selected LILCO workers in LERO, those individuals had a hard time recalling the substance of the training they had received. For example, two of them could not even recall that they had received certain modules. (See Deposition of John Barrows, September 22, 1983 ("Barrows Deposition"), at 66; deposition of Ronald Brady, September 22, 1983 ("Brady Deposition"), at 27). Similarly, one of these workers did not know the locations of the EOC, the Shoreham Plant, or the Staging Areas. (Barrows Deposition, at 63, 71, 76.) Another did not know whether his pager would make a noise when activated. (See Deposition of James Biggers, September 22, 1983, at 28.) Thus, there appear to be serious retention problems among LILCO's trainees.

Q. What about the practical demonstrations described in the LILCO Plan? Are these practical demonstrations able to mitigate the lack of experience among LILCO's personnel?

A. No. First, it should be noted that LILCO has informed the County that although the Plan at 5.1-5, 5.1-6 refers to individual training materials called "Practical Demonstrations," no such separate training materials exist. (See

letter dated February 2, 1984 from J. Monaghan to J.

Birkenheier.) Moreover, the type of practical demonstrations described in the LILCO Plan -- video presentations, pen and paper exercises, and procedure walk-throughs -- are not sufficient to develop the skills needed for emergency response jobs and cannot compensate for the lack of emergency experience among LILCO's personnel. Videotapes alone are not good practical demonstrations, because although they show things to the trainees, they do not give the trainees the chance to practice. Similarly, "paper exercises" are only valuable if the skills being developed are "paper" skills, such as those of an accountant. A "paper exercise" cannot develop skills needed to communicate on a radio or direct traffic.

Similarly, the scenarios for LILCO's so-called "tabletop drills," show that rather than being drills, these are really "seminar type sessions." (See Long Island Lighting Company Local Emergency Response Organization Communications Tabletop Drill, at 2.) In seminars trainees might talk about procedures or describe how they would react to posited problems. But talking is not doing. The tabletop drills were really informal reviews of procedures with feedback to trainees. This sort of session could help to teach the Plan to trainees, but it could not teach job performance.

Similarly, LILCO's equipment "demonstrations" appear to afford little opportunity to practice skills. First, those demonstrations are limited primarily to personnel dosimetry and radiological monitoring equipment. Thus, most trainees do not receive practical demonstrations for equipment necessary to the performance of their emergency response assignments. In addition, it is not enough for the instructor to show the trainees some equipment and let some trainees take turns handling it. If a particular job is dependent on the use of equipment, the workers must practice the use of that equipment over and over again. Handling it once in a class is not enough.

~~An additional significant problem with the LILCO training materials is the absence of evaluation of the trainees' performance. In order for the classroom sessions to give trainees simulated experience, there should be testing in which the trainees' performance is evaluated against objective, observable standards. In this way, the trainees would have to perform and show that they are learning what is supposedly being taught. The students would gain at least a slight amount of simulated experience through performing, and the instructors would be able to evaluate the abilities of each trainee. Further, there would be some way to gauge whether further~~

instruction in a given area were necessary. The need for testing is especially important with regard to the LILCO training program, because the LILCO workers come into the training program with little relevant experience, and there was no selection process that screened out individuals unlikely to succeed. Testing would identify those people who had failed to overcome their great lack of experience and learn their jobs. Despite these requisites of effective training, however, there is no real testing of trainees included in the LILCO classroom training program.

The training workbooks do contain self-review exercises, but these exercises are not utilized by LILCO as a testing technique. (See Varley Deposition, at 111-12.) Instead, the trainees are allowed to work through these exercises in open book fashion, the instructors review the trainees answers while the trainees complete the exercises, and the exercises are never graded. (See Varley Deposition, at 109, 111-112.)

~~Even if the review exercises were used as tests, however, they would be ineffective, because many of these exercises do not even reflect the learning objectives listed at the beginning of the workbooks. For example, one of the stated objectives of the workbook for Module 13, Special Evacuations.~~

is that the trainees should "have an understanding of the actions outlined in OPIP 3.6.5." Question 10 of the review exercise for Module 13 is the only question in that review that deals with OPIP 3.6.5. But question 10 is a true/false question that asks whether OPIP 3.6.5 contains a list of persons who would need assistance. That is, there are no questions in the review exercise for Module 13 that test whether the trainee has learned anything about the actions outlined in OPIP 3.6.5, even though imparting that knowledge is a stated object of the module. Likewise, the workbook for Module 5, LERC Notification, states that one of its objectives is that the trainee "be able to demonstrate this understanding by . . . identifying what response or actions he/she will take upon notification." However, the review exercise does not ask the trainee what actions he or she will take upon notification. In workbook 6, Public Notification, there are no review questions related to any of the stated objectives. Workbook 9, Section I contains only a table of contents, not objectives, and Workbook 14, Transportation Coordination, contains no objectives at all, only a review exercise. Without observable objectives, a review is meaningless, because there is no achievement for a review to measure.

Moreover, it is impossible for a trainee to fail out of the LILCO training program, (see Varley Deposition, at 111-12), and therefore, trainees who fail to learn anything about their jobs will remain in LERO and will be relied upon by LILCO to protect the public in the event of a Shoreham emergency. Without any accountability, it is possible that LILCO emergency workers will not learn enough to perform their jobs, but LILCO has no way of knowing who those people are.

In any event, because trainees ~~are not tested on classroom training, because they~~ are given almost no opportunity to practice the skills they need to develop, ~~and because the classroom instructors never evaluate the abilities of trainees to perform their emergency jobs,~~ it is unlikely that LILCO's classroom training program could or would overcome the general lack of relevant experience of LILCO's personnel. ~~In fact without testing and evaluation, it is impossible for LILCO to provide any assurance about the capabilities of its emergency workers. LILCO does not know what those capabilities are.~~

b. LILCO's Drill Program is Deficient

Q. So far you have addressed the LILCO classroom training program. Do the drills proposed by LILCO compensate for the lack of relevant experience among LILCO personnel or for the deficiencies in classroom training?

A. No. LILCO's drills do not compensate for the lack of experience among LILCO's personnel. Even under the best of circumstances, no drill program can fully compensate for the significant lack of experience that exists among LILCO's personnel. Simulated experience is helpful, but is not sufficient to prepare emergency response workers for their jobs. That is why police and fire agencies require field training.

For example, when a police recruit in Suffolk County graduates from the Police Academy, he spends the next three months working exclusively with experienced field training officers. Virtually every working minute, that new cadet is being observed and evaluated under real conditions. Moreover, during this time the training officer can correct errors made by the new cadet and advise him about how to improve his performance. The point is that rookie police officers are assigned to a normal routine and perform real police work out in the community, under close supervision and scrutiny by an experienced police instructor. They are being trained while they work. This arrangement is typical of police departments and reflects the fact that an emergency worker cannot learn to perform his job well without real experience.

Thus, even if LILCO were to develop a good drill program for emergency response workers relied upon by the LILCO Plan, it would not be sufficient. Moreover, with respect to reducing the adverse effects of inexperience, LILCO's drills are neither well designed nor adequately implemented. Consequently, they are not helpful in providing emergency experience to LILCO's personnel.

Q. Please explain.

A. In connection with Contention 99 we noted the three basic steps involved in teaching a job: imparting information, developing an appreciation of it, and allowing the trainee to practice applying the information necessary to the performance of the job. This last step can be accomplished in part by drills. As we discussed above, we doubt very much that the LILCO classroom program imparts enough job-specific information to allow LILCO emergency workers to perform their jobs properly and effectively especially in light of the inadequate selection process, the trainees' lack of experience, ~~and the repeated suggestion that the training will never have to be put to use.~~ Moreover, we do not believe that the LILCO drills provide the trainees an adequate opportunity to learn how to apply what little knowledge they may have learned.

To begin with, LILCO has made it impossible for many trainees to learn their jobs in drills because, as asserted in Contention '00.D, during those drills many trainees do not get to practice the skills they will need to perform their emergency functions and duties. For example, although directing traffic is a skilled job which can be learned only through practice and experience, LILCO's traffic guides do not direct traffic, even under simulated conditions, during either the traffic guidance drills or the staging area drills. Instead each traffic guide is deployed at a traffic control point, reports in by radio and returns to the staging areas. (See Varley Deposition, at 156, 157); Long Island Lighting Company Local Emergency Response Organization Traffic Guidance Drill, at 7; Long Island Lighting Company Local Emergency Response Organization EOC/ENC/Port Jefferson Staging Area Drill at 10, 13.)

LILCO's bus drivers face a similar problem. According to LILCO, these personnel were selected because they were familiar with driving large vehicles. (See Weismantle Deposition, at 66). However, familiarity with driving a large vehicle is only one aspect of the job of driving an evacuation bus. The driver must not only know how to drive the vehicle, he must be able to deal with passengers who will likely be anxious and worried

about their personal safety. LILCO's bus drivers are given no opportunity to learn or to practice their jobs under conditions like those that would probably occur during an emergency. Instead, during LILCO's drills they simply drive over one or two routes. (See Long Island Lighting Company Local Emergency Response Organization Transportation Coordination Drill, at 2, 5, 6; Long Island Lighting Company Local Emergency Response Organization EOC/ENC/Port Jefferson Staging Area Drill, at 13.) Similarly, during LILCO's drills road crews do not move stalled vehicles or other road blockages in the middle of heavy traffic, and evacuation route spotters do not locate trouble spots in traffic congestion.

The above examples highlight our concerns with the fact that LILCO personnel, including bus drivers, traffic guides, road crews and route spotters, will never have adequately practiced, let alone performed, their actual emergency jobs before they are called on to respond to a real emergency. Under these circumstances, it is unrealistic in our opinion to expect LILCO's personnel to understand or to perform their jobs properly.

Moreover, as asserted in Contention 100.B, even if trainees were given an opportunity to practice their skills

during LILCO's training drills, that opportunity would be of little value because LILCO's training instructors do not accompany LILCO field workers, such as traffic guides, during their drills. (See Varley Deposition, at 157.) Apparently, the "observers" of LILCO's drills are located only at facilities such as the EOC and staging areas. Apparently, there are none in the field where traffic guides and other field workers are allegedly being "drilled." When a trainee is first learning a job, practice without observation is valueless. Without the presence of an instructor, there is no one to correct mistakes or suggest improvements. Thus, for example, the trainee could do something wrong, and neither the trainee nor the instructor would ever know. The result would be that when the trainee later has to perform under real circumstances, he will not know how to perform properly.

Related to the facts that many trainees do not perform their jobs during drills, and that instructors do not accompany the trainees into the field, is the fact that, as is asserted in Contention 100.G, the drills contain no performance standards. (See Varley Deposition, at 142.) That is, it is impossible for a trainee to fail out of the program because of inability to perform his job, no matter how bad his performance is. Of course, given the structure of the LILCO drill program,

drill performance standards would be meaningless, because many trainees do not perform their jobs during drills, and because no instructors are present to observe them or evaluate their performance in any event.

But in either case, LILCO's drill program is fatally flawed. In any group of trainees there are individuals who, because of laziness, inability, or any number of reasons, do not learn to perform their jobs properly despite training. Such individuals are especially likely to be present in LILCO's trainee pool, because there was no pretraining screening of candidates. As a result, it is likely that many members of LERO will never overcome their lack of experience and will not learn to perform their response jobs. However, because LILCO has no pass/fail testing, LILCO does not know how many workers cannot perform their jobs or who those workers are. Therefore, it is impossible for LILCO to provide reasonable assurance that protective actions that depend on the performance of LERO personnel could or would ever be taken. LILCO has no idea whether individual trainees learn how to perform their emergency response jobs or their roles under the LILCO Plan, and therefore LILCO has nothing on which to base any opinion about LERO worker capabilities.

Q. Do you have any other concerns with the LILCO drills?

A. Yes. The key deficiency with LILCO's drills, and indeed with its classroom training too, is that they involve far too little realism. When training individuals for complex, difficult jobs such as many of the jobs in LERO, instructors must prepare the trainees to deal with all the problems that could confront them while doing their jobs. It is not sufficient preparation to prepare the trainees only for ideal situations. Good instruction stresses things that could go wrong. Such preparation is especially important for a number of LERO job categories, because they likely would face some serious problems in the event of an accident at Shoreham.

Q. Can you be more specific?

A. Yes. Crowds of evacuees will congregate on buses, and at transfer points, key intersections, and relocation centers. Serious problems that LERO workers would have to deal with could arise at any of these locations. For example, if an inadequate number of buses were available so that the situation arose at a given transfer point that there was more than one bus load of evacuees but only one bus, a disturbance would be very possible as the evacuees attempted to grapple with the problem of there not being enough room on the bus. Similarly,

if an accident blocked an intersection so that traffic became stalled, it is possible that the other drivers would attempt to solve the problem themselves, or that the driver of the stalled car might resist efforts by LILCO road crews to move his car. Likewise, at relocation centers, evacuees are expected to surrender their cars to LILCO employees, and according to Videotape 10, Monitoring and Decontamination, contaminated evacuees are expected to strip naked, surrender their clothes and personal effects to LILCO employees, and then submit to being scanned, while naked, by still other LILCO employees. It is unrealistic to expect evacuees to surrender their property and their dignity to strangers without some of them becoming upset and creating disturbances.

Because of possibilities such as these, traffic guides, bus drivers, monitoring and decontamination workers, and security personnel must be prepared to deal with these problems. With real emergency workers, their experience would prepare them for these difficulties. LILCO's drills, however, fail even to simulate such experience.]

Moreover, too many of LILCO's emergency workers are not required to solve problems of any sort during drills. The traffic guides, bus drivers, road crews and route spotters

basically just practice reporting for duty. ~~This compounds the~~
problem caused by the fact that many of the LILCO training
materials deal with ideal conditions. In Videotapes 10,
Monitoring and Decontamination, and 16, Security, all the
evacuees and other non-LILCO personnel at relocation centers
and the EOC are portrayed as cooperating with all the
instructions given by LILCO employees. This is unrealistic.
It simply cannot be said that the drills provide simulated ex-
~~perience if the scenarios are all unrealistic.~~

Trainees should be trained to handle surprises. In
addition, as Contention 44.E alleges, training drills should be
designed to allow "free play for decision making." For exam-
ple, in police training, extensive use is made of role playing
and simulated situations to provide trainees with the opportu-
nity to develop the ability to make quick decisions. In these
role-play exercises, recruits are confronted by experienced
training officers realistically playing the roles of civilians,
to present the recruit with unexpected difficulties, and the
recruit is graded on his or her ability to resolve the surprise
problems. Of course, training can accomplish only so much in
this regard, and learning to react well to the unexpected is
another skill that, to a great extent, must be learned through
on-the-job experience. Nonetheless, a good training program

should do as much as possible to prepare workers for such problems. LILCO's training program fails to do so.

Road crews and traffic guides in heavy evacuation traffic, and monitoring, decontamination and security personnel at crowded relocation centers will all have to deal with evacuees in pressure-filled situations and make quick decisions on which the safety of members of the public will depend. Consequently, LILCO's failure to include in its training program sufficient situations like these which would give its personnel at least some experience in dealing with such situations, is a serious defect.

A related shortcoming of the LILCO drills is that LILCO's personnel are not subjected to pressure during the drills. (See Varley Deposition, at 142-143). As previously noted, LILCO's emergency workers cannot be expected to perform adequately in a real emergency if they are not required to deal beforehand with the anxiety likely to be present in a real emergency. LILCO's drills do not provide trainees experience in dealing with simulated pressure or stress. In fact, Mr. Varley, the person who supervised the drafting of LILCO's training materials, testified that he does not know of any method that can be used to subject an individual to stress

during a drill. (See Varley Deposition, at 143). This is incorrect. Trainees can be forced to perform in front of their peers, or they can be forced to perform tasks in limited amounts of time. Devices such as these impose pressure on the trainee. It is simulated stress, but it is an effective teaching device nonetheless. LILCO's emergency response workers may never have performed emergency jobs under stress until the first time they respond to a real emergency. At that time, because they will not be accustomed to pressure, their performance will likely be substantially impaired.

The LILCO drills also fail to provide LILCO's personnel with an opportunity to become familiar with the specific environments and geographic areas in which they will have to work. Ordinarily, people with jobs similar to LILCO's bus drivers, route spotters, road crews, and traffic guides are familiar, through their day-to-day jobs, with the areas where they might have to work during an emergency. Familiarity with the area, including local roadways, is important to many of the emergency functions and duties assigned to LILCO's personnel. LILCO itself has acknowledged this fact.

For example, it is our understanding that LILCO's meter readers were assigned the job of traffic guides because LILCO

believed that they would be generally familiar with local roadways. (See Weismantle Deposition, at 74-75). Information provided to the County by LILCO, however, indicates that most of these meter readers live and work in areas outside the 10-mile EPZ. In fact, only 56 of the approximately 1500 LILCO employees who are members of LERO live in the 10-mile EPZ. Further, none of the LILCO workers in LERO are assigned to work locations in the 10-mile EPZ as part of their regular duties. (See LERO - EOF/SCH - ENC - Employee Listing, October 27, 1983, provided to Suffolk County in discovery, which provides limited data concerning LILCO employees in LERO.) Therefore, it is fair to conclude that few LILCO employees serving in LERO will be intimately familiar with the 10-mile EPZ either through their work or because they reside within that area.

LILCO's drills, however, do not provide LILCO's workers with an opportunity to familiarize themselves with the EPZ. For example, in the LILCO drills traffic guides are not given the opportunity of going to all the traffic control points to which they might be assigned. Similarly, bus drivers, route spotters, and road crews do not drive all the routes they might have to drive during an emergency. Decontamination and monitoring workers and security personnel are not even taken to the relocation centers where they will work during an emergency.

Traffic guides should not be expected to direct traffic at intersections which they have never seen before. Bus drivers should not be expected to find their ways along possibly poorly marked routes they have not seen before. Also, it is unrealistic to expect security, monitoring or decontamination personnel to arrive at relocation centers to set up and operate facilities for handling evacuees without any prior familiarity with the facilities. In our opinion, this deficiency of the LILCO drill program will result in many LILCO personnel being unprepared for their emergency response roles.

~~Indeed, the LILCO drills do not appear to be training mechanisms at all. Instead, they seem to be devices for attempting to test portions of the Plan. This is all the more apparent when one looks at the changes LILCO made in Revision 3 allegedly as a result of drills. These changes are all organizational. For example, personnel were added to the staging area staffs, and the communications system was restructured. Thus, it appears that during drills that have been conducted LILCO examined the written structure of its Plan, rather than focusing on individual trainees, requiring them to perform their emergency jobs against measurable, objective standards, and determining whether those trainees should be rejected, or passed, or given more training. This fits exactly what we have~~

~~discussed above, namely that LILCO's entire training program really was designed to show trainees how to fit into the Plan, but not how to perform their emergency jobs. LILCO's proposed drills do little to train LILCO's workers.~~

3. LILCO's Training Program Does Not Provide Necessary Post-Training Experience.

Q. Do you have any other concerns with respect to LILCO's training program?

A. Yes. LILCO's program completely lacks the third essential element of a training program: post-training experience. As a result, there is no assurance that in the event of an accident at Shoreham LILCO's emergency workers would be able to perform their emergency response roles.

First, when teaching adults, it is essential to give them the opportunity to apply continuously what they have learned. Adults quickly forget knowledge and skills that they do not use frequently. Thus, even if some of LILCO's workers may learn needed information or skills during classroom training or even drills, because they are given no opportunity to apply what they have learned, they are going to forget it.

Second, as we explained before, a trainee can only learn a job involving any complexity by applying what he has learned in

classes and practiced in drills, in real situations and under the watchful eyes of field trainers or experienced co-workers. LILCO workers do not receive this type of experience, and therefore we doubt that many of them will ever really learn their emergency jobs.

4. Summary

Q. Please summarize your conclusions with respect to the lack of experience among LILCO's emergency response personnel.

A. Training individuals to perform difficult jobs such as those in LERO requires extensive experience. Either the trainee must bring the needed experience to the job, or it must be provided through a combination of classroom and drill sessions, field training, and post-training experience.

LILCO's emergency response personnel are not experienced in dealing with emergency conditions. Indeed, LILCO's personnel as a group have almost no prior experience relevant to their emergency functions in LERO, since their normal jobs are unrelated to their emergency roles.

However, LILCO's training program does nothing to offset the lack of experience. Classroom sessions are almost exclusively lectures, taught by non-experts, ~~with no testing or~~

~~evaluation~~, very few practical demonstrations, and insufficient opportunity to practice necessary skills. The LILCO drills are no better. They do not include simulated interaction with the public, subject trainees to stress, require trainees to solve unexpected problems under realistic conditions, or permit trainees to practice their emergency jobs.

So long as problems likely to be encountered are routine and straight-forward, training for them is not difficult. Training personnel to perform emergency functions, however, is difficult. The complexity and unexpectedness of events cannot be anticipated, nor can the pressures of emergency situations and the multiplicity of demands be adequately communicated in the classroom. Simulations or drills can partly meet the need to give trainees experience in applying what is learned in the classroom, but they cannot fully meet this need, and they can satisfy it in part only if they take place frequently enough and if they are realistic enough.

LILCO's training program involves neither field training nor post-training experience. Because LILCO's employees will have almost no opportunity to apply in the field whatever they may learn, they will not have a clear understanding of their emergency roles and they will not be able to perform those

have almost no opportunity to apply in the field whatever they may learn, they will not have a clear understanding of their emergency roles and they will not be able to perform those roles adequately or effectively in the event of an emergency at the Shoreham plant.

V. Contentions 41 and 44.D - Communications Training

Q. What is the your opinion concerning the communications training provided to emergency personnel?

A. (Cosgrove and Fakler) Contention 41 states:

All necessary emergency personnel must be trained adequately in the proper use of the communications equipment relied upon in the LILCO Plan. Such training must include instruction in the proper use of radio frequencies, the range of coverage available for each frequency, and proper radio discipline. The LILCO Plan, however, does not provide such training. The Plan provides for a "communications drill" that is designed primarily to test equipment. (Plan at 5.2-1; OPIP 3.4.1). Only persons in those selected LERO positions designated as "communicators" will participate in this drill. (Plan at 5.2-2, 5.2-2a). In addition, it is clear from the Plan and drill scenarios that other than the workers assigned to remain at the EOC, ENC, and staging areas, LERO workers will receive essentially no practical communications training, and that even the workers assigned to the EOC, ENC, and staging areas will not receive enough. Thus, there is no assurance that LILCO's Plan satisfies the requirements of 10 CFR Section 50.47(b)(15)

or that emergency response personnel will be prepared and adequately trained to initiate and receive communications, as required by 10 CFR Section 50.47(b)(6) and NUREG 0654, Section II.F.

Contention 44.D states:

The provisions of the Plan for quarterly testing of communications with Federal emergency response organizations and States within the ingestion pathway do not provide for testing whether the content of messages is understood by emergency response personnel. NUREG 0654, Section II.N.2.a. (See FEMA Report, at 13.)

We agree that the LILCO Plan provides no assurance that emergency personnel will be adequately prepared and trained in the use of the communications equipment relied upon in the LILCO Plan.

Q. Why must workers be trained in the use of communications equipment?

A. (Cosgrove and Fakler) Emergency workers do not typically use their communications equipment under the best of conditions. For example, during emergency conditions, radio operators typically are under stress, and there are often conflicting demands for their attention. Anxiety on the part of a radio user often leads him to talk too fast to be understood. Further, in emergencies there is often confusion among the personnel attempting to use the radio frequencies, and heavy radio

traffic taxes the system of the response organization.

Emergency workers must know how to maintain effective communications under such conditions, and in our experience that is not something that most people can do naturally. Rather, it is a skill that can only be learned through training and experience.

Similarly, it is unrealistic to expect people to know how to use unfamiliar equipment without sufficient instruction and practice. For example, even under calm, non-emergency conditions, inexperienced police officers improperly use communications equipment resulting in garbled messages or failures to communicate. For example, they often forget to release the key, that is, the button that must be depressed to transmit, after they finish transmitting their message. It is also common for persons just beginning to use radio equipment to switch to the wrong frequency. Beginners also frequently fail to adjust the "squelch control" which controls the range of reception and reduces background noise, and they often forget to use only the phonetic alphabet, that is, for example, "Alpha" and "Bravo," instead of the letters "a" and "b".

Q. Why is LILCO's communications training not sufficient to prepare LILCO emergency workers to use their communications equipment adequately in an emergency?

A. (Cosgrove and Fakler) The primary defect is that LILCO's communications training contains almost no real life experience or hands-on practice. Instead, the bulk of LILCO's communications training consists of two classroom sessions, which are lecture and videotape sessions, like all the other classroom sessions. A trainee cannot learn to use a radio properly from a workbook or from watching a videotape. Instead he must have the opportunity for extensive practice. Furthermore, LILCO's proposed communications drill is apparently intended to test the equipment, not the ability of emergency personnel who will have to operate communications equipment. (See OPIP 3.4.1) While some of LILCO's other drills may provide trainees with limited opportunities to operate radios, those drills do not afford enough opportunity to actually use the equipment, and thus do not allow the development of necessary communications skills.

Q. What are the two communications classroom sessions?

A. (Cosgrove and Fakler) The first is Module 5, "LERO Notification." Module 5 suffers from all the shortcomings we discussed with respect to the LILCO training program in general in connection with Contentions 98 and 99, and we will not repeat them in detail here. ~~In addition, Module 5 attempted to~~

~~teach all trainees how every emergency worker is notified. Although a short, general overview along these lines would have been helpful, the typical emergency worker does not need to know anything more than how he is notified, and what he is supposed to do when notified. Unneeded information does nothing more than cause attention to lapse.~~

Q. What is the second communications training module?

A. (Cosgrove and Fakler) The second training module is Module 8, which deals with LILCO's communications system. For the reasons stated above in connection with Contentions 40 and 99, flaws in Module 8 make it likely that many trainees will not learn how to use their communications equipment.

In addition, Module 8 contains little information directed at the LILCO employees who need to know a great deal about certain aspects of the LILCO communications systems. Figure 2.1.1 of the Plan indicates that a number of workers are assigned jobs as "communicators." Presumably, these people will have to operate the radio base stations at facilities such as the EOC. However, in the LILCO training program they receive no specialized communications training. The LILCO training program does not include a job-specific module for communicators, covering how to operate the radio equipment on

which their performance will depend. As a result, it is doubtful that these emergency workers will be able to perform properly or adequately essential communications functions during an actual emergency.

Moreover, much of the communications-related information provided to trainees is confusing. As we discussed above, many of LILCO's videotapes incorrectly inform or suggest to the trainees that they will use hand-held radios.

The most serious problem with LILCO's program as it relates to communications, however, is that the LILCO drills do not include enough practical exercises during which trainees are given the opportunity to operate the radios they will use in an emergency. In particular, there are no radio exercises with individualized supervision that simulate fast-paced emergency conditions. Thus, for example, LILCO's traffic guides apparently are given an opportunity to make only a few radio transmissions during their drills. This is essentially no experience at all.^{6/} As a result, LILCO workers are not taught

^{6/} By way of contrast, after receiving a two-hour classroom session on the use of police radios, including demonstration, recruits use a mobile radio, instead of telephones, as their primary means of indirect communications with the instruction staff. A radio is set up outside the recruit classroom with a station in the staff office. It is with this radio that recruits make appointments, ask for infor-

(Footnote cont'd next page)

properly when to transmit, how long to listen, how not to cut off others, or how to keep messages short. These things can be learned only through repeated use of radios in emergency situations.

Q. What are your conclusions about LILCO's communications training?

A. (Cosgrove and Fakler) Because most of LILCO's emergency workers are inexperienced at responding to emergencies, it is likely that they are inexperienced in the use of communications equipment during emergencies. As we noted before, many of LILCO's "communicators" apparently do not work with radios in their regular jobs. Moreover, it does not matter that some of LILCO's employees use radios as part of their normal work. First, one mistake can disrupt the entire communications system, and therefore all LILCO emergency workers must be experienced. Second, radio experience in nonemergency situations

(Footnote cont'd from previous page)

mation, and the like. In addition, the radio is used in simulated role play situations. This hands-on use and dependence upon the radio continues for approximately 17 weeks. And even then, recruits need field experience before they become proficient at using communications equipment such as radios.

is irrelevant because the volume of traffic is so much lower. This lack of experience probably will prevent LILCO's communications system from operating effectively. Notwithstanding this obvious problem, LILCO's training program does not overcome this lack of experience. The classroom sessions were inadequate because of all the flaws that afflict LILCO's classroom training in general as discussed in connection with Contentions 40 and 99. Moreover, LILCO's communications training materials did not even attempt to impart much of this needed information. Furthermore, LILCO's drill program does not give trainees an adequate opportunity to gain necessary experience in using radios. Therefore, there is no assurance that personnel trained by LILCO will be able to communicate effectively during an emergency.

VI. Contention 39 - Attrition

Q. What are your concerns regarding attrition among the emergency personnel relied upon by LILCO?

A. (All witnesses) We believe that many emergency response positions identified as necessary in the LILCO Plan are likely either to be filled by inadequately trained individuals, or not filled at all because the Plan does not compensate adequately for attrition. As a result, it is unlikely that the

LILCO Plan could be implemented. Our concerns are set forth in Contention 39, which reads as follows:

LILCO's Plan fails to deal effectively with the problem of attrition. As a result, LILCO cannot demonstrate that adequate numbers of trained support organization personnel will be available to respond to an emergency at Shoreham and thus cannot demonstrate compliance with 10 CFR Sections 50.47(a)(1) and 50.47(b)(15), 10 CFR Part 50, Appendix E, Section IV.F and NUREG 0654, Section II.O.1.

A. With respect to LILCO personnel, the Plan relies on quarterly general training and semi-annual job-specific training to qualify new LERO members for positions opened through attrition. (Plan at 5.1-7, 5.1-8; OPIP 5.1.1 at 6-7.) Such training for new members is insufficient, because it does not assure that trained LILCO employees will be available to fill positions in LERO as the need arises. As a result, there is no assurance that LERO will be fully staffed with trained personnel on a continuous basis. To ensure compliance with 10 CFR Section 50.47(b)(15), 10 CFR Part 50, Appendix E, Section IV.F and NUREG 0654, Section II.O.1, LILCO must demonstrate that all personnel are trained in their designated emergency response organization positions. Thus, LILCO should make satisfactory completion of its emergency response training program a prerequisite to the hiring of personnel who will be assigned emergency response duties.

B. With respect to all non-LILCO personnel, except Coast Guard and ambulance personnel, the Plan ignores the issue of attrition. (OPIP 5.1.1, Section 5.1.3.2 and Attachment 1.) And, with respect to the Coast Guard and ambulance companies, LILCO will attempt to counteract the

effects of attrition only if notified by one of these groups that understaffing exists. (Plan at 5.1-6; OPIP 5.1.1, Section 5.1.3.3.) However, the Coast Guard and ambulance companies are under no obligation to maintain necessary staffing for LERO, to notify LILCO of "understaffing," or otherwise to assure LILCO's compliance with 10 CFR §50.47(b)(15), 10 CFR Part 50, Appendix E, Section IV.F and NUREG 0654, Section II.0.1. Therefore, there is no assurance that LILCO will know whether personnel in any non-LILCO emergency response support organizations who might have been trained at one time by LILCO remain with their respective organizations, and thus remain available to respond to an emergency at Shoreham. Thus, there is no assurance that any non-LILCO support organizations will be sufficiently staffed with adequately trained emergency response personnel.

Q. What is meant by attrition in Contention 39?

A. In the context of Contention 39, attrition refers to the fact that people who are employed by LILCO or by the non-LILCO organizations relied upon by LILCO for implementation of its Plan, who are expected to perform emergency response functions under the Plan, will, over time, leave the employ of LILCO or these organizations and thus will become unavailable for emergency response duties.

Q. How do you know attrition will occur among the workers relied upon by LILCO?

A. First, we understand that as part of its recent austerity program, LILCO has laid off approximately 20 percent of its labor force or over 800 of its 6000 employees, in terminations announced on March 7 and March 30, 1983. Between approximately 10 and 20 percent of the LILCO employees assigned LERO positions are no longer with the company, including Andrew W. Wofford, one of the Directors of LERO.^{7/} Clearly, this represents a large attrition problem which is already a reality for LILCO.

Second, in addition to LILCO's employee terminations, every organization experiences attrition among its employees in the normal course of its operations. People leave their jobs, voluntarily or involuntarily, all the time. Attrition is simply a fact of life for most employers, including LILCO, the Coast Guard, ambulance companies, and the other organizations relied upon in the LILCO Plan. Indeed, although LILCO only identified the LILCO employees who would be assigned to emergency response jobs in LERO in May, 1983, only five months later, by October, it had already begun to experience

^{7/} See Letter dated March 23, 1984, from Donald P. Irwin to Karla J. Letsche, and New York Times, March 31, 1984, p. 46. Mr. Irwin's letter states that as of March 23, 1984, LILCO did not yet know the identities or LERO positions of the union member employees who had been terminated, and that additional LERO members were being recruited.

attrition. (See Weismantle Deposition, at 104; Seale Deposition, at 139).

Q. Why is attrition a problem for an emergency response organization?

A. Attrition is a problem for any organization that depends on trained and experienced members. Whenever an experienced worker leaves, that person takes with him all his training and experience. The replacement rarely has an equal level of experience and familiarity with the procedures of the organization. The resulting loss of experience impairs the capabilities of the organization, even if only temporarily.

Attrition is an especially acute problem for emergency response organizations, because, as discussed above, their workers need high levels of training and experience to perform their tasks. The jobs that these workers do, such as traffic and crowd control, cannot be performed by amateurs. In addition, an emergency response worker is likely to need substantial training and experience before he is capable of performing his job properly, if at all, under the pressure and fatigue that are involved in emergency response activities.

Because of the importance of both training and experience, an untrained, inexperienced person simply cannot "replace" a veteran emergency worker who has left the organization. Therefore, if an emergency response organization is to be continuously ready to respond to emergencies, it must have in place an effective training program that ensures that adequately trained and prepared replacements are available at all times to staff all positions within the organization.

Q. In your opinion, will LILCO's proposals for dealing with attrition among LILCO employees in LERO offset the effects of attrition sufficiently to allow LERO to be continuously staffed with trained personnel?

A. No. LILCO proposes to offer classes on a quarterly basis that will repeat the general training materials contained in the "generic" modules, such as the "General Overview" and "Site Specific Overview" modules. Classroom materials that relate to specific jobs will be offered by LILCO on a semi-annual basis. (Plan, at 5.1-7 and 5.1-8). Thus, the LILCO Plan relies on quarterly general training and semi-annual job-specific training to "qualify" new LERO members for positions opened through attrition. Drills and exercises will be repeated annually. (Plan at 5.2-1). Under the LILCO Plan, as

the need for adding new personnel to LERO is identified by the LILCO Personnel Department, the Emergency Planning Coordinator is required to identify the training sessions the new personnel must attend (based on Figure 5.1.1) and the "required completion date necessary to maintain the LERO organization adequately staffed at all times." (Plan at 5.1-8). Only if what LILCO considers to be a key position in LERO, such as the Director of Local Response or Manager of Local Response, becomes understaffed might a "special" accelerated training program perhaps be initiated by the Emergency Planning Coordinator so that the vacancy could be filled more rapidly than would otherwise be accomplished. (Plan. at 5.1-8).

Thus, under the LILCO Plan, it is not clear whether positions in LERO will remain unfilled until replacement personnel have attended assigned classes, or whether replacement personnel will be assigned to LERO and then attend the next available training classes. In either case, however, there is no assurance that LERO will be fully staffed with trained LILCO personnel on a continuous basis. Either LERO positions will remain open for up to six months until replacements have attended designated training classes, or, for up to six months at a time, replacements will fill LERO positions without having received training. The only exception under LILCO's proposal is that

training for personnel replacing a few "key" emergency personnel "may" be accelerated.

In our opinion, LILCO's quarterly general training and semi-annual job-specific training are far too infrequent and provide no assurance that trained LILCO employees will be available to fill positions in LERO as the need arises. Some organizations may be able to function properly with such a system, but not an emergency response organization, because emergencies, by their very nature, can occur at any time. They do not adhere to predesigned schedules, and therefore an emergency response organization cannot train its replacements only every six months. Because LILCO intends to do so, LERO will not be fully staffed with trained personnel.

Q. Will attrition among non-LILCO personnel be a problem?

A. Yes. Under the LILCO Plan, non-LILCO personnel perform many essential emergency functions. (See our discussion of Contention 98 above.) As with LILCO employees in LERO, LILCO cannot depend on non-LILCO individuals to perform their roles under the LILCO Plan, unless they have been taught what those roles are and how to perform them during a radiological emergency in the context of the LILCO Plan. However, under the

LILCO Plan, there is no assurance that non-LILCO organizations relied upon by LILCO to perform emergency support functions will be sufficiently staffed with adequately trained emergency response personnel.

Despite the importance of non-LILCO support organizations to successful implementation of the LILCO Plan, LILCO has made only token plans to counteract attrition among non-LILCO personnel. In the Plan, LILCO divides non-LILCO organizations into two groups for purposes of training. The first of these two groups consists of "those organizations supporting a response by LERO" (Plan, at 5.1-6), which, apparently, LILCO considers to be limited to the U.S. Coast Guard and ambulance companies. (See Plan, Figure 5.1.1). According to LILCO, these "support" organizations will receive training, including training to offset the consequences of attrition. (Plan, at 5.1-6, 5.1-7). The second group of non-LILCO organizations consists of entities such as schools, hospitals and nursing homes inside the EPZ. LILCO describes these organizations as those "which must take actions during an incident at SNPS," to which LILCO intends to "offer" training at some point in the future. (Plan, at 5.1-6)

The first deficiency of the LILCO proposals for non-LILCO organizations is that stated with respect to Contention 98. Simply put, there is no assurance that these groups will receive any training at all, including training designed to offset the effects of attrition. To our knowledge, LILCO has not made arrangements for either initial training or retraining of the personnel in organizations expected to "take actions" during an incident at Shoreham, and LILCO does not even intend to attempt to arrange for retraining until sometime in the future. Second, LILCO apparently does not intend to provide initial or attrition-related training to personnel from the Department of Energy or the American Red Cross. (See Plan, Figure 5.1.1). Third, the training that LILCO apparently intends to provide to personnel of the Coast Guard and ambulance companies will do very little to overcome the consequences of attrition. For example, while the Plan purports to provide for annual training of the personnel of the Coast Guard and ambulance companies (See Plan, at 5.1-6; Figure 5.1.1), the Coast Guard letter, which LILCO refers to as an agreement (Plan at APP-B-8), mentions only retraining concerning dosimetry and personal safety. Similarly, the agreements that LILCO has obtained from ambulance companies do not mention retraining.

Furthermore, even if LILCO had made arrangements for adequate training, attrition would still not be offset, because for the reasons we discuss above annual training is inadequate to compensate for attrition. It is simply poor planning to assume that over the course of a year, only insignificant personnel changes will occur in non-LILCO support organizations. And, there is no assurance that LILCO's proposal, for providing more frequent training if an organization notifies LILCO that it has experienced significant attrition would work, because it places responsibility for ensuring that non-LILCO organizations maintain an adequate number of trained individuals on staff at all times on the organizations themselves. Thus, under the Plan, the organizations are expected to identify to LILCO's Emergency Planning Coordinator any understaffing which may result in insufficient personnel to fulfill LILCO's expectations in the event of an emergency at Shoreham. (Plan, at 5.1-6, 5.1-7).

LILCO cannot depend on prompt notification of staffing problems from the non-LILCO support organizations. It is our understanding that the support organizations relied upon by LILCO have no obligation to maintain adequate staffing for LERO or to notify LILCO of understaffing. Neither the Coast Guard letter to LILCO nor the contracts that LILCO has signed with

ambulance companies say anything about an obligation to notify LILCO of personnel changes, and LILCO has no training agreements at all to our knowledge with the DOE and ARC. Without appropriate agreements, there is no assurance that LILCO will have up-to-date information about the staffing of non-LILCO support organizations. However, even if LILCO did receive updated staffing information on a timely basis, LILCO's proposal would still probably fail to ensure that adequate numbers of trained support organization personnel will be available to respond to an emergency at Shoreham.

Q. Why?

A. First, LILCO's proposed system will not provide attrition-related training until after attrition has resulted in inadequate staffing. That is, there necessarily will be periods during which the Coast Guard and private ambulance companies will be staffed by people who have not received training specifically related to LERO. In our opinion, this is a grave deficiency under the LILCO Plan. An emergency can occur at any time, and, therefore, LILCO's emergency response organization must be adequately staffed with trained personnel at all times.

Moreover, under the LILCO Plan, the adverse effects of attrition may be aggravated by the fact that lapses in adequate staffing will last for a substantial period of time. This is because LILCO will have no real authority over either the non-LILCO organizations or their personnel. Thus, even after a staffing problem is identified, LILCO may not be able to set a specific schedule for the needed training.

In summary, under LILCO's proposed scheme, LILCO will not know if serious understaffing exists among non-LILCO response organizations. Moreover, even if LILCO does eventually learn of the need for additional training, LILCO will have too little authority to administer effective training.

Q. What are your conclusions about attrition in both LILCO and non-LILCO organizations?

A. In our opinion, LILCO's offsite training program does not compensate for attrition among LILCO employees who are members of LERO or among the non-LILCO organizations relied upon by LILCO under the LILCO Plan. LILCO's proposed retraining program will cause positions in LERO either to remain open or to be filled by untrained individuals for substantial periods of time. Some non-LILCO organizations will receive attrition-related training only when they ask for it,

and other non-LILCO organizations may not receive any training to compensate for attrition, except for annual, informational training which will occur only if LILCO succeeds in arranging for it in the future.

As a result, not all the emergency workers on whom LILCO relies will know and understand their emergency response roles; nor will they all know how to perform those roles. Indeed many of them, especially in non-LILCO organizations, may not even know that they have a response role. Consequently, neither LILCO's own employees nor the personnel of non-LILCO organizations relied upon by LILCO can be expected to perform their emergency response functions and duties.

Q. Does that conclude your testimony?

A. Yes.

ATTACHMENT 1

Personal Resume
Captain Peter F. Cosgrove
Suffolk County Police Department

Police Experience:

October, 1981 - Present	Commanding Officer, Police Academy Section
May, 1980	Promoted to Captain
February, 1979 - October, 1981	Commanding Officer, Personnel Section
September, 1977 - February, 1979	Commanding Officer, Employee Relations Unit
January, 1977 - September, 1977	Assigned to Chief of Detectives Office to develop performance evaluation program
September, 1975	Promoted to Lieutenant
September, 1975 - January, 1977	Assigned to Sixth Precinct, Patrol Supervisor
December, 1972 - September, 1975	Assigned to Police Academy Section, Recruit Training Unit
October, 1971	Promoted to Sergeant
October, 1971 - December, 1972	Assigned to Fourth Precinct as Patrol Supervisor
July, 1966 - October, 1971	Assigned to Sixth Precinct, patrol duties
May, 1966	Appointed to Suffolk County Police Department

Formal Education:

1982	Completed course work for Master of Public Administration, C.W. Post College, L.I. University
1974	B.S. Behavioral Science, N.Y. Institute of Technology

Formal Education: (cont.)

1970 A.A.S. Police Science, Suffolk County
Community College

Related Training & Education:

1983 F.B.I. National Academy, 132nd Session
(11 weeks)

1974 Ethical Awareness Instructors Workshop
N.Y.S. Bureau for Municipal Police
(1 week)

1974 Police Performance Appraisal Workshop
Northwest Traffic Institute (1 week)

1973 Basic Instructors School, Internal
Revenue Service (2 weeks)

Related Experience:

1972 - Present Lecturer, Suffolk County Police Academy

1972 - Present Adjunct Asst. Prof., Suffolk County
Community College

1973 - 1976 Training Instructor, N.Y.S. Bureau for
Municipal Police

1975 - Present Training Instructor, Suffolk County
Department of Health

1979 - Present Lecturer, Suffolk County Sheriff's
Department

Certificates & Memberships:

Certified New York State Police Instructor

New York State Training Zone #1 Coordinator

New York State Association of Chiefs of Police (member of training
committee)

National Academy Associates

New York State Law Enforcement Training Directors Association

Certificates & Memberships: (cont.)

American Academy for Professional Law Enforcement

Suffolk County Community College Occupational Education Advisory
Council

ATTACHMENT 2

John L. Fakler, Lieutenant
Suffolk County Police Academy
Old Country Road
Westhampton, New York 11977
(516) 286-5000

GENERAL BACKGROUND

Twenty years of law enforcement experience, the last fifteen years in training supervisory and management positions.

EDUCATION

Accumulated 55 college credits relating to Communications and Law Enforcement.

Graduate of F.B.I. National Academy - March, 1974

Have completed a host of seminars and workshops relating to Instructional Design & Evaluation, Television Production Methods, and management related topics.

EXPERIENCE

- 1981 to Present - Commanding Officer of Recruit Training and Media Services (Lieutenant)
- 1971 to 1981 - Commanding Officer of Audio Visual/ Research (Lieutenant)
- 1968 to 1971 - Supervisor of Recruit Training (Sergeant)
- 1963 to 1968 - Various assignments in Patrol, Tactical, and Detective Units

AFFILIATIONS

Regional Vice President, International Television Association
1982 to 1984

Past President, Law Enforcement Training Directors of New York State - 1980

Second Vice President, Police Association of Suffolk County
1983

Consultant and Lecturer for the International Association of Chiefs of Police since 1980

ARTICLES PUBLISHED

- "Drunk Drivers: It's Your Choice"
Law Enforcement Communications - April, 1982
- "Instructional Television for Police Entry-Level Training"
The Police Chief - February, 1981
- "An Efficient Training System for Police Officers"
Educational & Industrial Television - December, 1979
- "Television: A Versatile Tool at Large Demonstrations"
F.B.I. Law Enforcement Bulletin - December, 1979
- "TV Role-Playing for Training"
Law & Order - February, 1970

OTHER CAREER ACTIVITIES

Authored and directed 3 federally funded projects that were designed to explore television applications for law enforcement

1. Project "Teletraining, 1971
2. Project "D.I.I.T." (Decentralized, Individualized In-Service Training)
3. Project "T O.D." (Television for Observation at Disturbances)

Have been a guest speaker at:

- . Canadian Association of Chiefs of Police Convention, Edmonton, Alberta, Canada
- . First International Video Symposium for Law Enforcement Kent, England

ATTACHMENT 3

BIOGRAPHICAL SUMMARY OF MICHAEL LIPSKY

November, 1983

ADDRESS:	42 Brington Road Brookline, MA 02146	DATE OF BIRTH:	April 13, 1940
TELEPHONE:	(617) 731-5137	PLACE OF BIRTH:	New York, NY
NATIONALITY:	U.S.A.	MARITAL STATUS:	Married
		CHILDREN:	Two

EDUCATION:

Oberlin College, B.A., 1961; Woodrow Wilson School of Public and International Affairs, Princeton University, M.P.A., 1964; Princeton University, M.A. (Politics), 1964; Ph.D. (Politics), 1967.

PROFESSIONAL EXPERIENCE:

Current: Professor, Department of Political Science, Massachusetts Institute of Technology.

Previous Teaching: Assistant Professor, Department of Political Science, University of Wisconsin-Madison, 1966-1969.

Other: Assistant, Public Affairs Program, The Ford Foundation, Summer, 1965.

Brookings Institution Predoctoral Research Fellow, 1965-1966.

Consultant to Upward Bound, Office of Education, H.E.W., previously Office of Economic Opportunity, 1966-1972.

Special Assistant to the Chancellor for Equal Opportunity Programs, University of Wisconsin (Madison Campus), July, 1968-June, 1969.

Staff Associate, Institute for Research on Poverty, University of Wisconsin, 1966-1969.

Consultant on evaluation and urban policy, ACTION, Washington, D.C., 1977-1978.

Member, Law and Government Study Group, National Institute of Education, 1979-1982.

Director of Policy Studies, Legal Service Institute, Jamaica Plain, MA, 1979-1981.

Member, Board of Trustees, Justice Resource Institute, 1978-.

Consultant, Massachusetts Department of Public Welfare, 1983-.

PUBLICATIONS - BOOKS:

Protest in City Politics: Rent Strikes, Housing and the Power of the Poor (Chicago: Rand McNally, 1970).

Law and Order: Police Encounters, 2nd edition, edited with an Introduction (New Brunswick, N.J.: Transaction Books, 1973).

Theoretical Perspectives on Urban Politics, edited with an Introduction (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1976) (with Willis Hawley).

Commission Politics: The Processing of Racial Crisis in America (New Brunswick, N.J.: Transaction Books, 1977) (with David J. Olson).

Street-Level Bureaucracy: Dilemmas of the Individual in Public Services (New York: Russell Sage, 1980).

In August, 1981, Street-Level Bureaucracy was named the 1981 recipient of the C. Wright Mills Award of the Society for the Study of Social Problems.

In September, 1981, the American Political Science Association presented Street-Level Bureaucracy with its Gladys E. Kammerer Award as the best publication on national policy published in 1980 (co-winner).

PUBLICATIONS - ARTICLES:

"Outputs, Structure and Power: An Assessment of Changes in the Study of State and Local Politics," Journal of Politics 30 (May, 1968), pp. 220-248 (with Herbert Jacob).*

"Protest as a Political Resource," American Political Science Review, LXII (December, 1968), pp. 1144-1158.*

"Rent-Strikes--Poor Man's Weapon," Transaction, February, 1969, pp. 10-15.*

"Riot Commission Politics," Transaction, July-August, 1969, pp. 9-19 (with David J. Olson).*

"Landlord-tenant Law in the United States and West Germany: A Comparison of Legal Approaches," Tulane Law Review, XLIV (December), 1969, pp. 36-66 (with Carl Neumann).

"Review Symposium" (on the Supplemental Studies for the National Advisory Commission on Civil Disorders), American Political Science Review, LXIII (December, 1969), pp. 1278-1281.

(*Indicates article reprinted in journal or anthology.)

"Radical Decentralization: A Response to American Planning Dilemmas." Paper presented to the Second International Symposium on Regional Development, sponsored by the Japan Center for Area Development Research, September 17-19, 1968, Tokyo, Japan. Published in the proceedings of the Symposium (Tokyo, Japan: Japan Center for Area Development Research, 1969), pp. 102-110.*

"Social Scientists and the Riot Commission," The Annals of the American Academy of Political and Social Science, 384 (March), 1971, pp. 72-83.

"Street-level Bureaucracy and the Analysis of Urban Reform," Urban Affairs Quarterly, 6 (June, 1971), pp. 391-409.*

"Citizen Participation in Federal Housing Policies." Paper submitted to Subcommittee on Housing Panels on Housing Production, Housing Demand, and Developing a Suitable Living Environment, Committee on Banking and Currency, House of Representatives, 92nd Congress, First Session, June, 1971, pp. 895-925 (with Donald Dickson, John Mollenkopf, and Jon Pynoos).

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ATTACHMENT 4

TRAFFIC CONTROL

MODULE NO. 12

LERO personnel who should complete this workbook:

- o Director of Local Response
- o Manager of Local Response
- o Public Information Coordinator
- o Public Information Staff
- o Evacuation Coordinator
- o Traffic Control Coordinator
- o Evacuation Route Coordinator
- o Traffic Control Group Communicators
- o Road Logistics Coordinator
- o Traffic Control Point Coordinator
- o Staging Area Coordinators
- o Traffic Guide Coordinators
- o Traffic Guides
- o Road Crews
- o Evacuation Route Spotters

Your Name _____

LERO Title _____

Company Title _____

LERO TRAINING PROGRAM

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TRAINING OBJECTIVES

At the conclusion of this workbook, the trainee should be able to:

- A. List the emergency classes at which Traffic Control members are notified and know when and where to report.
- B. Know how many zones are in the EPZ.
- C. State the groups within the Evacuation Group.
- D. List the people in Traffic Control who report to the Local EOC and know at what level of emergency they report.
- E. Understand the operations and activities of the three field groups and their coordinators when evacuation is ordered.
- F. State the types of dosimeters field members will use and what kinds of protection can be taken to minimize radiation exposure.
- G. List what field members do after their deployment is over.
- H. Understand the reporting chain within Traffic Control.
- I. Briefly explain what occurs at Staging Areas.
- J. Know how Traffic Control is notified and what to do when notified.
- K. State by title who has and who does not have pagers within Traffic Control.

INTRODUCTION

As you remember from the first presentation, the Nuclear Regulatory Commission has set certain standards to classify nuclear power plant emergencies. There are four emergency classes which increase in severity. They are:

- o Unusual Event
- o Alert
- o Site Area Emergency
- o General Emergency

The Unusual Event class has no radiation release. The Alert class has no or very small radiation releases. The Site Area Emergency may involve and the General Emergency will definitely involve some degree of radiation releases offsite. When there is a potential or actual release of radiation, the Director of Local Response will analyze the conditions and may recommend some form of sheltering and/or evacuation in the Emergency Planning Zone or EPZ. Sheltering will be the protection recommended in the majority of cases. However, in extremely rare cases, some evacuation may be recommended. Evacuation in any case will be most likely only for a portion of the population in the EPZ. The EPZ is divided into 19 zones where one or more complete zones may be asked to evacuate.

To help the evacuation from the Shoreham EPZ go smoothly, LERO has an Evacuation Group.

A. THE EVACUATION GROUP

Figure 1 shows the Evacuation Group with the rest of LERO.

Notice that it has three main groups:

- o The Transportation Group
- o The Special Evacuation Group
- o The Traffic Control Group

Before we get into the details of the Traffic Control Group and what they do, let's briefly describe the other two groups.

The Special Facilities Evacuation Group

The Special Facilities Evacuation Group assists in the evacuation of hospitals or nursing homes and other similar facilities or helps individuals with special needs, such as the handicapped, to evacuate. They also have a group of Route Alert Drivers who drive routes and use Public Address Systems to alert people in areas of siren malfunction. The Special Facilities Evacuation Coordinator is in charge of this group.

FIGURE 1

LOCAL EMERGENCY RESPONSE ORGANIZATION

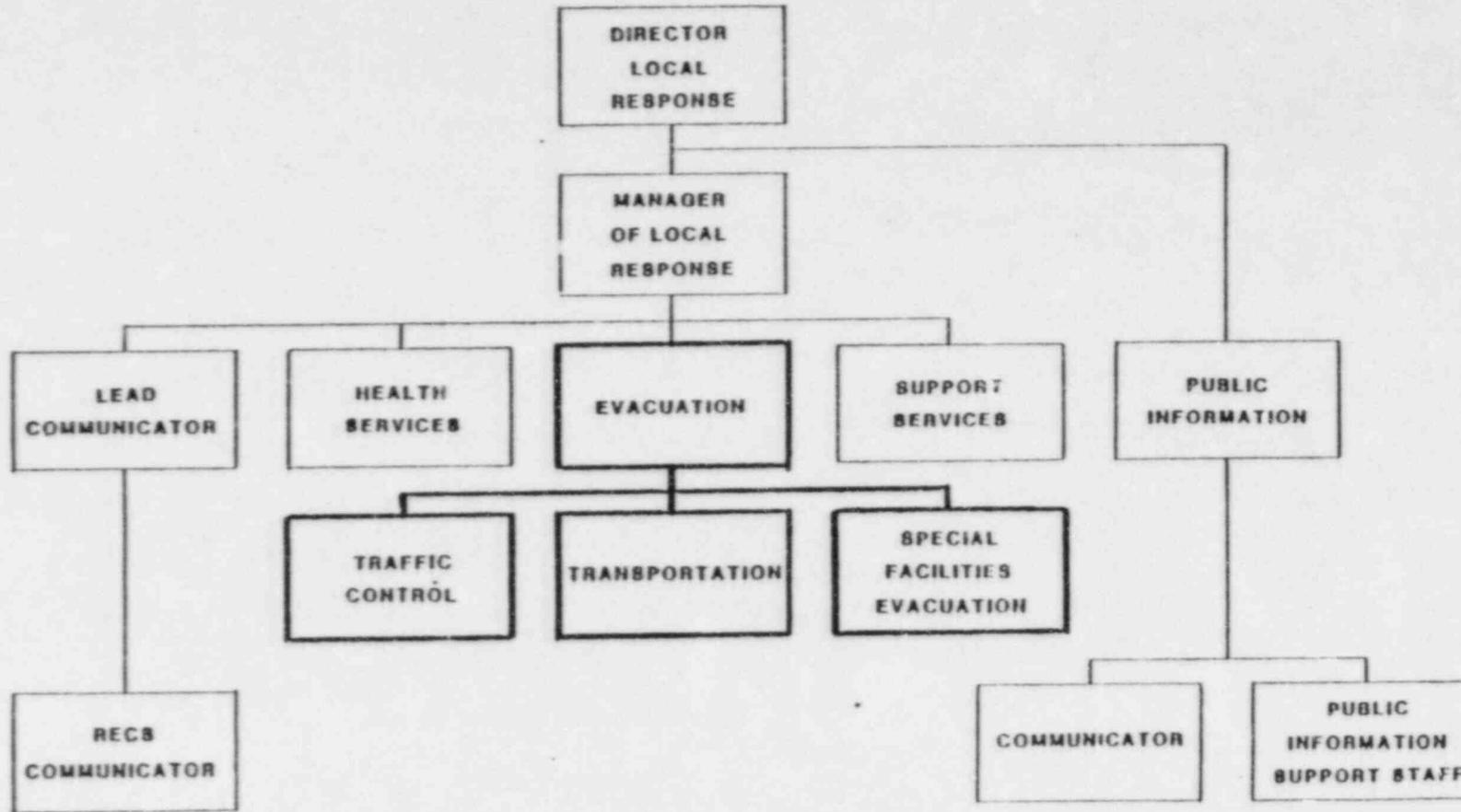
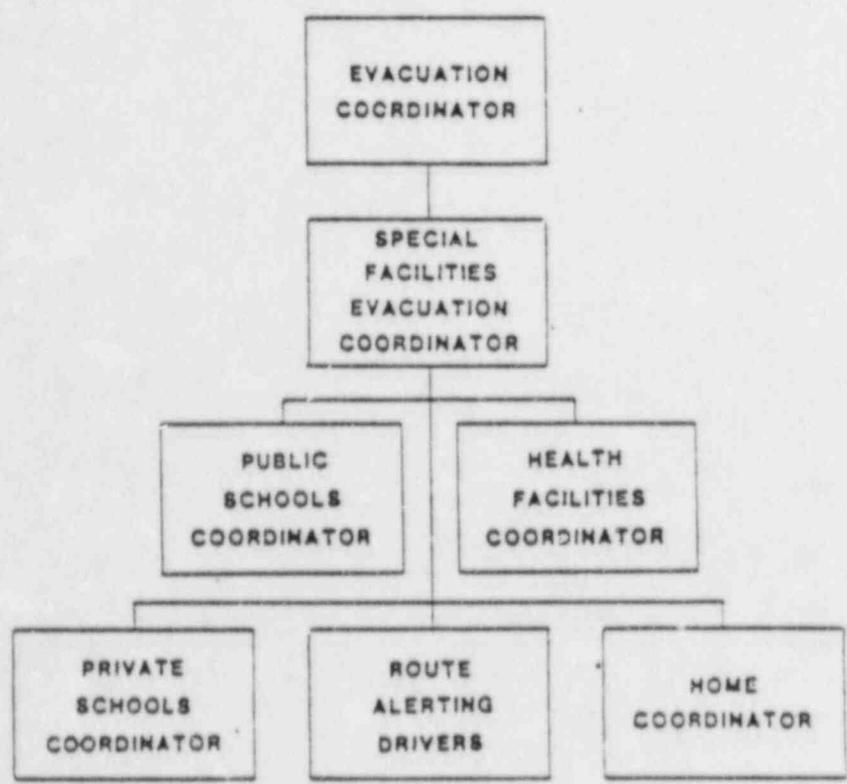


FIGURE 2

**LOCAL EMERGENCY RESPONSE ORGANIZATION
SPECIAL FACILITIES EVACUATION GROUP**



The Transportation Group

The Transportation Group is headed by the Transportation Support Coordinator. They will operate buses to pick up those people who should evacuate, but who don't have their own transportation. There are networks of bus routes to be driven by the drivers so that pick up spots are no more than 1/2 mile from any given residence. The people picked up will be brought to Relocation Centers.

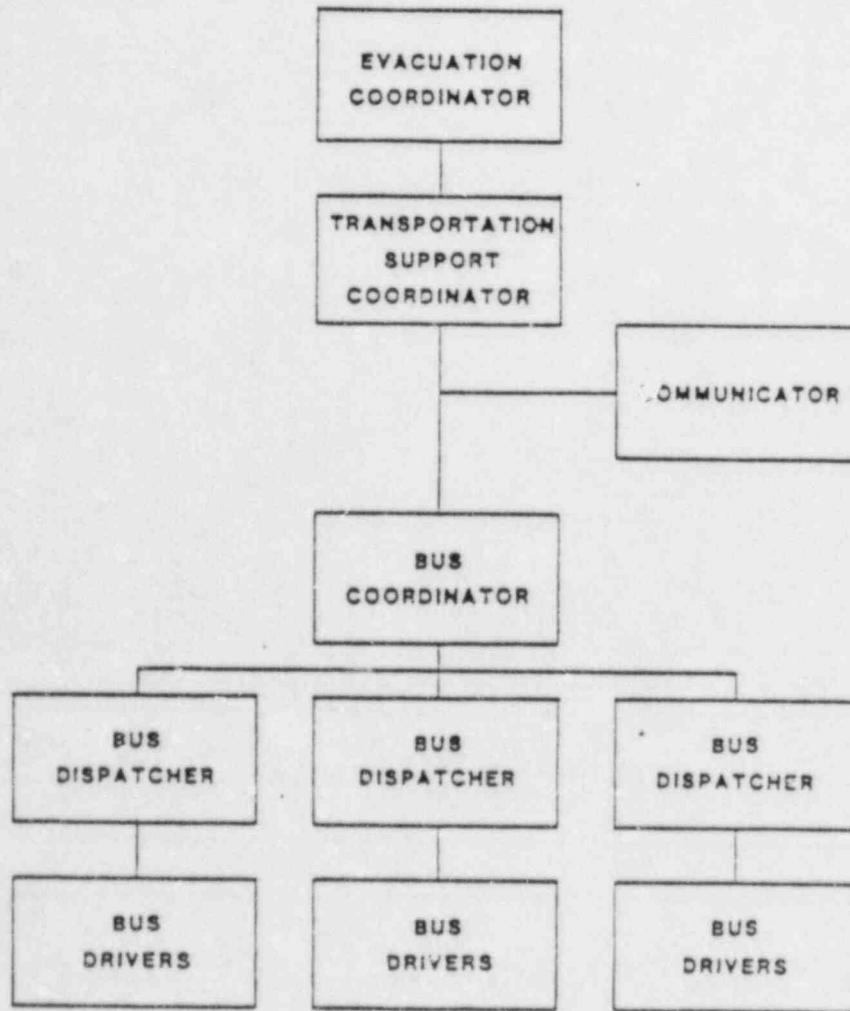
To summarize, sheltering is the most likely protective action to be taken. Evacuation is very unlikely.

Even though the entire EPZ could be evacuated, it is likely that only a few of the 19 zones would be required to evacuate.

The Evacuation Group within LERO provides busing, traffic control, route alerting and help with special evacuations.

FIGURE 3

TRANSPORTATION GROUP



B. THE TRAFFIC CONTROL GROUP

Our discussion will start at the top of the Traffic Control Group and work down. For each person or group, the discussion will start with the basic job description, then how they get notified and mobilized. Each person or group will then get a step-by-step description of what they do during an emergency. It should be remembered that even though all the coordinators and the required number of field group members will be notified and report as per procedure, a smaller group of field people may actually be mobilized. This initial notification and reporting in of large numbers of people is done to allow for the possible evacuation of the entire EPZ and all 19 zones simultaneously. In most cases, only one or a few of the 19 zones would need evacuation, thus requiring a reduced number of field personnel.

- Traffic Control Coordinator

o Job Description

The Traffic Control Coordinator is in charge of the entire Traffic Control operation. He reports to the Evacuation Coordinator and has five people reporting directly to him. They are:

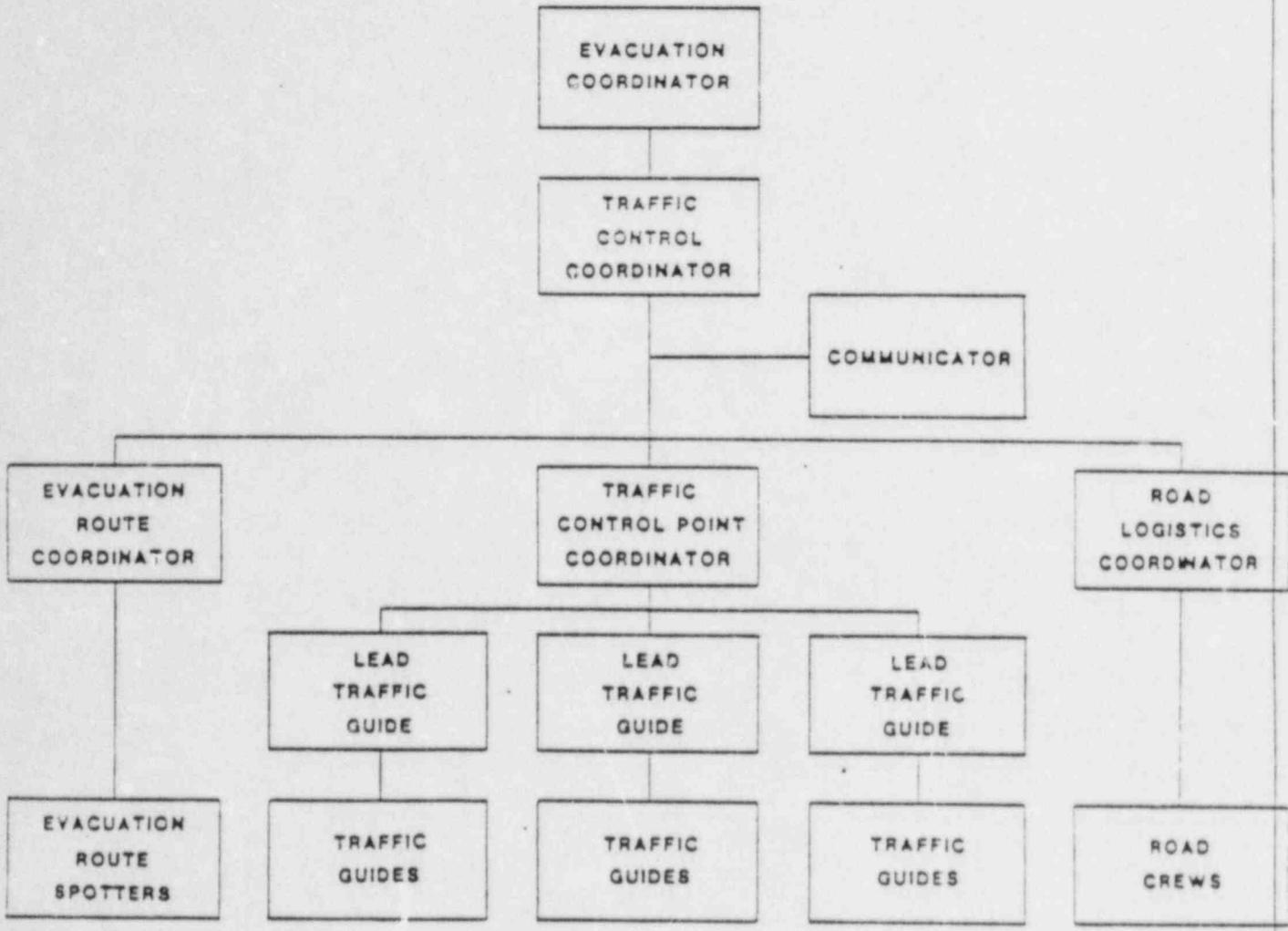
- a. The Traffic Control Point Coordinator
- b. The Road Logistics Coordinator
- c. The Evacuation Route Coordinator
- d. Two Communicators

- o Notification and Mobilization

The Traffic Control Coordinator will not be notified for an Unusual Event. He is notified for an Alert, Site Area Emergency and General Emergency and reports to the EOC when paged.

FIGURE 4

TRAFFIC CONTROL GROUP



o What the Traffic Control Coordinator Does

- a. After arriving at the Local Emergency Operations Center (EOC), confer with the Evacuation Coordinator on the current status of the emergency. Discuss the possibilities and scope of evacuation with him and the three Traffic Control Group Coordinators (the Road Logistics Coordinator, Traffic Control Point Coordinator and Evacuation Route Coordinator).
- b. If evacuation is recommended, obtain the details such as:
 - 1. Emergency class
 - 2. Zones affected
 - 3. Duration of radiation release
 - 4. Doses expected offsite
 - 5. What route will be used for a Site Evacuation
- c. Make sure that your coordinators have all the necessary information and that it is correct.
- d. After you are sure that your coordinators are properly informed, direct them to begin Traffic Control operations for the affected zones.
- e. During the course of the emergency, communicate with your coordinators to keep them briefed and to keep yourself informed.
- f. Provide status updates on Traffic Control operations to the Evacuation Coordinator or other LERO management.

- g. When Traffic Control operations are complete, conduct a briefing with your coordinators and provide a report to the Evacuation Coordinator.

- Traffic Control Point Coordinator

- o Your Job Description

The Traffic Control Point Coordinator is in charge of the Traffic Guides. He reports to the Traffic Control Coordinator and will have all the Traffic Guides reporting to him through the Lead Traffic Guides.

As mentioned in the video presentation, the Traffic Guides are stationed at pre-designated road intersections and entrance ways to assist in the flow of traffic.

- o Notification and Mobilization

The Traffic Control Point Coordinator has a pager and reports to the EOC when notified of an Alert, Site Area Emergency and General Emergency. He is not notified for an Unusual Event.

- o What the Traffic Control Point Coordinator Does

- a. After arriving at the Emergency Operations Center, obtain briefing from the Traffic Control Coordinator on the current status of the emergency.
 - b. If evacuation is recommended, verify the zones to be evacuated with the Traffic Control Coordinator.

- c. After the zones are verified, determine the number of posts to be activated. In the EOC there is a copy of OPIP 3.6.3, "Traffic Control" which has the list of posts to be manned for each zone that is evacuated. Take time now to examine the sample from this list shown on the next page.

TRAFFIC CONTROL POSTS

POST #	LOCATION	ZONE(S)	STRATEGY	NUMBER OF TRAFFIC GUIDES
7	Ridge Rd. @ Whiskey Rd.	F	PREVENT traffic from proceeding east on Whiskey Rd. DIRECT all traffic south on Ridge Rd.	1
8	CR 46 @ Whiskey Rd.	B with A	DIRECT eastbound traffic to southbound on William Floyd Pkwy. Use southbound shoulder as entrance ramp, if necessary.	1
9	Rt. 25 @ Ridge Rd.	F	DIRECT 50% of southbound traffic west and 50% south. FACILITATE westbound through movement on Rt. 25. PREVENT traffic from proceeding east on Rt. 25. Redirect eastbound traffic south down residential streets.	2
10	Rt. 25 @ Wading River Manor Rd.	C or D	DIRECT eastbound traffic on Rt. 25 southbound on Wading River Manor Rd. DIRECT southbound traffic on Wading River Manor Rd. to continue south. DIRECT northbound Wading River Manor Rd. traffic (if any) west on Rt. 25.	2

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NOTE: Notice that the list has the posts numbered and gives their location. Instructions that tell how many Traffic Guides are needed are given for the Traffic Guides at each location. Each Traffic Guide sent out to a post will be given equipment, along with a copy of the Traffic Control Procedure which has this list attached.

- d. To dispatch the Traffic Guides, have a Traffic Control Communicator telephone the Staging Area nearest the zones to be evacuated. Request that the required number of Traffic Guides be deployed and relay the traffic post numbers to be activated. Then request a status report following their deployment.
- e. Maintain a status of the Traffic Guide deployment to keep yourself and the Traffic Control Coordinator informed. All Traffic Guides will relay their information to their Lead Traffic Guide, who will relay it to the EOC. All messages from the EOC for Traffic Guides will first be relayed to the Lead Traffic Guide who will radio the information to them.
- f. If the area to be evacuated increases, request additional deployment of Traffic Guides from the Lead Traffic Guide at the appropriate Staging Area.
- g. During their deployment, Traffic Guides will provide updates to the Lead Traffic Guide on traffic conditions. The Lead Traffic Guide will report this information to the EOC. If there are reports of unexpected heavy or light traffic, this could be a sign of an accident, road blockage or other

difficulty. Relay the messages of traffic flow problems to the Traffic Control Coordinator. He will then direct the coordinator of the Route Spotters or Road Crew to investigate the problems.

- h. Keep the deployed Traffic Guides informed of the status of the emergency. Inform them when emergency classes change, evacuation plans alter or routes change and of Route Spotter investigations and Road Crew work.
- i. Especially keep the Lead Traffic Guides informed of radiological conditions. If it becomes known that a traffic control post lies in an area where the Traffic Guides will get 5R or more, then inform the appropriate Lead Traffic Guide to radio the Traffic Guide at that post to abandon the area. The Traffic Control Coordinator will keep you informed of the expected doses for a zone and what posts should be abandoned.
- j. When Traffic Guides complete their assignments, have them report to the Emergency Worker Decontamination Center in Brentwood for their contamination check. Then hold a briefing with them to prepare a report for the Traffic Control Coordinator.

- Road Logistics Coordinator

o Your Job Description

The Road Logistics Coordinator is in charge of the Road Crews. He reports to the Traffic Control Coordinator and

will have all the Road Crew personnel reporting to him. The Road Crews are dispatched to clear blockages to the flow of evacuation traffic.

o Notification and Mobilization

The Road Logistics Coordinator will not be notified for an Unusual Event. He will be notified for an Alert, Site Area Emergency, or a General Emergency and reports to the EOC when paged.

o What the Road Logistics Coordinator Does

- a. After arriving at the Emergency Operations Center, get briefed by the Traffic Control Coordinator on the current status of the emergency.
- b. If evacuation is ordered, verify the zones to be evacuated with the Traffic Control Coordinator and determine the priority routes for Road Crew deployment. The Traffic Control Procedure contains a two page listing of patrol routes which correspond to the affected zones. The following page has a sample from this list.
- c. To dispatch the Road Crew, have a Traffic Control Communicator telephone the Lead Traffic Guide at the Staging Area nearest the zones to be evacuated. Provide the dispatching information and request a status report following their deployment.
- d. Maintain a status of Road Crew deployment to keep yourself and the Traffic Control Coordinator informed.

PATROL ROUTES

NOTE: The following roadways represent major evacuation routes which require constant patrolling during an evacuation. The stated objective is to keep these routes clear of obstructions and report any problem encountered along a route. Where possible, disabled vehicles should be pushed clear of the travel lanes. Radio for truck or any other assistance required. (Route numbers begin with 151 to avoid confusion with traffic control post numbers.)

Route #	Roadway(s)	Patrol Section(s)	Zone(s)
151	Wading River Manor Road	From Route 25 to Route 495	C or I
152	Edwards Avenue	From Route 495 to Route 25	E or D or I or J or P
	Route 25	From Edwards Avenue to Route 495	
	Route 495	From Route 25 to Edwards Avenue	
(Note: These three roads are designed to be patrolled as a single loop by one car.)			
153A	William Floyd Parkway	From Route 25A to Route 495	A or B or C or G or H
153B		From Route 495 to Route 27	M or N
154A	CR 21	From Route 25A to Mill Road	F or G or H
154B		From Mill Road to Route 27	M

- e. If the area to be evacuated increases in size, request additional deployment of Road Crew members from the appropriate Staging Area.
- f. During the deployment of Road Crews, they will report the status of traffic and Road Crew clearing work directly to the Communicator at the EOC. Relay this information to the other Traffic Control Point Coordinator, Evacuation Route Coordinator and Traffic Control Coordinator.
- g. Keep the deployed Road Crews informed of the status of the emergency. Inform them of the status of the evacuation, emergency class changes, evacuation plan alterations and route changes.
- h. Keep the Road Crew informed of radiological conditions. If it becomes known that a Road Crew member will be in an area where he could receive a dose of 5R or more, assign the person to a different area. The Traffic Control Coordinator will keep you informed of the offsite doses that are expected.
- i. When Road Crews are done, have them report to the EOC for their contamination checks. Hold a briefing with them to prepare a report for the Traffic Control Coordinator.

- Evacuation Route Coordinator

o Your Job Description

The Evacuation Route Coordinator is in charge of the six Evacuation Route Spotters and reports to the Traffic Control Coordinator. The Route Spotters drive the evacuation routes to discover and report traffic flow problems and their causes.

o Notification and Mobilization

The Evacuation Route Coordinator is not notified for an Unusual Event. He is notified by pager for an Alert, Site Area Emergency or General Emergency and reports to the EOC when paged.

o What the Evacuation Route Coordinator Does

- a. After arriving at the Emergency Operations Center, get briefed by the Traffic Control Coordinator on the current status of the emergency.
- b. If evacuation is ordered, verify the zones to be evacuated with the Traffic Control Coordinator and by observing the status boards in the EOC.
- c. To dispatch the Route Spotters, have a Traffic Control Coordinator telephone the Lead Traffic Guide at the Staging Area nearest the zones to be evacuated. Relay the zones to be surveyed and request a status report following their deployment (see page 17 for an example

of the priority route listing shown from the Traffic Control Procedure). Notice that the routes are specific for the zones that are affected.

- d. If additional zones need evacuation, contact the appropriate Staging Area and request additional spotters. Since there are only six spotters, a Lead Traffic Guide may recruit additional spotters from other groups waiting for deployment at the Staging Area. If other spotters have to be recruited, talk with the Traffic Control Coordinator first.
- e. Keep informed of the status of Route Spotters. If they report road blockages, notify the Road Logistics Coordinator who will dispatch a Road Crew to clear them. There may also be specific requests from the Road Crews or Traffic Guides to investigate traffic problems. When these requests come in, determine the closest available Route Spotter and dispatch him to the suspected trouble area to investigate. Route Spotters will communicate directly with the Traffic Control Communicator in the EOC.
- f. Keep Route Spotters informed of the status of the emergency. Especially keep them informed of radiological conditions. The Traffic Control Coordinator will inform you of zones or routes which could have high levels of radiation. If you are informed that the radiation is excessive to the emergency worker for a particular area, radio the Route Spotters to abandon the route in that area and to not return to the area unless specifically instructed to do so.

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- g. When a Route Spotter is done with a zone, instruct him to repeat the route or go to another route. When you are informed that Traffic Control operation is complete, call in your spotters to the EOC. Brief them there after they get their contamination checks.

Before we go on to the field groups, let's summarize the important points about the coordinators in Traffic Control.

- o The Traffic Control Coordinator is in charge of the whole Traffic Control group. He reports to the Evacuation Coordinator. He gives information and activation orders to his coordinators who activate and direct the three field groups.
- o The Traffic Control Point Coordinator directs the Traffic Guides.
- o The Road Logistics Coordinator directs the members of the Road Crew.
- o The Evacuation Route Coordinator directs the Evacuation Route Spotters.
- o Each of the three field group coordinators have certain things in common, as shown below:

- a. Notification:

All coordinators are notified by pager. None of the coordinators is notified for an Unusual Event. They are notified for an Alert, Site Area Emergency and General Emergency and report to the Local EOC when paged.

b. At the EOC:

Each coordinator gets briefed by the Traffic Control Coordinator, and verifies the zones to be evacuated. To dispatch field teams, have one of the Communicators telephone the Lead Traffic Guide at the appropriate Staging Area and relay the information and direction.

c. When field teams are deployed:

Keep in constant communication on their progress and inform them of the evacuation status. Remember to inform the field members when they themselves should evacuate because of excessive radiation exposure. Traffic Guides communicate through the Lead Traffic Guide at their Staging Area. The Road Crew and the Route Spotters communicate directly with the EOC.

d. When field members are done:

Call in the field members to the EOC for their contamination checks. Then hold a briefing session.

- Traffic Guides

o Your Job Description

Of all the designated Traffic Guides, about 75% will be activated during an emergency, and the remainder will be backups. Three Traffic Guides are designated "Lead Traffic Guides" with one stationed in each Staging Area.

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Traffic Guides are dispatched from Staging Areas to man traffic control posts. At a post, they will direct traffic to assist the flow of vehicles at intersections and entrance ways. Traffic Guides report to the Lead Traffic Guide at a Staging Area and communicate with him when in the field.

o Notification and Mobilization

Eighteen of the Traffic Guides (three Lead Traffic Guides and 15 others) have pagers. None of the Traffic Guides is notified for an Unusual Event. These 18 are paged for an Alert, Site Area Emergency, or General Emergency. For an Alert, the Lead Traffic Guides report to their assigned Staging Area. The 15 others with pagers just stay on standby. For a Site Area Emergency or General Emergency, the three Lead Traffic Guides report to the Staging Areas and the other 15 will notify and call in about 190 Traffic Guides. Each Traffic Guide with a pager has a list of Traffic Guides to call. Out of each list, only the first 11 or 12 Traffic Guides that are reached will be notified and called in. All the notified Traffic Guides, including the 15 with pagers will report to one of the three pre-assigned Staging Areas.

o What a Traffic Guide Does

- a. After finishing their calls, the 15 paged Traffic Guides will report to their assigned Staging Area along with the other guides they have reached. All traffic guides will drive to the Staging Area in their own vehicles.

- b. When you get to a Staging Area, a security guard will check off your name on a roster.
- c. After being checked in at the Staging Area, all personnel will be told where to pick up their dosimeters. When you get your dosimeters, immediately put them on. You will get a 0-200 mR dosimeter, a 0-5 R dosimeter and a TLD badge. Clip these to an outside shirt or coat pocket.
- d. At the Staging Area, the Lead Traffic Guide will coordinate the assembly and brief the Traffic Guides.

The six steps below discuss the job of the Lead Traffic Guide.

1. The Lead Traffic Guide at a staging area oversees the assembly, briefing and deployment of the Traffic Guides, Road Crew and Route Spotters.
2. The Lead Traffic Guide obtains the roster from security. Using the roster, he notifies the three coordinators in the EOC on the manpower status of the field groups.
3. He receives notification from the Coordinators in the EOC on the emergency status. If there will be an evacuation, he is told what zones and traffic control posts will be involved, what routes should be used and what deployment areas should be covered.

4. After being informed, he briefs the field member on the evacuation details and assigns posts, routes and deployment areas.
 5. He distributes the equipment and emergency packets.
 6. He then remains at the staging area and keeps in contact with the EOC coordinators on the deployment status of the field groups.
 7. he will be the communication contact for receiving and sending all information to the deployed Traffic Guides and will be the contact for relaying all traffic guide information to and from the EOC.
- e. The Traffic Guides, after being assembled and briefed, will get their emergency equipment and kit. The kit has a packet which contains maps, the Traffic Control procedure (OPIP 3.6.3) and a Traffic Guide checklist. This checklist provides each Traffic Guide with a step-by-step process on what to do from the time they get their packets to the time their assignment is over.

Take the time now to read the Traffic Guide checklist shown on the next two pages.

TRAFFIC GUIDE PROCEDURE

1. Inventory emergency packets before going to the traffic control point. Equipment consists of:
 - a. Packet containing:
 - Traffic control procedure
 - Traffic control point maps
 - b. Emergency vest
 - c. Flashlight, flares
 - d. Traffic cones
 - e. Standard rain gear
2. Receive dosimetry, consisting of 1 direct-reading dosimeter (0-200 mR), 1 direct-reading dosimeter (0-5 R) and 1 thermoluminescent dosimeter (TLD). Make sure these are put on immediately.
3. Complete Part I of all dosimetry forms required, retaining a Daily Dose Record Card and a copy of a Permanent Dose Record Form.
4. Attend the Lead Traffic Guide evacuation briefing to receive direction on your assignment.
5. Pick up mobile radios and check operation of units. If radios should break down, use a commercial telephone or proceed to another radio-equipped location.
6. Upon arrival at the traffic control point, put on emergency safety vest. Make sure dosimeters are placed on clothing. Do not try to tamper with traffic signals. Leave them in their present mode.
7. Place the LERO vehicle so that its physical location will achieve the desired control strategy and avoid interference with the desired traffic flow. Use of the traffic cones will assist in this task for detouring of vehicles. Approaching emergency vehicles and buses are to be given priority right of way.
8. If County or other police arrive at your post, turn over control to them. Brief them on the strategy of the control post and any problems that have arisen during the emergency.

TRAFFIC GUIDE PROCEDURE (continued)

Remain with them throughout the duration of the assignment to provide radiological dose information and communications to the EOC. Request police accompany you to the Emergency Worker Decontamination Center at the completion of the assignment.

9. Contact the Lead Traffic Guide at the Staging Area upon the following conditions:
 - a. Upon initially establishing your control post.
 - b. If traffic flow through your intersection stalls.
 - c. If road blockage requires a Road Crew.
 - d. If there is no traffic on your assigned route.
10. Upon arrival of the LERO Evacuation Route Spotters, indicate any problems that are occurring at the traffic control point.
11. If informed by the Lead Traffic Guide that you are downwind of a release, put on your standard rain gear. Read your direct reading dosimeters at 15 minute intervals.
12. If readings go beyond the scale on the 0-200 mR dosimeter, inform the Lead Traffic Guide and read the 0-5 R dosimeter.
13. At a reading of 3.5 R, inform the Lead Traffic Guide of your dosimeter readings. Make sure traffic cones are properly set up to detour traffic correctly. Leave post when instructed or at 5 R, whichever occurs first.
 - a. Report to the Emergency Worker Decontamination Center at the Local EOC in Brentwood for monitoring and possible decontamination.
 - b. After completion of the Decontamination Center Check in, report to the Traffic Control Point Coordinator for a briefing.
14. When informed by the Lead Traffic Guide that emergency operations have ended, dismantle traffic control post and return to the Emergency Worker Decontamination Center at the Local EOC for monitoring and decontamination. Report to the Traffic Control Point Coordinator for a final briefing.

- Road Crews

o Your Job Description

All Road Crews will be deployed from the Staging Areas in company trucks to waiting points along evacuation routes. From these waiting points, they will be dispatched to clear road blockages. Road Crews report to the Lead Traffic Guide at the Staging Area and will report to and communicate with the Road Logistics Coordinator at the EOC when in the field.

o Notification and Mobilization

Three of the Road Crew members have pagers. None of the Road Crew members are notified for an Unusual Event. These three are paged for an Alert, Site Area Emergency and General Emergency. For an Alert, the three just stay on standby. But for a Site Area Emergency or General Emergency, the three Road Crew members will notify and call in about 27 additional Road Crew members. Each Road Crew member with a pager has a list of 15 Road Crew members to call. Out of each list of 15, only the first 9 that are reached will be notified and called in. All the notified Road Crew members including the three with pagers will report to one of three pre-assigned Staging Areas. One of the Road Crew members with a pager will also notify and call in three Route Spotters.

o What a Road Crew Member Does

- a. The paged Road Crew members, after finishing their calls, will report to their assigned Staging Area along with the other members that they have reached. They will drive to the Staging Area in their own vehicles.
- b. When you get to a Staging Area, a security guard will check off your name on a roster.
- c. After being checked in at the Staging Area, all personnel will be told where to pick up their dosimeters. When you get your dosimeters, immediately put them on. You will get a 0-200 mR dosimeter, a 0-5 R dosimeter and a TLD. Clip these to an outside shirt or coat pocket.
- d. At the Staging Area the Lead Traffic Guide will coordinate the assembly and preparation of the Road Crew.
- e. Road Crew members, after being assembled and briefed, will be assigned a vehicle and given their emergency equipment and kit. The kit has a packet which contains maps, the Traffic Control procedure (OPIP 3.6.3) and a Road Crew checklist. This checklist provides each Road Crew with a step-by-step process on what to do from the time they get their packets to the time their assignment is over.

Take time now to read the Road Crew Checklist shown on the next two pages.

ROAD CREW PROCEDURE

1. Inventory emergency packets before being deployed to designated locations along evacuation routes. Packets should contain:
 - a. Traffic control procedure
 - b. Traffic control point maps
 - c. Emergency vest
 - d. Flashlight, flares
 - e. Traffic cones
 - f. Standard rain gear

2. Receive dosimetry, consisting of 1 direct-reading dosimeter (0-200 mR), 1 direct-reading dosimeter (and 0-5 R) and 1 thermoluminescent dosimeter (TLD). Make sure these are put on immediately.

3. Complete Part I of all dosimetry forms required, retaining a Daily Dose Record Card and a copy of a Permanent Dose Record Form.

4. Attend the Lead Traffic Guide evacuation briefing to receive direction on your assignment.

5. Pick up mobile radios and check operation of units. If radios should break down, use a commercial telephone or proceed to another radio-equipped location.

6. Leave for predesignated locations along evacuation routes, watching for road impediments that have to be moved.

7. If problems arise, contact the Road Logistics Coordinator via radio at the Local EOC immediately.

8. If informed by the Road Logistics Coordinator that you are downwind of a release, put on your standard rain gear. Read your direct-reading dosimeters every 15 minutes.

9. If readings go beyond the scale on the 0-200 mR dosimeter, inform the Road Logistics Coordinator and read the 0-5 R dosimeter.

ROAD CREW PROCEDURE (continued)

10. At a reading of 3.5 R, inform the Road Logistics Coordinator of your dosimeter readings and prepare to leave your post. If directed to leave your post, or at a reading of 5 R, whichever occurs first, return to the Local EOC/Emergency Worker Decontamination Center at Brentwood for monitoring and possible decontamination.

11. When informed by the Road Logistics Coordinator that emergency operations have ended, return to the Emergency Worker Decontamination Center at the Local EOC for monitoring and decontamination. Report to the Road Logistics Coordinator for a final briefing.

f. When a road blockage is encountered, notify the Road Logistics Coordinator in the EOC. Try to locate the driver of the blocking vehicle to inform him that you are going to move the vehicle. Offer to bring the driver to a transfer point where he may get a bus to a Relocation Center. The vehicle should be moved off the road and beyond the shoulder if possible. If the driver protests, use discretion to convince him of the importance of clearing the road. If the driver cannot be located, the vehicle should still be moved.

- Evacuation Route Spotters

o Your Job Description

The Route Spotters are deployed from the Staging Areas to check the evacuation traffic progress and to investigate problems in the flow of traffic. Route Spotters report to the Lead Traffic Guide at the Staging Area and report to and communicate with the Evacuation Route Coordinator at the EOC when in the field.

o Notification and Mobilization

The six Route Spotters will be notified and called in by a Road Crew member. This Road Crew member has a pager and is instructed to mobilize the Route Spotters for a Site Area Emergency, or General Emergency. This Road Crew member uses a list of Route Spotters and notifies and calls in the first six he contacts.

LERO TRAINING PROGRAM

o What a Route Spotter Does

- a. Of the six Route Spotters, two will report to each one of the Staging Areas. They drive to the Staging Areas in their own vehicles.
- b. When you get to a Staging Area, a security guard will check off your name on a roster.
- c. After being checked in at the Staging Area, all personnel will be told where to pick up their dosimeters. When you get your dosimeters, immediately put them on. You will get a 0-200 mR dosimeter, a 0-5 R dosimeter and a TLD. Clip these to an outside shirt or coat pocket.
- d. At the Staging Area, the Lead Traffic Guide will coordinate the assembly and preparation of the Route Spotters.
- e. Route Spotters, after being assembled and briefed, will be given their emergency equipment and kit. The kit has a packet which contains maps, the Traffic Control procedure (OPIP 3.6.3) and an Evacuation Route Spotter Checklist. This checklist provides each Route Spotter with a step-by-step process on what to do from the time they get their packet to the time their deployment assignment is over. Take time now to read the Evacuation Route Spotter Checklist shown on the next two pages.

EVACUATION ROUTE SPOTTER PROCEDURE

1. Inventory emergency packets before going out on the road. These packets should contain:
 - a. Evacuation route and traffic control point maps
 - b. Standard rain gear
 - c. Flashlight, flares
 - d. Traffic cones
2. Receive dosimetry, consisting of 2 direct-reading dosimeters (0-200 mR and 0-5 R) and 1 thermoluminescent dosimeter (TLD). Make sure these are put on immediately.
3. Complete Part I of all dosimetry forms required, retaining a Daily Dose Record Card and a copy of a Permanent Dose Record Form.
4. Attend the Lead Traffic Guide evacuation briefing to receive direction on your assignment.
5. Pick up mobile radios and check operation of units. If radios should break down, use a commercial telephone or proceed to another radio-equipped location.
6. Leave for the evacuation route/EPZ area and survey the zone.
7. Contact the Evacuation Route Coordinator at the Local EOC every 30 minutes via radio to keep him up-to-date on conditions in the areas that you have surveyed. If any problems are observed, contact the Evacuation Route Coordinator immediately.
8. If informed by the Evacuation Route Coordinator that you are downwind of a release, put on your standard rain gear. Read your dosimeters every 15 minutes.
9. If readings go beyond the scale on the 0-200 mR dosimeter, inform the Evacuation Route Coordinator and read the 0-5 R dosimeter.

EVACUATION ROUTE SPOTTER PROCEDURE (continued)

10. At a reading of 3.5 R, inform the Evacuation Route Coordinator of your dosimeter readings and prepare to leave your post. If directed to leave your post, or at a reading of 5 R, whichever occurs first, return to the Local EOC/Emergency Worker Decontamination Center at Brentwood for monitoring and possible decontamination.
11. When informed by the Evacuation Route Coordinator that emergency operations have ended, return to the Emergency Worker Decontamination Center at the Local EOC for monitoring and decontamination. Report to the Evacuation Route Coordinator for a final briefing.

HERO TRAINING PROGRAM

Now, let's summarize the jobs of the field members.

The three field groups are:

- The Traffic Guides reporting to the Traffic Control Point Coordinator
 - The Road Crew reporting to the Road Logistics Coordinator
 - The Evacuation Route Spotters reporting to the Evacuation Route Coordinator
-
- o All the field members report to an assigned Staging Area for a Site Area Emergency, or General Emergency. Members having pagers will notify the other members to report using notification lists. Those members with pagers are also notified at an Alert to be on standby, except the three Lead Traffic Guides who report in to their Staging Areas during this stage. The Lead Traffic Guide at each Staging Area will assemble and brief the field members and distribute their equipment and emergency packets. The Lead Traffic Guides will be the communication contact for relaying messages to and from the deployed Traffic Guides.
 - o The Traffic Guides direct evacuating traffic at pre-assigned traffic control posts.
 - o The Road Crew clears blockages on evacuation routes.
 - o The Route Spotters scan specified evacuation routes to investigate causes of road blockages.

LERO TRAINING PROGRAM

All the field members report back to the Local EOC when called in or when their field assignment is over. At the EOC, they first go to the Emergency Worker Decontamination Center to be checked to determine if they have received any radiation exposure or are contaminated. If contaminated, they will be decontaminated. Next, all field personnel will go to a briefing with their coordinator.

By now, you have seen a video presentation on Traffic Control and have read through this workbook. OPIP (Offsite Plan Implementing Procedure) Number 3.6.3, "Traffic Control," can be read for further information.

MODULE 12
TRAFFIC CONTROL
MODULE REVIEW

Name: _____

LERO Title: _____

Company Title: _____

1. Fill in a letter indicating to who the individual or group directly reports. Hint: A letter may be used more than once.

Reports to:

- | | | |
|----------------------------|-------|---------------------------------|
| Route Spotter | _____ | a. Evacuation Route Coordinator |
| Traffic Control | _____ | b. Traffic Control Coordinator |
| Coordinator | | c. Director of Local Response |
| Evacuation Coordinator | _____ | d. Traffic Control Point |
| Road Crew | _____ | Coordinator |
| Road Logistics Coordinator | _____ | e. Road Logistics Coordinator |
| Communicator | _____ | f. Evacuation Coordinator |
| Lead Traffic Guide | _____ | |
| Traffic Control Point | _____ | |
| Coordinator | | |
| Evacuation Route | _____ | |
| Coordinator | | |
| Traffic Guide | _____ | |

LERO TRAINING PROGRAM

2. For which two emergency classes do all the field members report?

1. _____
2. _____

3. Evacuation is the more likely and preferred protection than sheltering.

True or False

4. How many zones are in the EPZ?

- a. 10
- b. 9
- c. 6
- d. 19

5. The evacuation group is made up of Traffic Control, Transportation and Special Facilities Evacuation.

True or False

6. Traffic Control will transport school children.

True or False

7. List four people within Traffic Control who report to the Local EOC by title.

- 1. _____
- 2. _____
- 3. _____
- 4. _____

8. At what class of emergency do the people in question 7 report?

9. Where does the Traffic Control Point Coordinator get the list of Traffic Control posts?

10. Where does the Traffic Guide get the list of Traffic Control posts?

11. At what potential radiation dose level should field members evacuate their deployed area?

_____ R

12. What will field members be instructed to do when there is a potential low level radiation exposure. Hint: Involves doing something with an equipment item but not a dosimeter.

LERO TRAINING PROGRAM

13. Where do field members report after their field assignment?

14. What two things occur with field members after they report in to question 13's answer.

1. _____

2. _____

15. Who in Traffic Control is notified for an Unusual Event?

16. Who directly coordinates the field members at a Staging Area?

- a. Staging Area Coordinator
- b. Traffic Control Point Coordinator
- c. Communicator
- d. Lead Traffic Guide

17. What should a Traffic Guide do when the police arrive where they are deployed? Hint: Details in checklist.

- a. Provide them with direction and guidance so they may follow you.
- b. Yield to their direction first.
- c. Attempt to work jointly with them.
- d. Continue your operation until informed by the EOC to yield to their orders.

18. Match the Traffic Control group with their job.

- | | | |
|--------------------------|-------|--|
| Evacuation Route Spotter | _____ | a. Directs cars at control posts |
| Traffic Guide | | |
| Road Crew | _____ | b. Removes disabled car off roads |
| | _____ | c. Looks for road blockages and traffic problems |

19. What dosimeters do field members receive?

1. _____
2. _____
3. _____

20. How often should dosimeters be checked when in the field?

- a. Every half hour
- b. Every hour
- c. Four times
- d. Twice
- e. Every 15 minutes

21. How many Traffic Guides have pagers?

22. How many Traffic Guides does the Lead Traffic Guide notify to report in?

- a. 30
- b. 15
- c. 20
- d. None

LERO TRAINING PROGRAM

23. Lead Traffic Guides have pagers.

True or False

24. Lead Traffic Guides are on standby for an Alert.

True or False

25. Evacuation routes and zones to be evacuated may change during the course of an emergency.

True or False

26. All of the field members that are on a call list will be notified by the callers.

True or False

27. Match the communication contact with the deployed field group:

Field Group

Communication Contact

Route Spotter _____

Road Crew _____

Traffic Guide _____

a. Lead Traffic Guide

b. Road Logistics Coordinator

c. Staging Area Coordinator

d. Evacuation Route Coordinator

e. Traffic Control Point Coordinator

ATTACHMENT 5

LERO SECURITY

MODULE NO. 16

This module applies to:

- Director of Local Response
- Manager of Local Response
- Support Services Coordinator
- Security Coordinator
- EOC Security
- Security (Relocation Centers)

Your Name _____

LERO Title _____

Company Title _____

VERO TRAINING PROGRAM

TABLE OF CONTENTS

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TRAINING OBJECTIVES

At the conclusion of the LERO Security portion of the LERO Training Program, the trainee will:

- A. Be able to identify the LERO group to which Security Personnel belong
- B. Know how to identify a LERO member
- C. Know what job functions Security Personnel perform
- D. Where LERO Security Personnel are located during an emergency
- E. What protective equipment to wear during an emergency

LERO TRAINING PROGRAM

INTRODUCTION

The services which will be provided by the LERO Security Personnel are best characterized by comparing them with similar actions which take place at an airport.

At an airline terminal, traffic guides direct the arriving and departing traffic into and out of the terminal area in an orderly and efficient manner, minimizing the amount of time anyone must spend getting in and out of the terminal. Passengers arriving at the terminal may be provided assistance by airline guides or other information personnel. They also provide assistance at arrival and departure gates to people needing directions or possibly requiring medical attention.

Friends or family of the passengers may gather around the gate areas to see the passengers off. However, security guards may restrict entry to only those who hold valid airline tickets.

LERO Security Personnel will perform similar services. At the Relocation Centers and EOC, Security Personnel will assist arriving people by directing them where to park their cars and where to go to be processed into the center. At the Local Emergency Operations Center, security will assure that only authorized LERO emergency personnel and visitors gain access.

A. SECURITY ORGANIZATION

LERO Security Personnel are part of the Support Services Group which is under the direction of the Support Services Coordinator. The Security Coordinator, who reports to the Support Services Coordinator, is responsible for coordinating the activities of the security staff and ensuring that sufficient manpower is available. The Security Coordinator will be located at the Local EOC.

B. SECURITY OPERATIONS AT THE LOCAL EMERGENCY OPERATIONS CENTER

Upon notification that the Emergency Operations Center (EOC) is to be activated, LILCO Brentwood Security personnel will establish and maintain a security post in the lobby at the main entrance. They will maintain the post until relieved by LERO Security. Upon the arrival of LERO Security, additional security posts will be established in accordance with the Security Procedure (OPIP 4.1.3).

Security will maintain an Emergency Personnel Log In/Log Out Form to allow properly identified personnel to be processed into the facility. Brentwood Security will maintain on file a list of all authorized EOC emergency personnel. Each of these people will be carrying LERO identification. Upon display of appropriate identification, security will provide the person with an EOC photo-identification badge and direct him/her to sign the Log In/Log Out Form. The photo-identification badge must be worn at all times while the person is in the EOC.

Legitimate visitors may arrive, who require entry to support the emergency response. In this case, the Security Coordinator will request authorization from the appropriate LERO Coordinator

LERO TRAINING PROGRAM

(dependent on the visitors reason for entry) and, upon obtaining it, will grant access to the visitor and provide him/her with a visitors photo-identification badge.

Security will be responsible for assuring that operations in the EOC are not disrupted by the news media or curiosity seekers. All inquiries for information from persons outside the emergency response organization shall be directed to the Emergency News Center.

LERO Security Personnel are to maintain order at the Local EOC. However, if a disturbance appears to be of a serious nature and threatens the security of the EOC, Security personnel should call the Suffolk County Police. A direct link to the Suffolk County Police Headquarters in Yaphank can be utilized by calling 345-5000 and asking for the duty officer.

A security post will be maintained at the entrance to the Local EOC until the facility is deactivated. Should Suffolk County Police arrive to help, LERO Security personnel should provide them with assistance as needed.

C. SECURITY OPERATIONS AT THE RELOCATION CENTERS

Public relocation centers will be opened to provide shelter for evacuees in the event that an evacuation is initiated for a zone or zones within the 10-mile Emergency Planning Zone. LERO Security Personnel will be available at the relocation centers to provide assistance to the arriving evacuees.

Several LERO Security people will be stationed in the parking lot to direct parking of the arriving vehicles. More Security Personnel will be located at the entrances to the center to

direct the evacuees to the Monitoring/Decontamination Personnel. Inside the facility, security will provide assistance as needed to the American Red Cross staff.

Upon arriving at the relocation center, Security Personnel should report to the Decontamination Leader. He will assign them to a location where assistance is needed most.

Security Personnel must receive dosimeters from the Record Keepers before reporting to their assigned location. Remember, to obtain:

- One direct-reading dosimeter (range 0-200 mR)
- One direct-reading dosimeter (range 0-5 R)
- One thermoluminescent dosimeter (TLD badge)

Security Personnel at the relocation centers must wear dosimeters since they may be exposed to radiation if any of the arriving evacuees are contaminated.

D. SECURITY OPERATIONS AT THE EMERGENCY WORKER DECONTAMINATION FACILITY

The services provided by security at the Emergency Worker Decontamination Facility are similar to those provided by security at the relocation centers. Security Personnel will direct emergency workers to the parking areas and to the monitoring/decontamination stations.

Upon arriving at the facility, Security Personnel should see the Security Coordinator for instructions. Before reporting to their assigned job location, they should obtain the following dosimeters from the Record Keepers:

- One direct-reading dosimeter (range 0-200 mR)
- One direct-reading dosimeter (range 0-5 R)
- One thermoluminescent dosimeter (TLD badge)

Security Personnel must wear dosimetry since they may be exposed to radiation if any of the emergency workers arriving at the facility are contaminated.

SUMMARY

The LERO Security staff, under the direction of the Security Coordinator, are part of the Support Services Group. The Security Coordinator, located at the EOC, reports to the Security Services Coordinator.

Security Personnel located at the Local Emergency Operations Center will control access to the facility, limiting it to those who have LERO identification or are authorized visitors.

At relocation centers, security will provide assistance to evacuees by directing them to parking spaces, guiding them to monitoring/decontamination stations, providing directions within the relocation centers and assisting the American Red Cross as needed. At the Emergency Worker Decontamination Facility, Security Personnel will provide directions and assistance to arriving emergency workers.

LERO TRAINING PROGRAM

MODULE NO. 16

LERO SECURITY

MODULE REVIEW

Name: _____

LERO Title: _____

Company Title: _____

True or False

- _____ 1. LERO Security Personnel are part of the Health Services Group.
- _____ 2. The Security Staff reports to the Security Coordinator at the Emergency Operations Center.
- _____ 3. LILCO Brentwood Security will initially establish a security post in the lobby of the Local EOC.
- _____ 4. LERO Security Personnel will establish security posts at each relocation center.
- _____ 5. Only emergency personnel carrying LERO identification badges will be allowed access to the EOC.
- _____ 6. Each person entering or exiting the EOC must sign a Log In/Log Out Form.
- _____ 7. Representatives of the news media will be given free access to the Local EOC.

LERO TRAINING PROGRAM

8. LERO Security Personnel will be providing directions and assistance to emergency workers arriving at the relocation centers.
9. LERO Security Personnel at the relocation centers will be directing arriving evacuees to parking locations.
10. LERO Security Personnel should report to the Decontamination Leader upon arrival at the relocation centers.
11. LERO Security Personnel assisting arriving evacuees at the relocation centers must wear dosimetry.
12. LERO Security Personnel will monitor arriving evacuees for contamination.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before The Atomic Safety And Licensing Board

In the Matter of)

LONG ISLAND LIGHTING COMPANY)

(Shoreham Nuclear Power Station,
Unit 1))

) Docket No. 50-322 (O.L.)
) (Emergency Planning)
)
)

CERTIFICATE OF SERVICE

I hereby certify that copies of Testimony of Deputy Inspector Peter F. Cosgrove, Lieutenant John L. Fakler and Professor Michael Lipsky in Support of Emergency Planning Conventions 39, 40, 41, 44, 98, 99 and 100 - Training of Offsite Emergency Response Workers, have been served on the following this 2nd day of April, 1984 by U.S. Mail, first class, except as otherwise noted.

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**By Federal Express

DATE: April 2, 1984



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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)

LONG ISLAND LIGHTING COMPANY)

(Shoreham Nuclear Power Station,)
Unit 1))
)
)
_____)

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

SUPPLEMENTAL TESTIMONY OF DEPUTY INSPECTOR PETER
F. COSGROVE AND LIEUTENANT JOHN L. FAKLER ON
BEHALF OF SUFFOLK COUNTY REGARDING CONTENTIONS
39, 40, 41, 44, 98, 99 AND 100 - TRAINING OF
OFFSITE EMERGENCY RESPONSE WORKERS

Q. Please state your names and occupations.

A. My name is Peter F. Cosgrove. I am a Deputy
Inspector in the Suffolk County Police Department and hold the
position of Executive Officer of the Third Precinct. Until
January 15 of this year, I was the Commanding Officer of the
Suffolk County Police Academy.

My name is John L. Fakler. I am a Lieutenant in the
Suffolk County Police Department and hold the position of
Commanding Officer of Media Services.

Our professional qualifications are contained in our previously filed testimony on Contentions 39, 40, 41, 44, 98, 99 and 100.

Q. Since your testimony was filed on April 2, 1984, have you received additional information which bears upon the issues raised in Contentions 39, 40, 41, 44, 98, 99 and 100?

A. Yes. It is our understanding that, subsequent to the filing of our testimony on April 2, 1984, LILCO was ordered by the Licensing Board to produce copies of critique and evaluation forms that had been completed by controllers and observers of four LERO drills and/or exercises. We have been informed that these controller/observer comments were produced by LILCO on or about June 1, 1984, and that such comments represent the only drill/exercise comments by LILCO controllers and/or observers that have been retained by LILCO or its training consultants. Based upon our review of the documents produced, it appears that we have been provided with comments from a training drill held in November, 1983 and another training drill held in January, 1984. We have also been provided comments from two exercises held in February, 1984. We have reviewed these documents and, in our opinion, they raise significant concerns about the adequacy of the LILCO drill and exercise program.

Q. What are these concerns?

A. First, we are concerned about the lack of briefings and the adequacy of the briefings that have been held both prior to and during LILCO's drills and exercises. Such briefings, during an actual emergency at Shoreham, would be of crucial importance and would, for example, provide a way of keeping LERO personnel informed about such matters as the status of the emergency, radiological and meteorological conditions, and the general progress of the emergency response. Therefore, it is important that during training drills and exercises, briefings be held and that such briefings be realistic and adequate in scope. Numerous comment sheets, however, noted that briefings were not held and that those which were held were frequently inadequate.

Q. Is it your opinion that emergency workers must be constantly kept advised as to all details of the emergency and the actions taken in response to the emergency?

A. No. However, emergency workers should be kept apprised of the overall status of the emergency and the plant conditions, and they should be knowledgeable about the general progress of the emergency response. In addition, it is essential that emergency workers be kept fully informed about

all emergency conditions that bear upon their particular emergency jobs. For example, radiological monitoring personnel would need to be aware of wind direction and other meteorological conditions, just as LILCO's traffic guides would need to be kept advised about traffic conditions.

The importance of timely and adequate briefings of emergency response personnel is emphasized by the LILCO Plan. For example, the LILCO Plan specifies that it is the responsibility of the Staging Area Coordinators to establish and maintain functional staging areas. (See OPIP 2.1.1). It is not possible, however, for the staging areas to function adequately if the emergency workers assigned to the staging areas do not have prompt and accurate information. Such information is provided by briefings; if such briefings are adequate, emergency workers will be better able to perform their tasks effectively and in the manner envisioned by the LILCO training program. For this reason, it is important that training drills and exercises include realistic and adequate briefings of trainees. Without such briefings, drill and exercise participants are precluded from having an opportunity either to interact with other emergency workers or to drill their job skills in a meaningful manner.

From our review of the drill/exercise comments produced by LILCO, it appears that problems in briefing emergency personnel/trainees occurred at every drill and exercise. For example, during the November, 1983 drill, drill controllers/observers commented that "periodic updates were not performed." One observer indicated that training personnel "generally performed below expectations," and that "[t]here were deficiencies of a significant nature." This same observer commented simply as follows: "Not the right info[rmation] at the right time." Similarly, during the January drill, observers noted that some briefings were "slow, late, [and] inaccurate," and also "lacked details." It was also noted that the bus driver dispatcher briefing "did not address current plant status/radiological status."

Briefings continued to be a problem during the two February exercises for which we were provided comments by LILCO. The first exercise, held on February 8, was characterized by numerous comments from observers about the lack of briefings. For example, observers wrote that there was "no general emergency briefing at [the Port Jefferson staging area]", and "[n]o general plant briefings for LERO field workers." In addition, there were comments that "[n]o radiological information was given to people going out to the

field." It was also observed that "people [were] not informed [of the] potential plume path and radiation levels at all." In fact, of the 14 completed critique/evaluation forms commenting on the performance of participants assigned to the LILCO staging areas during the February 8 exercise, seven indicated that personnel going into the field were not properly briefed as to the potential plume path and radiation levels. In addition, six of these forms also noted that field personnel were not properly briefed as to protective action recommendations. Only two of the forms indicated that field personnel had been properly briefed in both areas.

This pattern of problems with briefings continued during the second February exercise, which was held on February 15. As before, observers commented primarily on the lack of briefings. For example, one observer noted that there were "[n]o briefings relative to plant status or radiological conditions," while another observer commented that "[s]taging area personnel (dosimetry) were not briefed regarding emergency status, protective actions, plume travel -- other than status board posting. This is not enough." In addition, it was noted that "[b]riefings as to radiological conditions [were] poor." In fact, the briefings were so poor that one observer noted the following: "Traffic guides were given what meteorological

[and] plant status data . . . displayed on status board . . . but road crews, [route] spotters [and route] alert drivers [were] not given this data in briefings. This is a deficiency." (Emphasis in original.)

From the foregoing, it is clear that problems with briefings have persisted in every drill and exercise held by LILCO. The comments quoted and the critique/evaluation forms from which these comments were taken are appended to this testimony as Attachment 1. In our opinion, it is likely that the consistent failure of LILCO's briefings to provide drill and exercise participants with adequate and accurate information will significantly and adversely effect the ability of LILCO's emergency response personnel to develop an accurate understanding of LILCO's overall emergency response effort. In addition, in our opinion it is likely that the inadequate nature of LILCO's briefings have foreclosed LERO trainees from having an adequate opportunity to practice the particular jobs required of them under the LILCO Plan. This is a serious deficiency of the LILCO training program.

Q. Have the drill/exercise comments reviewed by you revealed any other problems with LILCO's training program?

A. Yes. There are comments and critiques from each of the drills and exercises noting significant problems with radio users being unfamiliar with proper radio language, radio protocol and general communications techniques. These areas are obviously important, since a good command of radio protocol, language and communications techniques would be necessary for there to be adequate communications among emergency response personnel during a Shoreham emergency. In our opinion, the persistent pattern of problems in these areas is therefore of significant concern. A sampling of the problems revealed in the training documents we have reviewed is set forth below and is appended to this testimony as Attachment 2.

During the November 1983 drill, for example, observers noted a "real need for radio training for communicators." One observer, in critiquing two communicators, commented as follows: "poor radio technique in 1 case, fair in the other." Some observers noted that LILCO's communicators were "unfamiliar with radio jargon" and one observer noted that "communicators had varying degrees of expertise with radios . . . more and better radio training [needed]." Similarly, during the

January drill, it was noted that LILCO's "traffic guides need[ed] more exposure" to radios to learn appropriate communication techniques and that the "communicators need[ed] to review [radio] jargon."

These problems continued during the February exercises. For example, during the February 8 exercise, some observers noted that "[b]etter radio protocol practices [were] needed" and that "[g]eneral radio protocol training is needed." In addition, when asked whether radio communications were easily understood, an observer commented as follows: "Not easily. A lot of walkover, some static. Poor radio etiquette."

(Emphasis in original.) Radio language, or "jargon," was also a problem in the February 8 exercise. For example, in one case a traffic guide and traffic controller had a simulated "problem" to solve and radioed in for instructions. There were no further communications, and 30 minutes later both the traffic guide and the controller were instructed to come in from the field. After arrival, the traffic controller learned for the first time that the radio room had been trying to reach them in the field with instructions on solving their problem. The controller concluded that this mishap was caused in part by the fact that "no uniform [radio] language [was] being used."

During the February 15 exercise, problems with the use of radios persisted. "Poor radio protocol and etiquette" were observed again, as were examples of exercise participants "joking and laughing around." (This problem had also been noted in the February 8 exercise). For example, one observer commented as follow : "Too many traffic guides were calling the base in rapid succession without waiting for the base to respond to the first caller. This is either lack of courtesy on the air (or fooling around by the drivers) or lack of knowledge in the use of the airways. Perhaps better training in the use of radios is req[ui]red[ed]."

In our opinion, the problems noted above are symptomatic problems which underscore the inadequate training given to LERO workers in the area of radio communications and usage. As a result, it is likely that the emergency response personnel relied upon by LILCO have not been properly trained to communicate effectively via radios, and therefore cannot be expected to respond to an emergency at Shoreham in the coordinated manner necessary to ensure an adequate and effective emergency response.

Q. Have the training documents reviewed by you revealed any other concerns regarding the communications training provided by LILCO?

A. Yes. In January and February there were problems with the radio equipment used in the training drills and exercises. For example, field personnel were not always provided with the appropriate radio equipment, and in many cases they were not given radios at all. Most of LILCO's emergency personnel do not use radio equipment in their daily jobs, and even those that do use such equipment do not use it under emergency conditions on a day-to-day basis. Therefore, it is important for the LILCO drill and exercise participants to be given some "hands on" experience with the equipment they will be expected to use in an actual emergency at the Shoreham plant. Without such experience, it is unrealistic to expect LILCO's emergency workers to be able to perform adequately during an actual emergency. A sampling of those comments concerning problems with LILCO's radio equipment (including the unavailability of such equipment) is provided below and is appended to this testimony as Attachment 3.

During the January drill, for example, it was noted that LILCO road crews were dispatched from the Riverhead

staging area with "Channel 3 radios, but [Riverhead] can only monitor Channel 10." In addition, observers noted a "lack of radios by field personnel" and a need for "radios for road crews."

During the February 8 exercise, an observer in LILCO's communications room commented that there was "not enough communications equipment in [the] communications room to handle [a] real emergency." Another observer noted that there was probably "not enough radios for the purpose of this exercise." During the February 15 exercise, problems with an insufficient number of radios continued. For example, one observer noted that "road crews [were] supposed to have multi-band radios, which were not available."

Based on the foregoing, it is apparent that segments of the LERO organization have not been provided an opportunity to use and practice with the radio equipment they would be expected to use during an emergency at the Shoreham plant. In our opinion, this is a serious deficiency of the LILCO training program.

Q. Have you discovered any other problems with the LILCO training program from your review of the drill/exercise comments provided by LILCO?

A. Yes. One area of particular concern was revealed by our review of critique/evaluation forms prepared by observers assigned to LILCO's Emergency Worker Decontamination Facility ("EWDF"). The EWDF was activated during the January and February drills and exercises and, during all three training opportunities, there was evidence of "sloppy performance" by the LILCO personnel given responsibility for performing monitoring and decontamination duties under the LILCO Plan. This "sloppy performance" by LILCO's monitoring and decontamination workers is not surprising, since monitoring and decontamination skills are not the kind of job skills performed by LILCO workers on a day-to-day basis. Therefore, LILCO's training program must be of sufficient quality to provide individuals unfamiliar with the tasks of monitoring and decontaminating personnel (and vehicles) with the ability to perform adequately. Based on our review of the training documents provided by LILCO, however, it must be concluded that the training given to LILCO's monitoring and decontamination personnel has failed to teach such personnel their jobs. A sampling of the critique/evaluation comments which lead to this

conclusion is set forth below and appended to this testimony as Attachment 4.

During the January drill, for example, it was noted that "[t]he monitoring personnel were scanning people a little too rapidly and they sometimes neglected to monitor the person's feet . . ." It was not until after a number of persons had been monitored that the monitoring personnel at the EWDF fell into a pattern and scanned more properly "although still a little too rapidly." Even then, however, they "neglected to fully question [a contaminated] person to find out his/her [field] location. Also they neglected to tell the people adjacent [sic] to them that they had a contamination problem."

During the February 8 exercise, it was noted that "[d]osimetry people were acting confused about what to do." The controller therefore had to instruct such persons to read the appropriate sections of LILCO's procedures. In addition, as had happened during the January drill, it was again noted that monitoring and decontamination personnel "monitored too fast." It was also noted that they "rushed the thyroid count." In one instance, an observer commented that the decontamination worker "held the probe too far away;" in another instance, it was noted that "some items were touched but not monitored."

During the February 15 exercise, problems with LILCO's monitoring and decontamination personnel persisted. For example, some observers commented that "monitors were sloppy" and that there was some "sloppy performances." In addition, one observer noted that "[d]econ[tamination] monitors need more training. They were monitoring poorly." This same observer noted that, in one instance, "the Decon[tamination] Coord[inator] sent a person to the hospital . . . without doing decon[tamination]."

In our opinion, this pattern of problems is very significant and raises serious concerns about the adequacy of the LILCO training program. As noted by one observer, "there was the possibility for cross-contamination the way [EWDF workers] were handling monitoring." Taken together, the problems noted during the January and February drills and exercises indicated a significant failure on the part of the LILCO training program to teach adequately the LERO monitoring and decontamination personnel how to perform their emergency jobs.

Q. Have the critique/evaluation comments reviewed by you also indicated problems with drill/exercise participants not checking their personal dosimetry equipment during the drills and exercises?

A. Yes. During the February exercises, many of the participants did not check their dosimetry equipment. Checking dosimetry readings is of obvious importance during a radiological emergency and must be practiced during training drills and exercises so that it becomes "second nature" to each LERO worker's routine.

Notwithstanding the importance of dosimetry checking, there were numerous comments from both the February 8 and the February 15 exercises in which dosimetry checks were not taken by the exercise participants. For example, one observer at the February 8 exercise noted that the participants "did not check their dosimetry." The same observer also commented that he "did see one [participant] check his dosimetry once. The others I did not see check at all during the 2 1/2 hrs [I was] out [at] the transfer point." Another observer at the February 8 exercise noted that "the transfer control point coordinator I was with never checked his dosimeter readings." Similarly, during the February 15 exercise, traffic guides and a transfer point coordinator were observed not to take periodic checks of their dosimetry equipment. At this exercise, another observer noted that "in the field[,] personnel exposures were not checked. This is a habit that should be broken."

The above examples, which are appended to this testimony as Attachment 5, indicate a problem that could have serious consequences for individual workers during an actual emergency involving an offsite release. LILCO must therefore emphasize, during training, the importance of checking dosimeters, so that this practice becomes part of each worker's emergency job routine. Based on the comments reviewed, it must be concluded that LILCO has placed insufficient emphasis and importance on this aspect of each worker's emergency response function.

Q. Have the drill/exercise comments reviewed by you disclosed any other problems with LILCO's training program?

A. Yes. Although there are many other problems that could be discussed, we will conclude this testimony by expressing our concerns about the fact that many of LILCO's own observers/controllers (including those supplied to LILCO by its training consultants) apparently believe that they have not been adequately prepared to be observers/controllers. Obviously, if training drills and exercises are to provide a way to assess the adequacy of a training program (as LILCO claims), it is extremely important that there be enough observers and that they be properly briefed so that they can properly determine if the activity they are observing is being done correctly. In

this regard, LILCO's training program has not met with success. Our opinion with respect to the inadequacy of briefings/preparation of LILCO's observers/controllers are illustrated by the following sampling of comments. These comments are appended to this testimony as Attachment 6.

During the January drill, for example, one observer noted the following:

For future drills, controllers will need to be better briefed. To prevent the miscommunications which occurred early at the EOC. It is unacceptable to brief fellow controllers at different locations on how events are to occur 15 minutes on the day before the drill. This unfamiliarity caused confusion amongst the participants and also created inconsistencies in procedural useage [sic].

Similarly, during one of the February exercises, an observer commented that "Impel observers (were) not briefed or knowledgeable enough on procedures," while another observer noted that there were "not sufficient observers."

With inadequate briefings and insufficient staffing of observers, it is impossible to determine whether or not all problems with the LILCO training program have been identified. For example, it is possible that observers who were not adequately briefed did not comment on significant problems because

they were not fully cognizant of the procedures and the drill/exercise scenarios. Nevertheless, the problems which we have discovered by reviewing the critique/evaluation comments provided by LILCO give rise to serious concerns regarding the adequacy of the LILCO training program and, for this reason, we have prepared this supplemental testimony.

Q. Please summarize your conclusions.

A. The documents provided by LILCO regarding the LILCO drills and exercises conducted to date (and for which LILCO has retained documentation) lead to the following conclusions. First, numerous comments from all drills and exercises demonstrate that there has been a lack of briefings and that briefings that have been held have often been inadequate. Second, there have been significant problems with LILCO's training with respect to radio communications. These problems have included problems in the areas of radio language, etiquette and general radio technique. In addition, not all trainees have had the appropriate radio equipment to practice with during the LILCO drills and exercises. Third, LILCO's EWDF workers have not received sufficient training to perform adequately their monitoring and decontamination responsibilities under the LILCO Plan. Fourth, LILCO's

personnel have not been trained adequately to check their dosimetry equipment. Finally, LILCO's own observers/controllers (including those supplied to LILCO by its training consultants) have not always been adequately prepared to judge the conduct and performance of the trainees under their observation and supervision.

Individually, it could be argued that these concerns may be correctable; similarly, in some cases, it could be asserted that the problems are not that significant. Taken as a whole, however, the concerns and problems discussed in this testimony indicate significant problems with LILCO's training program. While one might expect such problems during early drills, we believe that, by this time, steps should have been taken to correct and remedy them. This has not been the case, however, leading us to conclude that the LILCO training program has failed to recognize and deal adequately with problems. Indeed, in some cases, problems have actually become worse. Drills and exercises should be learning experiences both for the trainees/participants and for those in charge of the training program. It is apparent that, in LILCO's case, those in charge have not learned from their experiences, and, as a result, LILCO has failed to adapt its training program to correct problems either when they first occur, or even over time.

Q. Does this conclude your testimony?

A. Yes.

1 MR. MILLER: Judge Laurenson, then this panel
2 is ready for cross examination. I might just inquire
3 at this time of the Board and of LILCO, it is my understand-
4 ing that LILCO would proceed with cross examination on both
5 the training testimony submitted on April the 2nd, and
6 on the supplemental testimony that was submitted recently,
7 and then we would go through our regular round of other
8 cross examination by other parties and redirect by the
9 County.

10 JUDGE LAURENSON: Is that LILCO's understanding?

11 MS. MONAGHAN: My understanding, Judge Laurenson,
12 was that during today's, and perhaps part of tomorrow's
13 cross examination, it would be necessary for LILCO to
14 cross examination on the supplemental testimony submitted.

15 I was not under the understanding that we
16 necessarily had to complete all of LILCO's cross examination
17 on both pieces of testimony at one time. If that is the
18 way the Board prefers to do that, that is fine with
19 LILCO.

20 We would also be agreeable to breaking it up
21 and finishing with the panel so that, perhaps, Dr. Lipsky
22 could leave, since he is not on the supplemental testimony.

23 JUDGE LAURENSON: This is something I think you
24 can discuss with the County, depending on Dr. Lipsky's
25 availability, and how much time you intend to spend on the

1 supplemental testimony.

2 MR. MILLER: Yes, sir. Let me just bring to the
3 Board's and LILCO's attention right now, Dr. Lipsky is
4 available throughout the week. He will be here. Although
5 Professor Lipsky did not prepare the supplemental testimony,
6 and although he is not specifically a sponsor to that
7 testimony, it is the County's intent, and we have talked
8 with Professor Lipsky about this, that Professor Lipsky
9 be available and be on the panel with these witnesses
10 and that if there would be a need or a desire in a way for
11 Professor Lipsky to supplement questions presented to the
12 other two county witnesses, he would be available to do
13 that.

14 I would think that with common terms of being
15 probative and relevant to the Board in matter of inquiry,
16 the Board might want Professor Lipsky's views upon them;
17 to explain further to the Board, Professor Lipsky was not
18 put on the supplemental testimony because of logistical
19 problems and because of his unavailability at the time.

20 He is here this week, and willing and able to
21 go forward and to stay on the panel until both pieces of
22 testimony are completed.

23 MS. MONAGHAN: Judge Laurenson, LILCO objects
24 to the addition of a witness to a panel on direct testimony
25 on the day that that testimony is supposed to go forward.

1 Had the County desired to have Professor Lipsky
2 sponsor testimony, the supplemental testimony that the
3 County has offered into evidence, then he should have been
4 part of that written supplemental testimony, and not added
5 at the last minute.

6 MR. MILLER: Judge Laurenson, I would respond
7 by saying that the Board during the week, I believe, of
8 the cross examination of LILCO's training witnesses,
9 decided that henceforth the rule was that a witness who
10 does not specifically sponsor a piece of testimony can still,
11 nevertheless, supplement an answer given by other witnesses.
12 That the Board found that to be the relevant, efficient way
13 to proceed.

14 All the County is suggesting at this time is
15 that Professor Lipsky is here. His schedule has been
16 adjusted to permit him to be here during the week. He may,
17 indeed, have points that he would want to supplement upon
18 questioning of Inspector Cosgrove and Lieutenant Fakler,
19 he will be on the panel and he will be available to make
20 such supplementation.

21 That is in conformity of the Board's ruling
22 of June that a witness may do that, and I can find the
23 transcript cite if the Board would like.

24 MS. MONAGHAN: Judge Laurenson, it is not
25 LILCO's understanding that the Board's ruling that witnesses

1 who are on a particular witness panel would be permitted
2 to supplement answers given by other witnesses, goes so far
3 as to permit the addition of a witness to a witness panel,
4 particularly when the testimony sponsored by the witness
5 panel is of a fairly narrow scope, and goes directly to a
6 study or analysis that purports to have been done by the
7 witnesses who sponsor that testimony.

8 The addition of someone to a panel which is
9 based solely on a particular study who has had nothing
10 whatsoever to do with that study, seems to me far beyond
11 what the Board was considering when it permitted witnesses
12 to supplement testimony in response to questions from
13 cross examiners.

14 End 2.
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Sim 3-1

1 MR. MILLER: Judge Laurenson, I would agree
2 with Ms. Monaghan in certain respects. The questions
3 asked of this witness panel in the supplemental testimony
4 regarding how the review was conducted and what they did
5 to conduct the review, those questions must be answered
6 by Lt. Fakler and Inspector Cosgrove. Professor Lipsky
7 was not involved in reviewing the underlying documentation,
8 some of which has not been admitted by the Board into the
9 record.

10 However, Professor Lipsky may be able to provide
11 relative comments and probative comments regarding the
12 methodology regarding the significance of the review that
13 was conducted.

14 I think the way to proceed is to go forward
15 and see if there are questions which indeed Professor
16 Lipsky would be qualified and interested in addressing.
17 But I think at this time we should just get started and
18 see what happens.

19 I think, however, in conformity with the Board's
20 ruling, Professor Lipsky would be entitled to supplement.

21 JUDGE LAURENSEN: Well, since there is
22 speculation about whether any ruling will ever be needed,
23 I think that there is no need at this point to make a
24 decision on this question. We will reserve it until the
25 opportunity does present itself as a controversy here and

Sim 3-2

1 we will then have to decide whether the line is to be
2 drawn concerning the availability of a non-sponsoring
3 witness of testimony to supplement the record.

4 Did you say that the panel is now ready for
5 cross-examination?

6 MR. MILLER: Yes, sir, the panel is now ready
7 for cross-examination.

8 JUDGE LAURENSEN: Ms. Monaghan.

9 CROSS-EXAMINATION

10 BY MS. MONAGHAN:

11 Q Deputy Inspector Cosgrove, isn't it true that
12 your experience as an educator and trainer has been in
13 the field of police science primarily?

14 A (Witness Cosgrove) Most of my students have
15 been either law enforcement officers or college students.
16 I have been teaching at the college for ten years also
17 in the criminal justice field, yes.

18 Q Thank you.

19 Inspectors Snow and Regensburg testified that
20 the Suffolk County Police Department does not generally
21 engage in detailed preplanning for emergencies, but rather
22 the Suffolk County Policy Department would receive
23 notification of an emergency such as the fire at the
24 Grucci factor that occurred last summer and then develops
25 a response to the situation presented. Do you agree with

INDEX

Sim 1-3

1 that?

2 MR. MILLER: Excuse me, Ms. Monathan, are you
3 quoting from a transcript?

4 MS. MONAGHAN: I believe that that was the
5 testimony of Inspectors Snow and Regensburg on the record
6 of the hearing in the communications issues.

7 MR. MILLER: Yes. My problem is these gentlemen
8 were not present in that testimony, and if you are relying
9 on a transcript, I would prefer that you show the transcript
10 and the citation to the witnesses.

11 MS. MONAGHAN: Perhaps we can rephrase the
12 question that would make it easier for Deputy Inspector
13 Cosgrove to answer it.

14 MR. MILLER: Well, I am not sure that they
15 are having any difficulty in answering it.

16 MS. MONAGHAN: I don't have a specific trans-
17 cript reference, Mr. Miller, and I think I can rephrase
18 the question.

19 BY MS. MONAGHAN:

20 Q Deputy Inspector Cosgrove, is it your under-
21 standing that generally the Suffolk County Police Department
22 does not engage in detailed preplanning for emergency
23 situations, but that an emergency such as the first at
24 the Grucci factor will arise and that the Police Department
25 then develops a response to the situation that is presented

Sim 3-4

1 to it?

2 A (Witness Cosgrove) If you just include specific
3 response, I could agree. I mean there is a general set
4 of guidelines that exists for "emergencies" such as the
5 Grucci factory. We know what is available and we know
6 who is going to be in charge and, you know, we have a rank
7 structure. So there are some plans that are just there
8 all the time, general plans. Specific details of the
9 response are developed at the scene.

10 So I would say that I agree that specific
11 response is developed at the scene.

12 Q As a consequence of that method of responding
13 to emergencies, isn't it true that the Suffolk County
14 Policy Academy would not be training its candidates to
15 implement a specific preplanned emergency response, but
16 would be teaching them emergency response in general?

17 A Yes. We would be teaching them general responses,
18 right, as opposed to specific. We would not teach them
19 how to respond to a accident at Grucci's.

20 Q And that is somewhat different than the
21 radiological emergency response plan for Shoreham, isn't
22 it, because we are concerned here with a response to a
23 particular kind of emergency at a particular location?

24 MR. MILLER: Objection as to the form of the
25 question, and also I do not understand what "somewhat

Sim 3-5

1 different" means.

2 JUDGE LAURENSEN: Overruled.

3 WITNESS COSGORVE: All right. Would you just
4 repeat it? I am sorry.

5 MS. MONAGHAN: Certainly.

6 BY MS MONAGHAN:

7 Q The tyep of emergency plans that you are
8 educating the Suffolk County police candidates in the
9 Academy for are different from the radiological emergency
10 response plan that the LIRO employees are being trained
11 for because the LIRO plan is one that is for a specific
12 emergency at a specific location?

13 A (Witness Cosgrove) Well, yes and no. It is
14 for a specific location, but I would imagine the types
15 of responses could be different. For example, weather
16 is going to determine what zone gets evacuated. So
17 specifically there may be some different responses for
18 one zone as opposed to another.

19 Generally there is an evacuation plan, you
20 know, but the specific aspects of it that are going to
21 be implemented are going to be made by I guess the Director
22 of LIRO much the way our Commanding Officer would make
23 the specific decisions at a Grucci factory.

24 Q All right.

25 Deputy Inspector Cosgrove, have you ever

Sim 3-6

1 designed a training program for persons who would be
2 implementing a preplanned emergency response such as a
3 response to a radiological emergency?

4 A If you are limiting it to radiological
5 emergency, no, I have never designed a plan.

6 Q Have you ever designed any type of preplanned
7 emergency response, a training program for persons who
8 would be implementing a preplanned emergency response?

9 A Police recruit training. We have hostage
10 negotiations teams. We are involved with training them
11 and emergency service.

12 Q Does the Suffolk County Police Department
13 employ video tapes in its training program?

14 A Yes, it does.

15 Q Does the Suffolk County Police Department
16 evaluate the performance of its candidates with tests?

17 A Yes, it does.

18 Q And are those tests graded on a pass/fail
19 basis?

20 A Yes.

21 Q How many candidates does the Suffolk County
22 Policy Department have in a graduating class?

23 A In a graduating class?

24 Q Yes.

25 A It varies somewhere between 50 and 100 usually.

Sim 3-7

1 Q Does the Suffolk County Police Department
2 evaluate the performance of its candidates through
3 observation and critiques?

4 A Are you talking about while they are at the
5 Academy or after they leave?

6 Q As part of the trainign program that they would
7 go through to become a full-fledged police officer.

8 A Oh, definitely they do.

9 Q Does that observation and critique process
10 focus on an individual policy officer of candidate or
11 does it focus on a group of trainees?

12 A Primarily on the individual, but as the
13 Training Director I was also involved in the group
14 performance to find out if my program was meeting the needs
15 of the line. But we have a field trainig program, and
16 after each officer graduates from the Academy after his
17 18 weeks, he is assigned to a field training officer for
18 at least 12 weeks in the field and he is evaluated daily.

19 Then when he leaves there, he works without
20 the field training officer and is then evaluated by his
21 supervisor daily and put on probation for one full year.

22 Q During the 12 weeks that they are with a
23 field officer and they are being evaluated, those candidates
24 are performing the full panoply of duties that a police
25 officer would be expected to perform; is that correct?

Sim 3-8

1 A That is correct.

2 Q So that that 12 weeks is not directed towards
3 one specific job function, for exaple, of directing
4 traffic?

5 A No, not one specific job function.

6 Q Have you ever designed a critique or evaluation
7 form that was used to evaluate the performance of a group
8 of 'trainees?

9 A A group as opposed to individuals?

10 Q Yes, sir.

11 A No, I can't think of any. Everything we do
12 is individualized.

13 Q What does the term "sampling" mean to you?

14 A Sampling?

15 Q Yes.

16 MP. MILLER: In what context, Ms. Monaghan?

17 WITNESS COSGROVE: I was just going to ask
18 you, are you referring to a statistical context?

19 MS. MONAGHAN: Yes, in a statistical context
20 in connection with the review and analysis of critique
21 forms such as those used in the LILCO drill program.

22 WITNESS COSGROVE: Well, sampling generally
23 would be mean to to take a small part of the whole universe
24 and analyze that and then apply the findings to the entire
25 universe.

Sim 3-9

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BY MS. MONAGHAN:

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Q Lt. Fakler, isn't it true that your experience as an educator has been in the field of police science?

3

4

A (Witness Fakler) Police science ---

5

MR. MILLER: Excuse me. Lt. Fakler, excuse me. Was the question his experience as an educator?

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MS. MONAGHAN: Let me modify the question.

8

BY MS. MONAGHAN:

9

Q Isn't it true that your experience as an educator or trainer has been in the field of police science?

10

11

A (Witness Fakler) Police science as a broad category?

12

13

Q Yes.

14

A Have I instructed anybody but police officers; is that what you are getting at? I am trying to clarify it in my own mind.

15

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Q Certainly. I am talking about the subject area of police science as opposed to the individuals who are being instructed.

18

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A Generally speaking, yes. I have spoken to other groups and I have trained other groups, but hither and yond, a few here and a few there.

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Q In your opinion, Lt. Fakler, is there a difference between the terms "educator" and "trainer"?

24

25

A Yes, I see a distinction between them.

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2 Q Could you explain to me what the distinction is
between educator and trainer?

3 A (Witness Fakler) Well, they do overlap. I have
4 to say that to begin with. But a trainer is more -- he is
5 aimed at specific objectives. He has methodology for
6 evaluating, and he is particularly concerned with the change
7 in behavior, with the performance itself.

8 Whereas, I see an educator as eliciting thought
9 and idea from a student, expanding his thoughts and his
10 ideas on a topic.

11 Q Wouldn't you agree that many people might use
12 the term "educator" and "trainer" interchangeably?

13 A Not if you are a trainer. You see a very clear
14 distinction when you do training, because there is a very
15 distinct obligation to bring a person from one state of mind
16 skill to a finale.

17 But I don't know whether an educator in all
18 cases has that in mind.

19 (Witness Cosgrove) I would like to add, I
20 consider myself both because of my association with police
21 training and my association with the community college. When
22 I wear those two hats, I perform two different functions.
23 And I think my colleagues at the college are aware of it,
24 and my colleagues certainly in police training are aware of
25 it. I don't think people in the field make the -- have a

#4-2-SueT

1 problem making the distinction.

2 (Witness Lipsky) And I would agree that while
3 I am aware of and have some knowledge of training, I am
4 not a trainer and would classify myself as an educator.
5 So, I would see the distinction pretty clearly.

6 Q Lt. Fakler, were you instrumental in developing
7 the decentralized individual inservice training, as I
8 understand it's called, for the Suffolk County Police
9 Department?

10 A (Witness Fakler) Yes.

11 MR. MILLER: Objection to the relevancy, Judge
12 Laurenson.

13 JUDGE LAURENSEN: Overruled.

14 BY MS. MONAGHAN: (Continuing)

15 Q Does that program rely on instructional tele-
16 vision; in other words, videotapes to transfer the requisite
17 information to Suffolk County police officers?

18 A Yes.

19 Q Would you agree with the statement that the
20 students of today, both young and old, have been weaned
21 on commercial television and literally have received the
22 bulk of their news and other contemporary data via tele-
23 vision?

24 A That --

25 MR. MILLER: Excuse me, Ms. Monaghan. Lt.

#4-3-SueT

1 Fakler, please wait for my objections. Ms. Monaghan, I
2 would appreciate, number one, if you could ask your
3 questions at a speed which I can understand. And, number
4 two, if you are asking these gentlemen if they are aware of
5 some quoted passage if you would cite the passage.

6 BY MS. MONAGHAN: (Continuing)

7 Q Lt. Fakler, was that question too fast for you
8 to understand? I will slow them down if they are a little
9 too quick?

10 A Well, I don't want to get into a hither over
11 that. I can respond to your question if you are interested
12 in that now.

13 MR. MILLER: Would you provide the citation?

14 MS. MONAGHAN: I don't believe that I'm required
15 to provide a citation to an article. I think that the con-
16 cept is one that Lt. Fakler understands very well. He
17 didn't seem to have any trouble with answering the question.

18 I'm merely asking him if he agrees with the con-
19 cept.

20 MR. MILLER: The question, Judge Laurenson,
21 was if he agreed with a specific -- it appeared to me a
22 specific -- cited, quoted reference, passage. And then I
23 think the Lieutenant should be shown that passage.

24 JUDGE LAURENSEN: There wasn't any objection.
25 Are you making an objection now?

#4-4-SueT 1

2 MR. MILLER: Yes, sir, I'm objecting. I think
3 that she should show the material she is relying upon to
4 these witnesses.

5 MS. MONAGHAN: I don't believe that the rules of
6 evidence require that the witness be shown any piece of
7 documentary evidence until the cross-examiner has had the
8 opportunity to determine whether or not there is agreement
9 or disagreement with that particular piece of documentary
10 evidence if, in fact, this does come from an article or
11 some other piece of documentary evidence.

12 MR. PIRFO: Judge Laurenson, in my view of the
13 matter, as long as she is not eliciting the opinion of
14 him with regard to whether he agrees or does not agree with
15 the article, and she is relying on that article to contra-
16 dict his testimony, and -- now she is just asking him if
17 he agrees with the statement.

18 It's immaterial who made the statement until she
19 attempts to rely on the article, is how I would see it.

20 JUDGE LAURENSEN: I think there are limits to
21 how far you can go on questioning witnesses by using text
22 material without identifying them. But I think since we are in
23 a very general area at this point and the very beginning,
24 I don't think the questions go beyond those limits.

25 So, the objection is overruled at this time.

WITNESS FAKLER: Okay. Shall I answer that

#4-5-SueT

1 now?

2 BY MS. MONAGHAN: (Continuing)

3 Q If you remember the question.

4 A Slightly. I do remember the quote. I believe I
5 made it. And it was a brief statement about the attitude
6 of people toward watching television today.7 It has nothing to do with the content of program-
8 ming.9 Q Lt. Fakler, would you agree, though, that it has
10 to do with whether or not people today are receptive to
11 receiving information through a television type medium?

12 A The idea but not the fact of the content, no.

13 Q Lt. Fakler, wouldn't you agree that some of the
14 benefits of a videotape training program are, for example,
15 that the training programs or sessions can record a lot of
16 the footage in the trainees' working environment?17 MR. MILLER: Excuse me. Point of clarification,
18 Judge Laurenson.19 Is Ms. Monaghan referring to LILCO's videotapes
20 or videotapes in general?21 MS. MONAGHAN: I'm referring to videotapes in
22 general as education medium. I'm discussing with Lt.
23 Fakler right now his professional qualifications and his
24 views on certain matters.

25 MR. MILLER: I have no objection, then, Lieutenant.

#4-6-SueT

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BY MS. MONAGHAN: (Continuing)

Q Would you like the question again?

A Let's try it again.

Q All right. Wouldn't you agree that one of the benefits of videotape training is that the training programs or sessions can record a lot of the footage in the trainees' working environment?

A Definitely. Particularly if it's done realistically

Q And that that recording of footage in the working environment provides the trainee with both audio and visual cues that will help the trainee comprehend and retain that information?

A Certainly. Again, if it's done effectively.

Q Isn't it also true that another benefit of using videotape format is that each trainee receives the same message and that eliminates the problem of different perceptions, or goes a long way to eliminating different perceptions?

A If it's done correctly. If it's done with some realism. If it's done with some true instructional intent. And if the visuals are analyzed by the viewer as being realistic and job relevant, the answer has to be yes.

Q Lt. Fakler, have you ever designed a critique or evaluation form that was used to evaluate the performance of a group of trainees?

#4-7-SueT 1

2 A A group? I participated in the evaluation form
3 development, that's very true, for probationary officers
4 during the field training officers program. But I didn't
5 design it myself. It was in consultation.

6 (Witness Cosgrove) That's individual.

7 (Witness Fakler) That's individual, too, as
8 opposed to collective. I'm sorry. Yes.

9 Q Dr. Lipsky, am I correct in stating that you
10 are a political scientist?

11 A (Witness Lipsky) Yes.

12 Q How would you describe your speciality within
13 the field of political science?

14 A Using the categories that other political
15 scientists would recognize, my specialties are in the area
16 of public policy, of American government and policy, and
17 urban affairs.

18 Q The list of publications attached to your resume
19 indicates that your work has been focused on urban disorders
20 or riots.

21 Is that correct?

22 A No. It's one of the things that I have done
23 research on. But I wouldn't -- if you mean focused as to --
24 focused to the exclusion of other things, that is not
25 correct.

Q If we use the term "focus" to mean one of your

#4-8-SueT

1 primary areas of research, is that --

2 A Yes, I did research on that subject between
3 1967 and, say, '73 or '74.

4 Q Have you ever done any studies, either of
5 literature reviews or research, that you have done yourself
6 on disasters like natural disasters, volcanos, earthquakes?

7 A No.

8 Q Have you ever done any studies or literature
9 reviews on technological disasters like Three Mile Island
10 or chemical spills?

11 A Not directly.

12 Q Have you ever designed a training program of
13 any kind?

14 A I've participated in a sustained effort to train
15 legal services lawyers.

16 Q Other than that effort to train legal services
17 lawyers, have you participated in the design of any other
18 training program?

19 A I have participated in the -- in discussing the
20 issues involved in training social workers in the Public
21 Welfare Department in Massachusetts.

22 Q Do you have any experience in training persons
23 in the subject areas of, for example, traffic direction
24 and control?

25 A None.

#4-9-SueT 1

Q Radio usage?

2

A No.

3

Q Personnel dosimetry?

4

A No.

5

Q Monitoring and decontamination?

6

A No.

7

Q Dr. Lipsky, you and the other two gentlemen

8

on this panel filed approximately ninety pages of testimony

9

on the LILCO training program.

10

Do you recall how long it took you to prepare

11

for and draft your testimony?

12

A Well, do you want a ball park figure, I read

13

materials -- (Pause.)

14

I would say I gave it the better part of two or

15

three weeks.

16

Q Dr. Lipsky, I would like --

17

A This is not -- you asked me about my involvement.

18

Q Yes. I asked you about your particular involve-

19

ment.

20

A Yeah, because the other gentlemen put much more

21

time into it.

22

Q Do you recall approximately when you began to

23

prepare that testimony?

24

Is the two or three weeks that you are referring

25

to the two or three weeks just prior to the filing of that

#4-10-SueT 1

testimony?

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A (Pause.)

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It was complicated, because I had done some work with respect to the command and control and credibility contentions. And it was the judgment of the attorneys that some of my submissions had been -- were more relevant to these contentions than to the others. So, I would say I divided my time between the time that I prepared materials thinking it was for the other contentions and then also when it came to writing the training contentions I also had that time, too.

12

So, it was divided.

13

14

15

Q Dr. Lipsky, I would like to review briefly with you the training materials that you reviewed in preparation for drafting your testimony.

16

First, did you review the videotapes?

17

A I reviewed some of the videotapes.

18

19

Q Do you know approximately how many videotapes make up the program?

20

21

22

A I can't recall offhand. There are -- no, I don't. I think there are at least a dozen, but I'm not certain.

23

Q Do you remember how many that you reviewed?

24

25

A Three or four. I was particularly interested in, and much of my expertise relates to, the issue of the

#4-11-SueT1

2 so-called field workers, the bus drivers, the traffic guides
3 and so on. So, I concentrated on those, videotapes rele-
4 vant to those as well as one or two introductory video-
5 tapes.

6 Q Did you review the transcripts of the videotapes,
7 the scripts, as it were?

8 A Yes.

9 Q Did you review all of those or just for the video-
10 tapes that you viewed?

11 A I would say I scanned virtually all of them and
12 concentrated my attention on those portions that I thought
13 I would have some kind of expertise and ability to make a
14 useful comment on.

15 Q How about the workbooks? Did you review those?

16 A In general, yes.

17 Q But you didn't engage in a detailed review of
18 those workbooks?

19 A I would have the same response. I looked through
20 most of them to see what they consisted of and focused
21 attention in those areas where I thought the job descriptions
22 fit the kind of things that I knew about.

23 Q Finally, did you review the lesson plans?

24 A I have seen the lesson plans. And I proceeded
25 in the same way with respect to that.

Q If you would turn to Page 7 of your testimony.

#4-12-SueT 1

A (Witnesses complying.)

2

Q The first paragraph on that page, you make the statement that, "Consequently, there is no assurance either that those individuals would realize that LILCO has assigned them emergency roles,..." and then the statement continues on.

3

4

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7

Deputy Inspector Cosgrove, do you agree that under the LILCO Transition Plan schools and special facilities will be offered training?

8

9

10

A (Witness Cosgrove) I agree that they will be offered training, yes. I don't know if they will get it, though.

11

12

13

Q Do you have any reason to believe that absent some sort of agreement, personnel at schools and special facilities would decline to participate in a training program if, in fact, it were offered to them?

14

15

16

17

A Yes, I do. It's my understanding that during the -- the school administrators, most of them indicated that they would not participate.

18

19

20

(Witness Lipsky) Also, I think the plan doesn't distinguish between the agreements between the public officials involved who are heading the schools and the -- some of the personnel who would have to carry out the plan, such as individual teachers or subject heads and so on.

21

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I think there is an ambiguity there in the plan,

#4-13-SueT

2 and I think that ambiguity is encompassed in a sense in
3 this statement.

4 That is, I don't see where in the plan it is
5 clear that teachers understand that they will have emergency
6 roles, even were one to assume that there would be coopera-
7 tion with the school districts that have said that they
8 would withhold it.

9 Q Deputy Inspector Cosgrove, isn't it true that
10 the testimony that was given by the school administrators
11 was to the effect that they wouldn't cooperate unless the
12 plant operates?

13 MR. MILLER: Objection, Judge Laurenson. That's
14 a mischaracterization of what the school administrators did
15 say.

16 JUDGE LAURENSEN: Overruled. They can answer.

17 WITNESS COSGROVE: It was my understanding that
18 one school administrator said that, and the others withheld
19 completely.

20 BY MS. MONAGHAN: (Continuing)

21 Q Deputy Inspector Cosgrove, are you aware that
22 the Department of Energy RAP teams are trained to respond
23 to radiological emergencies and to conduct dose assessment
24 activities?

25 A I'm not specifically aware, but it doesn't
surprise me.

#4-14-SueT 1

2 Q Isn't it true that under the LILCO Transition
3 Plan the DOE RAP teams are to perform the radiological
4 assessment functions?

5 A LILCO says they will, yes. And I understand
6 that they will.

7 Q Are you aware that the Department of Energy
8 has agreed to respond to requests from LILCO for radiologi-
9 cal assistance?

10 A Yes, I do recall seeing an agreement to that
11 effect.

12 (Witness Fakler) There was in one of the evalua-
13 tions the fact that DOE actually created some sort of a
14 disturbance in that arena. They didn't seem to understand
15 their role that well.

16 Q Are you speaking with respect to the LILCO plan,
17 Lt. Fakler?

18 A Yes, I am. In response to some critiques that
19 we have looked at.

20 Q Is it your understanding that DOE Rap personnel --

21 A One of the --

22 Q Could I finish the question, please?

23 A Of course.

24 Q Is it your understanding that DOE RAP personnel
25 participated in the drill and exercise program run by LILCO?

A I saw a critique that mentioned a DOE representative

#4-15-SueT¹

not understanding his role in connection with the drill.

2 Q And that was one critique that you saw?

3 A Yes, one controller who obviously was observing
4 quite a bit.

5 Q Do you agree that the American Red Cross as
6 part of its function sets up relocation centers?

7 Deputy Inspector Cosgrove, that's fine.

8 A (Witness Cosgrove) Yes.

9 Q Do you also agree that Red Cross personnel are
10 trained and experienced in setting up such relocation
11 centers?

12 A Yes.

13 Q And do you agree that under the LILCO Transition
14 Plan, the relocation centers that are to be set up will be
15 run by the American Red Cross?

16 A Yes, they will.

17 end #4

18 Joe flws

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1 Q Deputy Inspector Cosgrove, a number of members
2 of the Suffolk County Police Department have testified in
3 these hearings. In your opinion, would those individuals
4 who have testified here from the Suffolk County Police
5 Department be qualified to direct traffic in an emergency
6 in Shoreham?

7 MR. MILLER: Objection, Judge Laurenson, as
8 to relevancy, as to what members of the Suffolk County
9 Police Department would be qualified to do.

10 JUDGE LAURENSEN: I don't understand the
11 relevancy of that question to this testimony. Objection
12 is sustained.

13 BY MS. MONAGHAN: (Continuing)

14 Q Lieutenant Fakler, how often do you direct
15 traffic?

16 A (Witness Fakler) Most recent case was on the
17 way home when I stumbled across an accident, and I had
18 to get out and do it, but I don't do it that often any
19 more.

20 Q Wouldn't it be a fair statement that a majority
21 of the members of the Suffolk County Police Department would
22 not direct traffic on a routine basis other than around the
23 scene of an accident?

24 MR. MILLER: Objection, Judge Laurenson, as to
25 relevancy. It is the same question we just debated.

1 JUDGE LAURENSEN: That's for all members of the
2 Suffolk County Police Department, whether they would not
3 ordinarily direct traffic as a routine matter? Is that
4 the question?

5 MS. MONAGHAN: Judge Laurenson, the foundation
6 of Suffolk County's testimony is that one must have real
7 world experience in order to perform certain activities,
8 and in particular they talk about traffic direction, and
9 say that it is necessary to have virtually daily experience
10 in doing this in order to be able to do it effectively, and
11 my question -- and they seem to feel that police officers
12 are the best qualified to do that based on the fact they
13 have real world experience.

14 My question merely goes to whether in fact they
15 do have such experience. Whether they are that much more
16 experienced, and have the real world experience that the
17 LERO people who will be doing this under the LILCO Plan.
18 I think it is relevant.

19 MR. MILLER: Judge Laurenson, this testimony
20 does not state anywhere that the Suffolk County Police
21 Department would be best qualified, or should do the jobs
22 LILCO says it will do.

23 This testimony says that LILCO's personnel
24 will not be able to perform emergency response functions
25 such as directing traffic, one of the reasons being their

1 lack of experience.

2 Let's focus on what the testimony does and does
3 not say.

4 JUDGE LAURENSEN: Well, I think when you have
5 raised the issue of the lack of experience of the LILCO or
6 LERO people, I think it is probably relevant to inquire into
7 the experience that police officers, who do direct traffic
8 would have, so the objection is overruled.

9 WITNESS LIPSKY: Can I comment that --

10 MR. MILLER: Well, let's have the question,
11 gentlemen, unless you remember the question.

12 MS. MONAGHAN: Would you like the question again,
13 Lieutenant Fakler?

14 WITNESS FAKLER: You directed it at me, as I
15 recall, as to whether I had experience, as opposed to the
16 general police. Now, which is it? That is the only thing
17 I want to clarify.

18 MS. MONAGHAN: Let me repeat the question.

19 WITNESS FAKLER: Okay.

20 BY MS. MONAGHAN: (Continuing)

21 Q Would it be a fair statement that most members
22 of the Suffolk County Police Department do not, as part of
23 their general routine, direct traffic unless it is around
24 the scene of an accident?

25 A (Witness Fakler) No, I can't say that generally

1 speaking that is true, because there are many instances
2 where the majority of the men would be confronted with at
3 least one traffic assignment a day as a minimum. That
4 goes beyond the training, which is where I think the bulk
5 of the experience occurs. During that first year of
6 probation time, there -- they are actually thrust into
7 situations. They are actually found, so that they can
8 be interacting with the public and dealing on a realistic
9 basis.

10 A (Witness Lipsky) I wouldn't speak to the
11 Suffolk County Police Department issue, but to imply that
12 it is critical that one perform all functions on a daily
13 basis in order to remain prepared to do that would be to
14 misunderstand the position in the testimony.

15 It is probably that -- it is undoubtedly the
16 case that police do not do everything every day that they
17 do. But that doesn't mean that they don't either do it
18 often enough, or maintain a preparedness that is based
19 upon the possibility that they will be called upon to
20 perform in any particular situation.

21 A (Witness Cosgrove) From a precinct point of
22 view I can explain to you some of the traffic direction,
23 you know. Suffolk County does use crossing guards, civilian
24 crossing guards. However, if a crossing guard is unable to
25 get to her post, and we get a late notification, we don't

1 have time to get a replacement, a police officer is sent.
2 This time of year, 4th of July, major fireworks events,
3 police officers directing traffic, and the Judge has
4 already brought it up, we have police officers directing
5 traffic around the LILCO pickets right now.

6 So, we are definitely directing traffic
7 regularly.

8 Q Isn't it true that within Suffolk County, as
9 Dr. Babb stated and as you have just alluded to, Deputy
10 Inspector Cosgrove, that much of the traffic directions
11 at points, which I understand is the technical term for
12 intersections, is done by civilians, such as auxiliary
13 police and crossing guards.

14 A Not auxiliary police so much, but crossing guards
15 handle, at this point now, in our Department's area,
16 cover all the church crossings and school crossings are
17 covered by crossing guards. But crossing guards receive
18 an elaborate training, which Dr. Babb wasn't aware of.

19 And I know that, because we
20 have an individual in my precinct assigned full time to
21 crossing guards.

22 Q What do you mean when you use the term, 'post
23 training experience?'

24 A (Witness Lipsky) Is that in the testimony?

25 Q Yes, it is.

1 A Where is that?

2 Q It is on page 7, and it is the third line from
3 the bottom of the page.

4 A (Witness Cosgrove) We were just debating who
5 should answer. I didn't know who you were addressing --

6 But let me say -- Obviously, post training
7 experience, basically after training experience, applying
8 what you have just learned in an experience setting, so that
9 the skills become reinforced. Skills, knowledge, whatever
10 the particular training was. So you are talking about
11 situations after you have received the training, where you
12 actually get to use it in experience.

13 Q How often do you need to use that training to
14 have an effective post training experience?

15 A It depends on the skill. It depends on the
16 individual. There's no -- it is how quick did somebody
17 forget something? Well, that varies. There are so many
18 factors involved. The post training experience reinforces
19 the classroom training, and of course, it is going to cut
20 down on retention. If you were a good -- had a good
21 retention level to begin with, you are going to retain it
22 longer than someone else, and you may need less. There
23 is no set rule of how much you need.

24 A (Witness Fakler) Just validate that you can
25 perform to the standards that have been set. They are under
continuous supervision. So, if there is a weakness that

1 occurs and it is spottied, then it is remedied.

2 A (Witness Lipsky) It is evident from looking
3 at virtually every profession, that post-training experience
4 has been regarded by those professions as critical to
5 competency.

6 So, we have regularly, for example, in the
7 medical field doctors now have to go back and receive
8 additional practice and we have clinical experiences such
9 as after graduation we have internships, we have student
10 teachers, we have psychologists that have to work under
11 supervision.

12 It is an evident, necessary concept in the
13 general training for the professions.

14 Q Doctor Lipsky, isn't it true that physicians and
15 psychologists and other professionals that are accomplished
16 in the type of internship program to which you refer, perform
17 a wide range of difficult activities?

18 A Yes, I would say that was true.

19 Q Isn't it also true that a number of the jobs
20 that are encompassed in the LERO training program are geared
21 toward one specific job function, and do not entail a wide
22 range of difficult activities?

23 A Well, I think that -- I am glad you raised that
24 point, because it is something that has perplexed me about
25 these materials all along.

5-8-Wal

1 The conception of the jobs of bus drivers, of
2 traffic guides, of security personnel and so on, is so
3 limited in the planning -- in the LILCO Planning, that
4 one would imagine that the sky will always be blue, and
5 that everyone would line up in rows and proceed according
6 to the Plan.

7 It has been my assumption, which it is clear
8 is not shared by the LILCO planners, that these jobs have
9 the potential for a great deal of complexity, so I would
10 most vehemently disagree that it is true, as you said, that
11 these jobs are rather routine and single function oriented.

12 Q Dr. Lipsky, is the basis of your statement that
13 these jobs could have a degree of complexity based upon
14 your opinion that in the event of a radiological emergency,
15 individual members of the public would not behave in an
16 orderly fashion?

17 A In part. In part, as well, over the complexity
18 of some of the scenarios that might well develop as a result
19 of technological difficulties that might arise, as a result
20 of accidents and unexpected occurrences. As a result of
21 weather disturbances that might throw the plant into
22 disarray. Over the incredible logistics that are required
23 in order to mobilize LERO organization.

24 My assumption has been -- whenever I have read
25 the LERO planning, I have asked myself: Is there

1 preparation for contingency here, and the answer is virtually
2 always, no, because the workers in this plan are set forward,
3 and it is assumed that there will be kind of single-function
4 oriented with no difficulties.

5 As you said, -- I don't know have you character-
6 ize it as my opinion. It seems to me as a careful reader
7 of what might transpire, one has to ask whether or not the
8 training is sufficient for the potential complexity that
9 might arise, and I would be interested in seeing where
10 you would point me to in the planning that would address
11 this kind of concern that I, and I think other thoughtful
12 people would have.

13 Q Dr. Lipsky, is it your testimony that the LILCO
14 Plan does not take into consideration and plan for weather
15 conditions?

16 A It is my contention that the personnel who are
17 -- who have to meet the public are not prepared by virtue
18 of life experience or training, to deal with complexities
19 such as severely adverse weather conditions.

20 A (Witness Fakler) Or interacting with other
21 people. Not perceiving exactly what the reactions of the
22 public might be.

23 Q Doctor Lipssky, are you, with respect to the
24 question that you just answered for me, on weather
25 conditions and the ability of LERO workers to deal with

1 that and to deal with the public, are you talking about
2 severe snow conditions, and an inability to deal with the
3 public arising from severe snow conditions?

4 A (Witness Lipsky) On the video tapes, the sky is all v
5 blue. And suburban, middle class people are lining up in
6 the broad daylight, exactly according to the way things
7 would work out, if things were to work out perfectly. A
8 snow storm is a situation which the traffic gudies, bus
9 drivers and so on, would never anticipate experiencing if
10 one looked at the video tapes, to my knowledge.

11 I might not have seen the video tape in which
12 severe weather conditions and adverse situations of all
13 sorts might occur.

14 So, a snow storm probably would be such a
15 condition, but I am not talking specifically about snow
16 storms, or any specific weather condition.

17 Q Gentlemen, would you turn to page 12 of your
18 testimony. On page 12 of the testimony, you made the
19 statement that under the LILCO Plan, personnel at schools
20 and special facilities are expected to perform tasks which
21 we understand are not within the scope of their normal
22 activities. Do you see that?

23 A (Witness Cosgrove) Yes.

24 Q Let's see if we can restrict some of these to
25 yes and no answers, and move along here. Isn't it true

1 that early dismissal of school children by school adminis-
2 trators is within the scope of the school administrator's
3 normal activities?

4 MR. MILLER: What do you mean by, 'within the
5 scope,' Ms. Monaghan?

6 MS. MONAGHAN: Are you having difficulty
7 understanding the question.

8 WITNESS COSGROVE: Well, I can't answer it yes
9 or no.

10 WITNESS LIPSKY: Do you mean scheduled early
11 dismissal, or do you mean unscheduled early dismissal?

12 MS. MONAGHAN: Let me clarify the question again.

13 BY MS. MONAGHAN: (Continuing)

14 Q Isn't it true that early dismissal of school
15 children by school administrators could be within the scope
16 of a school administrator's activity.

17 A (Witness Cosgrove) Scheduled or unscheduled?
18 Are you talking about a snow day.

19 Q Yes -

20 A A snow day is not a normal school day, no.

21 Q But it would be an early dismissal based on
22 snow, on a snow day, would be something that a school
23 administrator would consider part of his normal job
24 duties?

25 A Not his normal job, no. His extraordinary.
It is not normal. It is extraordinary.

1 A (Witness Fakler) And it is not an exergency
2 that requires a time factor.

3 Q Please answer this question yes or no. Isn't
4 it true that school administrators on Long Island do dismiss
5 children for snow days in an early dismissal program?

6 A (Witness Cosgrove) Yes.

7 Q Please answer the question yes or no; isn't it
8 true that the loading of children onto school buses is
9 within the scope of school teachers and other administrative
10 personnel normal activities?

11 A Yes.

12 Q At this time, I would like you to look at the
13 paper that was placed on your table that is labeled
14 LILCO EP Exhibit -- I am not quite sure what number we are
15 up to Judge Laurenson, but I would like to mark this
16 for identification.

17 JUDGE LAURENSON : I show 68.

18 WITNESS LIPSKY: This is from Brian Walsh.

19 LILCO EP exhibit.

20 JUDGE LAURENSON: This will be marked as LILCO
21 EP 68.

22 XXX INDEX

23

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(Above referenced document
is marked LILCO Exhibit EP-68
for identification.)

1 Q Based on this memorandum from Mr. Walsh to the
2 District Superintendents, if you would look at paragraphs 1
3 and 2, isn't it true that schools in New York are required
4 to have disaster plans for early dismissal?

5 MR. MILLER: Objection, Judge Laurenson. Lack
6 of foundation. These witnesses are not familiar with what
7 New York State requires with respect to schools. They are
8 not on this memorandum, and to my knowledge they have
9 never seen this memorandum before, and I would also request
10 if we are going to continue these questions, that these
11 witnesses be given some time to read the memorandum.

12 I object to the lack of foundation.

13 End 5.
14 Mary fols.

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Sim 6-1

1 JUDGE LAURENSEN: Let's all take a few moments
2 to read it.

3 (Pause.)

4 JUDGE LAURENSEN: The objection is sustained
5 as to the lack of foundation.

6 BY MS. MONAGHAN:

7 Q Gentlemen, in your personal knowledge, are
8 schools in New York State required to have early dismissal
9 plans?

10 MR. MILLER: Objection to the relevancy,
11 Judge Laurenson.

12 JUDGE LAURENSEN: What part of the training
13 testimony does this relate to?

14 MS. MONAGHAN: On page 12 they make the statement
15 that under the LILCO plan personnel of schools and special
16 facilities are expected to perform tasks which to the
17 understanding of the witnesses sponsoring the testimony
18 are not within the scope of their normal activities.

19 My purpose in asking this question is to show
20 that early dismissal plans are in fact within the scope
21 of the normal activities of both schools administrators
22 and teachers and that they in fact have such plans and
23 implement them.

24 MS. PIRFO: I think I have a different objection,
25 Your Honor, that it calls for a legal conclusion on the

Sim 6-2

1 basis of these witnesses. Rephrasing of the question
2 would make me happy.

3 JUDGE LAURENSEN: Both objections are
4 overruled. You may answer.

5 MS. MONAGHAN: Would you like the question
6 again?

7 WITNESS FAKLER: Yes, please.

8 BY MS. MONAGHAN:

9 Q Isn't it true that schools in New York State
10 are required to have disaster plans for early dismissal?

11 A (Witness Lipsky) I don't know that out of
12 my knowledge, and I am wondering is this related to my
13 knowledge now?

14 Q No, Professor Lipsky, it is not related to
15 your knowledge. Perhaps either Deputy Inspector Cosgrove
16 or Lt. Fakler could answer the question.

17 A (Witness Cosgrove) I don't know for a fact
18 that they are required to, but I would assume they would
19 be.

20 Q Please answer yes or no to this question,
21 Lt. Fakler. Isn't it true that movement of patients within
22 a hospital comes within the normal scope of the hospital
23 staff's activities?

24 MR. MILLER: Objection as to the relevancy,
25 Judge Laurenson. Also, I will object to the vagueness,

Sim 6-3

1 movement of patients within hospitals. I have no idea what
2 that means.

3 JUDGE LAURENSEN: Overruled.

4 BY MS. MONATHAN:

5 Q Can you answer the question, Lt. Fakler?

6 A (Witness Fakler) When you say movement, again
7 in a little more detail, do you mean removing them from
8 the hospital?

9 Q Let's define it as transferring patients from
10 one location to another within the hospital.

11 A One ward to another ward?

12 Q That would be fine.

13 A Sure, of course.

14 Q So your response to that question is yes?

15 A Yes.

16 Q In the context of that question please answer
17 yes or no. Could movement also be defined as moving
18 patients from within the hospital to ambulances that would
19 remove them from the hospital?

20 A I doubt that. I don't know it, but I doubt
21 it.

22 Q Would you turn to page 17 of your testimony.

23 (Pause.)

24 On that page you make the statement that
25 "Most of the emergency response jobs assigned to LILCO

Sim 6-4

1 personnel cannot be performed properly without extensive
2 experience."

3 Lt. Fakler, how do you define the term "extensive
4 experience" as it is used in your testimony?

5 A When the individual can perform to meet the
6 standards that have been set for a particular task and
7 demonstrate that he can accomplish it efficiently, meeting
8 your standard.

9 Q So, therefore, the term "extensive experience"
10 depends upon the job skill that is required to be performed;
11 is that correct?

12 A I would say yes to that.

13 Q In your opinion, which of the emergency response
14 jobs assigned by LILCO to LERO personnel do you believe
15 cannot be performed without extensive experience?

16 A Again, using the term "extensive," as we
17 just discussed, I would say every one of them.

18 Q But "extensive" relates solely to the level
19 of the job skill and the difficulty?

20 A We do have a perception difference there though.
21 I see the traffic route spotter or even a traffic guide
22 as requiring some degree of extensive experience in a
23 realistic setting which is a very difficult task to do,
24 no doubt.

25 Q In your opinion, Lt. Fakler, how much experience

Sim 6-5

1 would the home coordinator need in operating a telephone
2 and calling disabled persons to inform them that they will
3 be evacuated?

4 MR. MILLER: Ms. Monaghan, I assume your
5 question is limited to the one task of the home coordinator
6 of picking up the telephone and calling a facility but
7 ignores other tasks of the home coordinator; is that
8 correct?

9 MS. MONAGHAN: Is that an objection?

10 MR. MILLER: It is an objection from the stand-
11 point that I think your question is vague and I am requesting
12 some clarification.

13 JUDGE LAURENSEN: Do you want to clarify what
14 you are referring to by a home communicator?

15 (Pause.)

16 MR. MILLER: Might I suggest that we could
17 take a break while Ms. Monaghan is looking because I
18 would appreciate just a quick break, and this would be
19 a logical time I suppose.

20 MS. MONAGHAN: I have found what I am looking
21 for if you want to go forward.

22 MR. MILLER: I still would request a brief
23 break.

24 JUDGE LAURENSEN: We will take a five-minute
25 recess.

Sim 6-6

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(Recess.)

JUDGE LAURENSEN: Okay, we are back on the record.

Ms. Monaghan.

BY MS. MONAGHAN:

Q Lt. Fakler, do you have a copy of the LILCO transition plan with you? Volume I of the job descriptions.

Volume I of the procedures, Mike.

(Pause while the document is handed to the witness.)

BY MS. MONAGHAN:

Q If you would turn OPIP 211, page 43 of 79.

(Witness complies.)

I believe at that page 43 of 79 of OPIP 211 you will find a job description or a position definition of the home coordinator. I would ask that you look at that job description and look at the responsibilities that are listed under that and describe for me what you would consider the extensive experience that the home coordinator would need to perform those job responsibilities.

A (Witness Fakler) Well, to begin with, it is a very general definition. It doesn't break it down to tasks. I really don't know what it entails to accomplish some of these things like providing information and

Sim 6-7

1 arranging coordination of evacuation and transportation
2 for these individuals. It is a broad statement and I
3 don't know what that entails.

4 If it means there is a list of people to call
5 and you have to discuss the problem with them anticipating
6 how they are going to react, then that is a valid thought.
7 There could be a variety of reactions, given this being
8 a radiological affair, something that the receiver of the
9 call is not familiar with. It opens the door to a lot
10 of tasks that are probably involved and I don't know what
11 they are. So it is hard to really say and I can't be that
12 specific with my answer for you.

13 I suspect there is a lot of dialogue going
14 on and a lot of information to be transferred. I am sure
15 there is some planning and training for this individual,
16 as we might do with our communications people. We put
17 them through mock telephone calls, not in the same room
18 and not face to face under what we would like to think
19 of in realistic stress conditions and inject all of those
20 possibilities, including foreign speaking people or just
21 attitude, you know, development on the other end or rejection
22 of the information, thorough inquiry, more than the person
23 wants to give because they have many more things to do.
24 It is a difficult task talking to people, especially in
25 emergencies.

Sim 6-8

1 What I think I am saying if I can reduce it
2 to a short statement is that I don't think there is enough
3 here to be descriptive to tell me that I could tell you
4 what kind of a time frame it would take.

5 Q You have reviewed the critique forms that have
6 been produced by LILCO that were completed by observers
7 and controllers during the drills and exercises that were
8 conducted over a period of time.

9 In your review did you come across any critique
10 forms that dealt with mock telephone conversations which
11 would have been completed by a controller who was at the
12 other end of a mock telephone conversation?

13 A I can think of one with a foreign language on the
14 other end that comes to mind, and the person dealt with
15 it very abruptly and they didn't know what to do with it.

16 Q But in fact apparently there was an exercise
17 of that nature that was in fact done?

18 A That was a drill I would hope, and I hope
19 somebody was there to help them straighten out their
20 problem. There is no way of telling that.

21 A (Witness Lipsky) Are you making a distinction
22 between the drill and the exercise that characterized
23 the testimony of the LILCO witnesses?

24 Q No, I was not making that distinction between
25 drill and exercise. I think today let's just refer to

Sim 6-9

1 them as being interchangeable, drills and exercises.

2 A (Witness Cosgrove) You see, that is difficult.
3 Again, people in the field can't make them interchangeable.
4 It is like saying a lesson and a test are interchangeable,
5 or yes and no are interchangeable. They are totally
6 different animals, and that is one of the problems with
7 the training program.

8 What you call an exercise, what you say is
9 the culmination of your training, what you say is the final
10 test, you read these forms and there is all kinds of prompting
11 and coaching. The people themselves don't know. The
12 trainers don't know the difference between a drill and
13 an exercise. You can't use them interchangeably,
14 Ms. Monaghan.

15 MS. MONAGHAN: Judge Laurenson, I would move
16 that Deputy Inspector Cosgrove's statement be stricken.
17 It was not responsive to any question that was outstanding.

18 MR. MILLER: Judge Laurenson, I would state
19 that it was responsive. Ms. Monaghan wanted these witnesses
20 to use the terms "drill" and "exercise" interchangeable,
21 and they have made clear they cannot do that and they
22 explained why they cannot do that.

23 JUDGE LAURENSON: I think Mr. Miller is correct
24 that you have asked the witnesses to assume two terms are
25 interchangeable and they say their usage of these terms

Sim 6-10

1 are distinguishable and are not interchangeable. I think
2 it doesn't go to any substance of the testimony here, but
3 I think that there has to be some understanding of what
4 the terminology is going to mean when you are questioning
5 the witnesses and when they are answering.

6 So I think you had better pursue that so every-
7 one understands what the words mean when they are used
8 here.

9 MS. MONAGHAN: I believe that Deputy Inspector
10 Cosgrove's statements went beyond what his understanding
11 of the difference between a drill and an exercise was.

12 JUDGE LAURENSEN: He did use some illustrations,
13 I agree with that, but this is non-substantive testimony
14 and I don't think we are going to accomplish anything by
15 striking it. But I do think it is important to be certain
16 that both the questioner and the person answering the
17 question are attaching the same meaning to important words
18 like "drill" and "exercise."

19 BY MS. MONATHAN:

20 O Deputy Inspector Cosgrove, would you define
21 a drill and your understanding of that term, please?

22 A (Witness Cosgrove) Yes. To me a drill is
23 a teaching session where the instructor will be drilling,
24 whether it be repetitive performance and repetitive
25 instruction, but it is a teaching session. An exercise

Sim 6-11

1 is more of a testing session where the instructor is
2 evaluating as opposed to teaching, and then the student
3 is on the spot. The information flow in a drill is from
4 the instructor to student. In an exercise the information
5 flow is from student back to instructor or evaluator.

6 Q Do you agree with the definitions as defined
7 by Deputy Inspector Cosgrove or Lt. Fakler?

8 A Yes. I just may add that that can take many
9 forms, the drill, such as some of your so-called drills
10 are. There is nothing wrong with the concept of the
11 individual going through a roll play which is the same
12 meaning in my mind at which time the instructor can interface
13 with him to keep it on course, because it is part of the
14 instruction period. But they can operate on their own.

15 Q Lt. Fakler, let's go back to this position
16 definition of home coordinator. Is it your testimony that
17 you couldn't determine what type of extensive experience
18 would be necessary based on the job definition presented
19 in OPIP 211?

20 A (Witness Fakler) No, I could think of some
21 things that the individual would have to have the ability
22 to do. Certainly he would have to know how to use the
23 list that was given and would have to know how to respond
24 to the person on the other end considering a wide range
25 of responses that might occur. There I think we would

Sim 6-12

1 have to get into a lot of detail in examining what kind
2 of people might be on the other end. Of course, if you
3 had a list, you might even have researched that beforehand
4 in preparing the person who is going to deal with that.
5 I mean we can carry this into a lot of avenues, depending
6 on how thorough your development of the training is.

7 Beyond that I don't see anything significant
8 to deal with other than how they are evaluated.

end Tape 6 9

End Sim

Sue fols 10

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#7-1-SueT 1

2 Q Would you look at Page 17 of the testimony in
3 which you make the statement that once formal training is
4 completed the new worker must receive extensive real world
5 experience in order to both develop fully needed skills and
6 to retain the knowledge provided in the training?

7 What do you mean by the term "extensive real
8 world experience?"

9 A (Witness Fakler) I'm sorry.

10 Q Lt. Fakler, if you would, please?

11 A Yes. What do we mean by real world experience?
12 That means operating in a real environment, under real
13 conditions. Conditions becomes an important word here,
14 too.

15 When we send a probationary police officer into
16 the street to deal with a call, he is dealing with real
17 people under real circumstances with the real pressures and
18 the real decision making requirement in the middle of it
19 all. That I didn't see to be the case with those who do
20 interface with the public, particularly out on the street,
21 with the LILCO training project.

22 (Witness Lipsky) It's widely understood that
23 when training that is provided in an academic environment
24 is not -- that training in an academic environment is only
25 tested and incorporated into the work of the individual when
that individual confronts the real world realities. So

#7-2-SueT 1

2 that, for example, the literature on police demonstrates
3 that a lot of training has to take into account the fact
4 that on-the-job, unless that training is honed with ex-
5 perience it will be lost or forgotten, because it won't be
understood as valid and useful for the individual.

6 Q This question is addressed to anyone on the
7 panel. Is it your understanding that NRC regulations and --
8 NRC and FEMA regulations and guidelines require that in its
9 drill and exercise program an emergency response organiza-
10 tion interact with the public?

11 A Would you repeat that, please?

12 Q Is it your understanding that NRC or FEMA regula-
13 tions or guidelines require that an emergency response
14 organization's drill and exercise program incorporate
15 interface with the public as part of that program?

16 A (Witness Cosgrove) No. It is a very strong
17 presumption that the agencies that are normally prescribed
18 already are interfaced with the public.

19 (Witness Lipsky) Actually I think that's a very
20 interesting question. It seems to me that the FEMA-graded
21 exercises can skip that step because they presume that the
22 organizations that they are dealing with have this extensive
23 experience.

24 And one of my concerns, as I read the testimony
25 of the LILCO witnesses, was that they seemed to believe that

#7-3-SueT 1

2 one could have an evaluation and a full test of the train-
3 ing that they have provided through the FEMA-graded exercise.

4 Now, there is a very important distinction here
5 between an organization that uses for emergency response
6 a set of organizations that normally deal with the public
7 and one that doesn't. And, therefore, the notion put forward
8 by the LILCO witnesses that one could test the training by
9 virtue of carrying through the FEMA-graded exercises seems
10 to me to be fallacious.

11 Q Dr. Lipsky, is it your opinion that the experience
12 necessary to train LILCO personnel for the emergency response
13 jobs to which they are assigned cannot be obtained through a
14 drill and exercise program?

15 A I would like to restrict my comment to the drill
16 and exercise program that we have seen. It's conceivable
17 that one -- I think we have debated this in preparing the
18 testimony. I think we would agree, but my colleagues might
19 want to comment otherwise, that it's conceivable that there
20 could be a drill and exercise program that would adequately
21 prepare people.

22 But we are doubtful that the utility could provide
23 the resources and devote the amount of time that it would
24 take to adequately prepare people to deal with the public
25 and be the kinds of individuals who have flexibility, resource-
fulness, a responsive in experience that we would think the

#7-4-SueT

1 public would demand of emergency response workers.

2 Do you have a comment?

3 (Witness Cosgrove) Well, we have discussed it.
4 And, in fact, I was the one that said I did think that a
5 drill and exercise program could substitute for experience.
6 And I cited as an example one that I knew of. It was the
7 Federal Bureau of Investigation's anti-terrorist team in
8 training for the Olympics. Obviously since the Olympics
9 have not begun, they have not had any real world experience.
10 They have been in training now for about a year and a half,
11 straight; that's all they have done.

12 I don't think LILCO can make that kind of commit-
13 ment of its personnel to put them a year and a half in LERO
14 training. So, I wanted to make it clear in our testimony
15 that we didn't think there was no such thing as being able
16 to substitute for experience, but we didn't think LILCO did
17 it. That's what we pointed out.

18 Q Deputy Inspector Cosgrove, is it your testimony
19 that the only kind of drill and exercise program which could
20 substitute for experience would be one that was similar to
21 the FBI terrorist training program that you just described
22 that would take a year and a half worth of constant training?

23 A Similar in scope. Maybe not a year and a half,
24 but certainly a tremendous commitment to manpower. And I
25 did note during the LILCO witnesses, they stated that the

#7-5-SueT

1 poor attendance at drills was due to the demands of operating
2 a company. Now, if they can't make the current drill,
3 obviously they cannot make the kind of commitment that I
4 think would be needed.

5 (Witness Fakler) Plus, there is no completed
6 evaluation. There is no way of determining at this time
7 whether in fact the LERO group can perform under real condi-
8 tions. It appears that they are relying strictly on the
9 FEMA exercise which is not the completion of training. That's
10 a total evaluation.

11 So, any good training program with drills and
12 exercises, as we know exercises, would include a thorough
13 realistic evaluation.

14 Q What is your understanding of the term "realistic
15 evaluation" when you use it in that context?

16 A When the tasks that are given to the individuals
17 that must be performed, that must perform them, are done in
18 a realistic environment under real conditions. That means
19 all conditions.

20 So that it's demonstrated very clearly that they
21 can perform the tasks under those conditions. Then, when
22 that is evaluated, individually by the way, then you can
23 be sure that they are capable of performing.

24 Q So, therefore --

25 A (Witness Lipsky) I would subscribe to that if

#7-6-SueT 1

2 Lt. Fakler meant by that that the real conditions included
3 those things that might be unexpected or so that it wasn't
4 simply the mechanical production of these activities but
5 being prepared for the kinds of eventualities that might
6 occur in a serious emergency of the kind that we have to
7 contemplate.

8 (Witness Fakler) Problem solving, decision
9 making, stress, all of those typical things that normally
10 would be involved. Yes.

11 Q Let's take for example a traffic guide, Lt.
12 Fakler. If you wanted to be sure that you had the kind of
13 evaluation that you thought was necessary to ensure that a
14 particular traffic guide in a LERO training program could,
15 in fact, perform his job, how would you go about testing
16 for that?

17 Would it be necessary to set up an emergency
18 situation to test?

19 A I would certainly try to perceive any possible
20 incident that might occur. Are you asking me to paint you
21 a scenario? Give you an illustration?

22 Q Let me paint you a scenario and see if agree
23 with it.

24 A Good.

25 Q We can perhaps move this along if we do yes or no
answers. Would you need to have the traffic guide out on

#7-7-SueT 1

the streets directing actual traffic?

2 A Sure.

3 Q Would you need to have the traffic guide perform
4 that task under a number of different kinds of weather
5 conditions?

6 A Yes.

7 Q Would you need to simulate accidents?

8 A Not necessarily.

9 Q Would you need to simulate motorists who declined
10 to obey the traffic guide's directions?

11 A Sure.

12 Q Would you need to simulate angry motorists?

13 A Certainly.

14 Q Is there anything else that you believe you
15 would need to simulate in order to truly test whether or
16 not that traffic guide could perform his duties?

17 A When you talk about weather, I believe you mean
18 day and night as well which is important, because we never
19 know when incidents do occur.

20 There are other things that even though they
21 may seem -- for instance, gridlock, it sounds like a city-
22 born problem but it could happen and it does happen out
23 here. And particularly with the small, narrow lanes that
24 go into and in and out of the EPZ area as we know it. I
25 think they should have some familiarity with how to relieve

#7-8-SueT 1

2 the congestion in a situation like that, be able to demon-
strate it.

3 I think that pretty much encompasses most of it.
4 But there is nothing like the realism of involving yourself
5 or interfacing with the real public.

6 Q And, in your opinion, anything short of that
7 would not be an accurate test?

8 A No. If you could simulate those environments
9 it would be just as good. In other words, such a thing as
10 role play where even in those cases, as we do frequently
11 when we are preparing our people before they go out on the
12 street, we spend elaborate amounts of time on just thrusting
13 them into realistic, as we call them, situations which are
14 role played but nevertheless they are done in a rather
15 realistic environment as opposed to just inside of a class-
16 room, as the traditional form is usually known.

17 (Witness Cosgrove) There is kind of a general
18 axiom in training that says repetition reinforces recall.
19 It's particularly true of adult learners. They want immediate
20 application of their knowledge and skill, and that kind of
21 helps to help cement it in there.

22 So, almost any task you are talking about, even
23 the home coordinator, you give them the instruction, you
24 give them the training and then you have them do. That tends
25 to help them remember it even if they don't do it for a while

#7-9-SueT 1

2 after it has been retained. You know, it helps them retain
3 it longer. And then you can start to separate the spaces
4 between drills.

5 But in the beginning, there is a need for that
6 experience.

7 Q So, then you would agree that a drill and exercise
8 program will reinforce the learning and will assist the
9 individual in perfecting the skills that are to be learned?

10 A It could. I didn't say it will.

11 (Witness Fakler) Only if it's realistic.

12 (Witness Cosgrove) Yeah. I don't think this
13 one will.

14 Q Turn to Page 20 of your testimony.

15 A (Witnesses complying.)

16 Q On Page 20 you make the statement, "The first
17 time an emergency worker faces danger or has to perform in
18 an actual emergency situation, his performance may well
19 suffer."

20 Lt. Fakler, isn't it true that you have not studied
21 the behavior or emergency workers in emergency situations
22 other than through your experience with police officers?

23 A (Witness Fakler) Well, I've studied the response
24 of police officers in dealing with these kinds of problems.

25 Q But you have not studied the response of other
emergency workers, have you?

#7-10-SueT 1

2 A Studied? No. I've seen, I've witnessed. Yes.
3 But I haven't studied.

4 Q Lt. Fakler, isn't it true that some studies on
5 emergencies have shown that stress may increase performance,
6 studies by experts in the field of human behavior?

7 MR. MILLER: Objection, Judge Laurenson, as to
8 what some studies are.

9 It's vague.

10 JUDGE LAURENSEN: Overruled.

11 WITNESS FAKLER: In some situations, there is
12 a positive response.

13 BY MS. MONAGHAN: (Continuing)

14 Q On Page 20, Dr. Lipsky, there is a statement
15 made, "Indeed, some inexperienced individuals may even
16 attempt to avoid the danger or anxiety through flight
17 when they are first encountered on the job."

18 It continues on to say, "With others, the
19 pressures and anxiety that accompany emergency conditions
20 may result in lowering the quality of performance to an
21 unacceptable level."

22 Isn't it true that with this statement you equate
23 the behavior emergency workers and the public with the
24 behavior of public in riots and civil disorders as opposed
25 to the behavior of the public in natural emergencies or
industrial emergencies?

#7-11-SueT 1

A (Witness Lipsky) Absolutely not.

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Q Isn't it true that you have not studied the behavior of the public in natural or industrial emergencies?

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A Yes, that's true. My statement here was based upon an understanding of the way in which the relationship between experience and training. For example, in the study that I am currently conducting on teachers and the way in which they are trained, we are concerned with the problem of burnout and the meetings of conditions that are simply overwhelming to the individual.

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And while I would agree that this has not been -- some of the teachers might think that they were in emergencies but one is reasoning indeed here by analogy rather than directly with respect to emergency situations when you draw on the general observation that preparation for work without actually easing into that work through experiencing the trials and pressures of those jobs normally leads to these kinds of behaviors as well as others.

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(Witness Fakler) May I add a less academic example? We have seen, even with our selection process as part of our training process, those who are thrust into situations where they encounter this anxiety or call it pressure, anything you want, decision making necessity, and they can't live with it. They actually stop functioning. And they actually leave the job. They don't even complete

#7-12-SueTⁱ

2 the training cycle. We have lost recruits during that pro-
3 cess. And we would think that they would be well prepared,
4 well selected, well oriented before they even get to that
5 stage of evaluation.

6 They are more from the real world, such as a
7 LERO worker would come from.

8 (Witness Cosgrove) I think the military's
9 experience with battle fatigue sort of makes the point of
10 a flight or fight kind of response also. In fact, if
11 there were any studies at all done on it, I would guess
12 it would probably be from the military.

13 Q But you don't know whether there have been
14 studies done on --

15 A I do know of one study that would have been done
16 on police officers. Yes.

17 It was a police training and performance study,
18 I believe it was called. It was done for the National
19 Institute of Criminal Justice. I don't know who authored it.
20 But that's the only study that I know that deals with this
21 almost a culture-shock kind of a thing where you are in a
22 new situation for the first time and it's the flight or
23 fight type of response. I know of no other studies.

24 Q Do you know what the basis for that study was,
25 Deputy Inspector Cosgrove? What sampling group they used
in order to do that study that you have just referred to?

#7-13-SueT 1

2 A No. I believe it was New York City Police
Department, but I'm not sure.

3 Q Do you know what the results of the study were?

4 A Well, I do know that one of the recommendations
5 of the study, this field training concept of not taking
6 somebody from a classroom and putting them into the field,
7 easing them out there with an officer coach, so to speak,
8 sort of an internship, just to get them over that whole --
9 in fact, reality shock was the term they used in this study.
10 The reality shock, to get them over that, to have somebody
11 with them when they first experienced it.

12 That was the recommendation. I know we adopted
13 it. That's why I read it, because we were researching for
14 a particular reason.

15 I think that was all that came out of the study
16 were those recommendations.

17 Q Have you ever read or reviewed any studies that
18 concern widespread, either natural or industrial, emergencies?

19 A Anything that I ever read, anything that had to
20 do with widespread emergencies?

21 Q Natural emergencies or industrial emergencies?

22 A In terms of stress now you are talking, or just
23 anything at all that ever dealt with widespread emergencies?

24 Q I'm talking about the behavior of emergency
25 workers.

#7-14-SueT 1

2 A Oh, emergency workers. No. I have looked for
them. I have never seen any.

3 Q Lt. Fakler?

4 A (Witness Fakler) No.

5 Q Dr. Lipsky?

6 A (Witness Lipsky) For the third time, would you repeat
7 the question for me?

8 I'm concentrating on the testimony that I have
9 read that alluded to all of these studies that Dr. Mileti
10 thought he had perused with usefulness.

11 So, it's hard for me to concentrate on what you
12 are saying.

13 Q Have you ever read any of the studies that
14 Dr. Mileti referred to in his testimony?

15 A No. I think there is an interesting question
16 here regarding the utility of these analogies. And what I
17 think you have to see in our testimony is a --

18 Q Professor Lipsky, is this responsive to the
19 question I asked you?

20 A As to whether I had read these materials?

21 Q Yes.

22 A It's responsive to the series of questions that
23 you are asking. It's not responsive to the most recently
24 asked question.

25 Q I would ask that you restrict your responses to

#7-15-SueT 1

the question that's on the floor, please.

2

A I will try to jump in earlier so I can say what I need to say.

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Q Lt. Fakler, would you look on Page 21 of your testimony, the second sentence on that page? And it says, "The only way to learn to perform an emergency response job competently and effectively is through working at comparable jobs under emergency conditions on a regular basis."

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Does that conflict with your prior statements and those of Deputy Inspector Cosgrove that a drill and exercise program could provide sufficient experience?

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A (Witness Fakler) No, because I think the Inspector made it rather clear that it's a rather elaborate and steady and hard and ongoing test that is required.

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1 A (Witness Cosgrove) People are working at that
2 day in and day out now. These anti-terrorist people are
3 working every day at a comparable job. They are working
4 at drilling and exercising.

5 Q So, it is essentially your testimony that it
6 would be a full time task to have an adequate training
7 program which would permit these LERO workers to become
8 trained to perform the jobs they need to perform under
9 the LERO Plan, is that your testimony, Deputy Inspector
10 Cosgrove?

11 A Full time for a period of time, or close to it.

12 Q What would you guess would be the period of time
13 it would be necessary for them to be engaged in this training
14 program in order to have the extensive experience that you
15 would feel they require?

16 MR. MILLER: I object to the question. It asks
17 the witnesses to speculate, to begin with. It also requires
18 the witness to know specifically something about the
19 individuals which form LERO, their background, what they
20 already know.

21 These witnesses do not know that. Therefore, I
22 do not see how they can guess as to how long you would have
23 to have some training in terms of drills or exercises.

24 JUDGE LAURENSEN: Objection is overruled.

25 WITNESS COSGROVE: Ironically, one of the things

1 I was going to say was I don't know the individuals. I
2 don't know the selection process. I would have to kind of
3 go through that to find out what kind of background.

4 You know, you do a training needs analysis,
5 even though I know you say it was not done in this program
6 at all. There is no training needs analysis, so I don't
7 know what the training needs are, and that is going to be
8 the key. From that point on, I have nothing to work with.

9 Q Let's assume for the sake of argument that they
10 have no prior experience, Deputy Inspector Cosgrove. How
11 long would the training program --

12 A Well, now I want to know their background. Was
13 there a test? Do they have a certain level of intelligence?
14 That is another thing I am going to want to know now, okay?

15 Then I am going to give them classroom training,
16 and I am going to evaluate them during the classroom
17 training, so see how well they are receiving the cognitive
18 knowledge -- the cognitive training that I am giving them.

19 Then, I am going to put them through some
20 drills and I am going to put them through some exercises,
21 and then I am going to put them out into the field, and then
22 I will be able to give you kind of a ball park figure at
23 that point.

24 Let me make an analogy with our process. We
25 take a recruit in who has passed the civil service exam, so

1 they have gotten some level of test taking ability. Train-
2 ability they call it.

3 We get them into the Academy. That is a more
4 specific screening process now. We fail some out, because
5 although the passed the civil service process, they didn't
6 pass ours.

7 We look at them academically. It tells us
8 nothing about what kind of police officers they are going to
9 be. It just tells us what kind of student they are. Then
10 we put them through the roll players, the drills, and
11 finally, the field training, and only then can we make a
12 decision.

13 So, there is no time limit I can give you
14 generically.

15 Q Lieutenant Fakler, I believe earlier today you
16 stated that once a Suffolk County Police Department trainee
17 completes his eighteen weeks of training at the Academy, he
18 is then put in the field for a 12 weeks program, is that
19 correct?

20 A (Witness Fakler) True. And then there is
21 another period of evaluation.

22 Q During which he is still under probation, but
23 not on the in the field training program, is that correct?

24 A It is field training officer program, and then
25 we have the supervisory program. That goes beyond that.

1 Supervisors actually evaluate on a daily basis the functions
2 of each recruit. In other words, they are weaned away from
3 side-by-side operation.

4 Q The side-by-side operation occurs during the
5 12 week in field period, is that correct?

6 A Yes.

7 Q And then after that period, they do not engage
8 on a daily basis in the side-by-side type operation, is
9 that correct?

10 A True. They could but they don't, it isn't
11 prescribed.

12 Q So, essentially it is a 12 week in field --

13 A No, after that the supervisory.

14 Q Yes, the supervisory period.

15 A I am sorry, yes. Plus the supervisory period,
16 which is a controlled period of time.

17 Q And in your opinion, after the 12 weeks in the
18 supervisory period they are fully trained.

19 A Not until the entire 12 months is up. Because
20 even once they are relieved from that everyday scrutiny
21 of supervisors, they still have a period of time left that
22 completes at 12 months.

23 A (Witness Cosgrove) Those who aren't are
24 terminated.

25 Q Is it your opinion that all of the emergency

1 jobs in the LERO program have a counterpart in the public
2 or private sector, Lieutenant Fakler?

3 A (Witness Fakler) Do all the jobs in the LERO
4 program have a counterpart in the -- which sector?

5 Q Either the public or private sector?

6 A Some do. I would have to go down each one of
7 them to analyze it in my own mind as to whether that does
8 have another function like it.

9 Q Isn't it true that if there are those jobs, and
10 we don't take the time to go down the list right now, that
11 do not have a counterpart -- let's take, for example,
12 monitoring and decontamination personnel, which I think
13 you would probably agree it would be hard to find a
14 counterpart in the private or public sector for the people
15 who do monitoring and decontamination. Would you agree
16 with that statement?

17 A Up to a point. Those who are familiar with
18 health services in any way would have a stronger familiarity,
19 I would think, and the logic and the purpose and all that
20 stuff would be a foundation for them to perform a task, such
21 as the actual monitor. Those who didn't appreciate the
22 significance of every little move they made, and what the
23 ramifications would be, and didn't get that kind of training,
24 you know -- there is a lot of ambiguity here.

25 A (Witness Lipsky) I would think industrial

1 facilities that used atomic materials of various kinds would
2 have a capability of measuring possible contamination.

3 I suppose MIT has among its workers people who
4 can go into a laboratory in the Nuclear Physics Department
5 and determine if any damage has been done.

6 A (Witness Cosgrove) I would even think the
7 Health Department might have something along that line. I
8 know I had my colored TV checked by them for radiation. I
9 know they have a radiation monitoring unit. I don't know
10 just what depth they go to.

11 Q Isn't it true, Lieutenant Fakler, that if in
12 fact there is not a counterpart for every LERO job, it
13 would be difficult to find people who had had the type of
14 extensive experience you feel would be necessary to fill
15 those jobs?

16 A (Witness Fakler) It would be difficult to
17 find people? Well, if you know what the task is that has
18 to be performed, and somebody who is very conversent with
19 it, whether he be the specialist, the expert, or the
20 resource material, reference material, and it could be
21 researched from the outset, you would have to start at
22 base zero and work your way up into what kind of tasks
23 are involved, and prescribe a training program for it.

24 Q Please turn to page 27 of your testimony. In
25 the middle of that page, you make the statement that a good

1 training program consists of three elements.

2 Lieutenant Fakler, have you relied on the
3 writings of any educational experts to develop the three
4 elements that you considered to be necessary to a good
5 training program?

6 A I can think quickly to Dugan Ladd. You know,
7 specifically I can't go beyond that at this moment.

8 Q Lieutenant Fakler, do you contend that each
9 of the elements is essential to a good training program?
10 That a good training program is not possible without all
11 three elements?

12 A I would say if you didn't have the evaluation
13 of the candidate before you got him, it would certainly
14 make the job a lot more difficult, and require a lot more
15 intensifying training and evaluation while you are going
16 along.

17 A (Witness Lipsky) I would say that this part
18 of the testimony, in my mind, was prepared in order to
19 provide a framework for people who would read it as to how
20 we were thinking about what -- how to evaluate a training
21 program, so in my mind it is a synthesis of our under-
22 standing of how -- of what training programs in general
23 consist of, and they consist of recruitment according to
24 very specific specifications, with some possibility of
25 weeding out eventually.

1 It includes the actual training and so on, and
2 because we were concerned with application in real world
3 experience, we identified this as still another place,
4 because all of us are aware that the classroom sessions
5 without application in a realistic setting wash out the
6 classroom training, and that is in the literature -- not
7 necessarily in training manuals, but in the studies of the
8 way in which -- in the studies of the relationship between
9 training in the formal sense, and how people perform on the
10 job.

11 Q Doctor Lipsky, when you are referring to
12 training in the statements that you just made, are you using
13 it in the way that Lieutenant Fakler and Deputy Inspector
14 Cosgrove made the distinctions earlier this morning between
15 trainers and educators?

16 A Yes, but not exactly. In the sense that -- I am
17 thinking slightly more broadly of training for a particular
18 professions or occupations, and in that respect, there
19 certainly is a very heavy dose of task orientation, but the
20 training I am referring to does not exclude classroom
21 sessions and so on that include helping people understand
22 the material, developing their attitudes towards the job,
23 et cetera.

24 A (Witness Fakler) There are very few jobs
25 available today that you can get without a pre-screening.

1 Call it an interview. Call it anything you wish.

2 But the employer wants to know what your quali-
3 fications are before he **even** subjects you, and sometimes
4 they want you to know the job pretty well before you get
5 there.

6 So, it is not an obsolete piece or an unnecessary
7 piece. That selection process is rather important.

8 Q Doctor Lipskey, you stated earlier this morning
9 that you had no experience as a trainer. Are these same
10 kind of concepts equally applicable to your experience as
11 an educator?

12 A (Witness Lipskey) I did say that I did have
13 some experience. I did mention some experiences with
14 respect to training that I did have. So, that was the
15 first part of it.

16 Could you break down that question for me? I
17 mean, are you saying that would I say that these three
18 things are important as an educator to successfully educate
19 people; do we need to have number one, number two, number
20 three? Is that the question?

21 Q Let me rephrase the question for you. Are these
22 three elements that have been discussed here equally
23 applicable to what we have used, the term, 'training
24 programs,' as opposed to educational programs?

25 A I think that we don't hold education in a sense

1 to the same standard, because we very often don't have the
2 kind of concrete performance appraisal that training implies.

3 Certainly, educational programs pay a great deal
4 of attention to recruitment. For example, certain colleges
5 will require various prerequisites and so on. Specific
6 courses will have prerequisites. I don't get the point
7 to the question, but I could go on about the fact that there
8 is selection.

9 Obviously, there are actual classes, and one
10 supposes that not only are there final examinations, but
11 in a much more diffused the quality of the education is
12 evaluated in the real world both by whether people move
13 on to graduate schools, get jobs of the sort that they had
14 hoped for or expected, et cetera.

15 Could you be more -- I don't get the thrust
16 of what you are saying.

17 Q I think that is fine. Let's turn to page 30
18 of your testimony, Dr. Lipsky. Dr. Lipsky, what are the
19 duties required for security personnel under the LERO Plan?

20 A The security personnel, essentially, are required
21 to keep order in, and direct people about in the decontami-
22 nation centers, as I understand it.

23 Q Do you know whether security personnel are located
24 at any other locations?

25 A I don't recall. I can refresh my memory if you

1 would like me to.

2 In thinking about the testimony, I have been
3 focusing on the security personnel with respect to the
4 decontamination centers.

5 Q All right.

6 A Do you want to direct me toward the job
7 description or my -- is this a test of my knowledge.

8 Q I would just like to find out what you were
9 thinking about when you wrote the testimony, here on page 30,
10 with respect to --

11 A Security personnel?

12 Q Right.

13 A They have to maintain order.

14 Q Isn't it true that the LILCO training material
15 states that LERO security personnel are to maintain order,
16 but that if a disturbance appears to be of a serious nature,
17 and threatens the security of the EOC, for example, security
18 personnel are advised to call the Suffolk County Police
19 Department?

20 MR. MILLER: Can you provide a citation, Ms.
21 Monaghan.

22 MS. MONAGHAN: I am asking Dr. Lipsky's knowledge
23 of what the material contain and what they don't contain.
24 He has made certain statements in the testimony about what
25 he believes is necessary.

1 MR. MILLER: Judge Laurenson, I object to Ms.
2 Monaghan referring to passages which are quoted and not
3 providing citations to the witnesses. It sounds like
4 she is testing his memory. If that is what she wants to
5 test, fine. But I think she should provide a citation so
6 the witnesses can see the material in context.

7 JUDGE LAURENSEN: The objection is overruled.

8 WITNESS LIPSKY: If that was a quote, I do --
9 I assume that that is accurate.

10 MS. MONAGHAN: It was not a quote, Dr. Lipsky.
11 To your knowledge, did those materials contain that
12 crux?

13 WITNESS LIPSKY: Yes, they do. And I do recall
14 that there is the reference to the calling of the police,
15 although I have questions that remain about whether the
16 police will be available.

17 Moreover, it seems unrealistic to me to assume
18 that you can have a plan in which the security personnel
19 who are doing anything that involves what one might call
20 real security, have to say, okay, I can't handle the
21 situation, and then they go and call the police, who
22 may be very impacted during this period of time.

23 Be getting calls from all sorts of places, and
24 may have -- can't respond in a matter of minutes, and it
25 may be a half an hour or more while this disturbance is

1 building.

2 Now, assuming that the security personnel are
3 supposed to do security, it seems to me that they, indeed,
4 quote, on page 30, may have to maintain order, and to do
5 that they may have to be forceful, confident, and physically
6 able to impress and confront people.

7 And the fact that the 'ILCO Plan says something
8 like what you said, doesn't take away from the fact that it
9 sounds to me like the training is inadequate, and I would
10 be very surprised if someone would volunteer to be a security
11 personnel, having really understood what it might be like to
12 be called security in a situation where one might not be able
13 to maintain order.

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Sim 9-1

1 Q Dr. Lipsky, do you anticipate that there will
2 be disorder at, for example, the emergency operations
3 center during a radiological emergency?

4 A (Witness Lipsky) It is my contention and it
5 is our contention all along that a situation of the sort,
6 of the worse sort that we have to imagine, which of course
7 is what we have to evaluate, might involve disorder, or
8 otherwise why would you even think about calling for
9 security personnel.

10 When you say to people that they have to strip
11 and that families have to be broken up and that you have
12 to become naked in front of strangers and that you have
13 to subject yourself to these probes which might appear
14 to be dangerous to some people, when you expect that some
15 people will be fearful because they may be radiated because
16 they have seen films like Silkwood that talk about the
17 horrors of radiation, they are in a panic because they
18 might be radiated and they have no idea whether or not
19 they are and what the levels and so on are likely to be
20 like.

21 When you have people who might be in the
22 circumstances and you order them about and you can't take
23 care of them in a timely way where they have to wait, who
24 know what -- I mean I am just thinking about this off the
25 top of my head. But those situations are likely to

Sim 9-2

1 prevail.

2 Now the organization that you represent can't
3 plan for every contingency, but one puts people in a
4 situation after they have been pulled out of their homes
5 and ordered about in ways that are uncomfortable and
6 frightening and one might expect that there would be a
7 need for security personnel and you would expect those
8 people to have to handle unexpected situations.

9 And I would certainly stand by the statement
10 that you might have to maintain order and you have to
11 have the characteristics and the qualities and the background
12 in order to do so.

13 Q Dr. Lipsky, do you have any basis for the
14 statement that you believe people will have to wait to
15 become decontaminated if in fact they are contaminated?

16 A I have studied for the past 10 years waiting
17 rooms in public facilities and all sorts of situations
18 in which people are asked to come at a certain time to
19 a facility and they don't come one by one according to
20 the best hopes of the organization that produces them.

21 You have buses that will be appearing in a
22 way, you know, not on a kind of routinized every-five-
23 minutes basis, but they may come all at once or there
24 may be a breakdown in the facility or the dosimeters might
25 not be all in working order, or a variety of things might

Sim 9-3

1 happen to create backups.

2 Now some systems have a great deal of redundancy
3 in order to take care of this, but it is unrealistic
4 to expect that one would achieve that.

5 So I think I have a good basis for saying
6 that people may very well have to wait.

7 Q Dr. Lipsky, do you know what a dosimeter is?

8 A I believe I do.

9 Q Could you explain that?

10 A I believe it is an instrument that measures
11 radiation. Is that incorrect?

12 Q Under the LILCO transition plan who would have
13 dosimeters?

14 MR. MILLER: Objection, Judge Laurenson,
15 relevancy. We are here to talk about training I think.

16 JUDGE LAURENSEN: I assume this is a foundation
17 question. Overruled.

18 WITNESS LIPSKY: Is this a test of my knowledge?
19 Shall I confer or shall I answer directly?

20 JUDGE LAURENSEN: If you know the answer you
21 may answer it, or unless there is an objection, you may
22 confer.

23 WITNESS LIPSKY: With respect to these
24 decontamination centers, there are personnel who are
25 utilizing the dosimeters.

Sim 9-4

BY MS. MONAGHAN:

1
2 Q What are they utilizing their dosimeters to do?
3 Are they being used to monitor people who would come into
4 the facility?

5 (Pause while the witnesses confer.)

6 A (Witness Lipsky) Mr. Cosgrove suggests that
7 I was correct that there would be some equipment being
8 used to monitor people and test their degree of contamination,
9 but I may have been incorrect in saying that those are
10 the dosimeters.

11 JUDGE LAURENSEN: Would this be an appropriate
12 time to take our lunch break, or do you want to follow
13 up on a particular area?

14 MS. MONAGHAN: No, it is an appropriate time
15 to take a lunch break.

16 JUDGE LAURENSEN: All right. At this time
17 then we will take our luncheon recess and we will reconvene
18 at 2 o'clock.

19 Let me just say for the record before we
20 go to lunch that I had frankly neglected to recall that
21 the County's motion for reconsideration of this testimony
22 and the motions to strike was pending.

23 So I would appreciate it if the County could
24 make available to us the transcript from June 12th that
25 you alluded to. I do have the pages of the LILCO testimony

Sim 9-5

1 that you had referred to noted, but I don't have the exact
2 transcript, and now that it is available, I would like
3 to have the opportunity to review that.

4 MR. MILLER: Yes, sir. We will provide copies
5 of the pages I cited this morning.

6 JUDGE LAURENSEN: Thank you.

7 (Whereupon, at 12:30 p.m., the hearing recessed,
8 to reconvene at 2:00 p.m., the same day.)

9 End Sim
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AFTERNOON SESSION

(2:00 p.m.)

Whereupon,

DEPUTY INSPECTOR PETER F. COSGROVE

LIEUTENANT JOHN L. FAKLER

- and -

PROFESSOR MICHAEL LIPSKY

resumed the stand and, having been previously duly sworn, were further examined and testified as follows:

JUDGE LAURENSEN: Back on the record.

Ms. Monaghan.

CROSS-EXAMINATION (Continued)

BY MS. MONAGHAN:

Q Would you turn to page 36 of the testimony. What type of monitoring equipment is used by LERO personnel, Mr. Lipsky?

MR. MILLER: Ms. Monaghan, you are requesting the particular brand name of the monitoring equipment?

MS. MONAGHAN: No, I am not requesting the brand name.

MR. MILLER: Well, I object then to the vagueness of the question, Judge Laurenson.

JUDGE LAURENSEN: Overruled.

WITNESS LIPSKY: Radiological monitoring equipment.

Sim 9-7

1 BY MS. MONATHAN:

2 Q Have you ever used radiological monitoring
3 equipment, Dr. Lipsky?

4 A (Witness Lipsky) No.

5 Q Do you have any idea what it consists of,
6 what the parts of that equipment might be?

7 A No. I have read the plan which describes the
8 monitoring of the automobiles, the inside of the automobile,
9 the outside and problems associated with making sure that
10 there are dose levels or radiation experience levels that
11 are below a certain threshold and so on. I have read
12 material in the case that focuses on making sure that
13 individuals don't have such various kinds of levels where
14 you have to monitor, that is what parts of the body. I
15 have read some materials on making that sure that all parts
16 of the body were included, what parts of the clothing might
17 pick up radiation, problems associated with carrying
18 radiation from one place to another.

19 My impression is there is equipment both to
20 monitor individuals and also automobiles. I can't recall
21 whether they are the same pieces of equipment or not.

22 Q But you have never seen that equipment; is that
23 correct?

24 A That is correct, to my knowledge.

25 A (Witness Fakler) It wasn't seen in the flesh,

Sim 9-8

1 but it was seen in the video tapes very clearly because
2 they prescribed how to use it, or at least attempted to.

3 Of course, as we saw later on in these documents
4 here, there was a lot of gross error in that area which
5 sort of leads us to believe that they may not have learned
6 too properly from that event. Whether it was done that
7 way or by an instruction, we have no way of telling.

8 A (Witness Lipsky) Before the break when I
9 referred to the notion of a probe, I had inferred that
10 there was such a thing because of testimony that I have
11 read that focused on how far away from the individual one
12 had to hold a particular piece of equipment in order to
13 get an accurate reading.

14 Q Isn't it true, Dr. Lipsky, that you have no
15 idea whatsoever with respect to exactly what the monitoring
16 equipment that is to be used in the LILCO program looks
17 like or how it is used?

18 MR. MILLER: Asked and answered, Judge
19 Laurenson.

20 JUDGE LAURENSEN: Overruled.

21 WITNESS LIPSKY: No, I don't think that is
22 accurate. I have described to you ways in which I have
23 understood it to be used from the materials that I have
24 read in this case.

25

Sim 9-10

BY MS. MONAGHAN:

1 Q You have read procedures; is that correct?

2 A (Witness Lipsky) Also, I have read testimony
3 from various LILCO witnesses.

4 Q Did that testimony describe the use of the
5 monitoring equipment, yes or no?

6 A Yes, and if I can elaborate, that is why I
7 was able to say something about how I believe the thing
8 could be used.

9 Q Dr. Lipsky, will you outline for me the
10 complicated routines as you term them that must be learned
11 before decontaminating evacuees in a step-by-step process?

12 A Are you referring to the testimony some place?

13 Q Page 36. I believe the testimony states
14 that decontamination workers must learn complicated routines
15 for cleaning both evacuees and vehicles, and I would like
16 you to limit it to an outline of what that routine is for
17 decontaminating an evacuee.

18 MR. MILLER: Ms. Monaghan, do you have a
19 reference to the plan or a particular evacuating procedure?

20 MS. MONAGHAN: No, I do not. I am asking
21 Dr. Lipsky to explain to me what his understanding of the
22 complicated routine is as he has cited in his testimony.

23 MR. MILLER: You are restricting your question
24 to Dr. Lipsky?

25 MS. MONAGHAN: Yes, I am.

sim 9-11

1 WITNESS LIPSKY: Well, I could look at the
2 workbook and then recite it to you. I think that my
3 testimony goes into the routines sufficiently for the
4 purposes of how I responded to you.

5 BY MS. MONAGHAN:

6 Q Could you please point out to me the section
7 of your testimony which supports your statement that there
8 are complicated routines for cleaning both evacuees and
9 vehicles?

10 (Pause.)

11 You make the statement on page 36 that
12 decontamination workers must learn complicated routines
13 for cleaning both evacuees and vehicles, and you have
14 also made the statement that your testimony supports
15 that statement. Please point me to the section of your
16 testimony where it indicates what those complicated
17 routines are that support that characterization?

18 MR. MILLER: Judge Laurenson, I object
19 because Ms. Monaghan is assuming something not in the
20 record. There is no assumption. There isn't anything
21 other than the statement in the testimony. She seems to
22 now want to ask these witnesses to point to another
23 section of their testimony. I am not sure what she is
24 asking for.

25 JUDGE LAURENSEN: She is asking them to point

Sim 9-12

1 to anything else in their testimony that supports this,
2 and if there is such testimony, he can point to it, and
3 if there is not, then that will be the answer.

4 The objection is overruled.

5 WITNESS LIPSKY: Maybe the other members of
6 the panel recall where else in the testimony we refer to
7 that. I don't think there is other references in the
8 testimony.

9 BY MS. MONAGHAN:

10 Q Dr. Lipsky, what is your understanding then
11 of what the routines are for cleaning evacuees of
12 contamination that you have characterized here as being
13 complicated routines?

14 A (Witness Lipsky) As I recall, the workers
15 must make assessments of the degree of contamination that --
16 and I am speaking of individuals now -- that individuals
17 have to undergo. The contamined, if you will, then
18 have to be informed about different ways of cleaning
19 themselves. There are five procedures I believe, or five
20 levels of proceeding as a contamined that are suggested
21 all in order, that is they are sequenced.

22 If contamination levels continue above a
23 certain point after the fifth procedure, the contamined
24 then has to go to some other place because that person
25 is seriously endangered.

Sim 9-13

1 That involves making assessments about the
2 level of contamination, holding individual subjects under
3 control of a certain sort while this is going on and
4 helping them process what would probably be a disturbing
5 and unnerving situation for somebody who believed himself
6 or herself to be contaminated.

7 If you are raising the question as to whether
8 or not that is complicated, I would suggest that, like
9 a lot of the LILCO procedures, if everything goes according
10 to plan, then it doesn't seem to be so complicated.

11 If you take a pessimistic assumption, which
12 I think is fair to do in evaluating plans such as this,
13 one may regard processing people in this invasive way
14 complicated.

15 I apologize if I have only from my memory
16 neglected to indicate all of the steps that are involved
17 in dealing with individuals in decontamination. Maybe
18 the rest of the panel can add additional steps.

19 Q Dr. Lipsky, let me just clarify one point. Is
20 it your understanding that the procedures in and of them-
21 selves are complicated? Is that your testimony?

22 MR. MILLER: Judge Laurenson, I am going to
23 object again. Ms. Monaghan seems to be quizzing the
24 memory of the witness. If she wants to know about the
25 procedures, she should show Professor Lipsky and the other

Sim 9-14

1 panel members a procedure.

2 JUDGE LAURENSEN: She is asking for his
3 assessment of the procedures. The objection is overruled.

4 WITNESS LIPSKY: I do not separate the routine
5 that we refer to from the situation that people may
6 encounter when they have to apply the routines. And it
7 is my testimony that throughout the review of the training
8 materials what LILCO regards as simple matters may escalate
9 or change into quite complicated matters.

10 Now, therefore, while the routines that people
11 are trained for may not be tremendously complicated, when
12 one identifies what it is that they are being asked do,
13 there is complication after complication that one should
14 be trained for.

15 BY MS. MONAGHAN:

16 Q Dr. Lipsky, is it your testimony that the
17 situation is what makes it complicated as opposed to the
18 routine?

19 A (Witness Lipsky) On a case-by-cases basis
20 I couldn't answer that.

21 Q Let's take it with respect to the decontamination.

22 A Okay. Could I refer to the module and discuss
23 it in terms of what the plan calls for? That might be
24 simpler.

25 Q I am merely trying to clarify my understanding

Sim 9-15

1 of your last statement in which you linked complexity with
2 a situation that might arise, and I want to be that what
3 you are saying here is that the complexity -- let me
4 rephrase my question here.

5 Is it your testimony that the complexity arises
6 from the situation in which these people may find themselves?

7 A That is a significant part of what I am saying.

8 MS. MONAGHAN: Thank you.

9 (Pause.)

10 end Sim
11 end take 9

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#10-1-SueT 1

2 Q Dr. Lipsky, on Page 37 of the testimony you
discuss the experience of LILCO's classroom instructors.

3 Can you give me an example of LILCO's classroom
4 instructors who are not experienced?

5 A (Witness Lipsky) My understanding of the way in
6 which the instructors were chosen is that they did not --
7 were not recruited for that assignment with respect to the
8 kinds of tasks that the people they would be instructing
9 would have to undertake.

10 Q What is that understanding based on?

11 A Mr. Varley's deposition.

12 Q Dr. Lipsky, is it impossible for someone to
13 teach a subject without prior on-the-job experience?

14 A Do you mean effectively?

15 Q Yes.

16 A Teach it effectively?

17 Q Yes.

18 A It's our view that a significant ingredient to
19 good instruction is having the authority in the classroom
20 to answer people's questions, to lend a degree of legitimacy
21 to the material being conveyed, and to create a milieu
22 in which motivation is high.

23 Q Dr. Lipsky, could you just answer yes or no
24 to this question? My question to you was whether it would
25 be impossible for someone to teach a subject without prior

#10-2-SueT 1

experience, on-the-job experience?

2

A Nothing is impossible.

3

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Q Yes or no answer again, if you would. Isn't it true that a number of jobs are taught, a number of jobs in industry and in the public and private sector are taught by people without actual on-the-job experience in that particular field?

8

9

10

A I'm really not familiar with industry and how that is done. I would say it is rarely done well in my experience. And I wouldn't -- that is --

11

12

13

Q Dr. Lipsky, that was a yes or no question. I believe I asked you for a yes or no answer. If you could, restrict yourself to that.

14

15

16

A Can I divide it into parts? With respect to industry, I don't know. With respect to the public sector, isn't it true? On the whole, no, in my experience.

17

18

19

20

Q Lt. Fakler, on Page 39 of your testimony, you make the statement that, "It is also important to effective training that an instructor be viewed as an authority on his subject."

21

22

Can you cite any educational literature as authority for this proposition? Literature on education.

23

24

25

A (Witness Fakler) I prefer using experience. It has been very obvious over my past sixteen years at least that that has been a significant factor in teaching

#10-3-SueTj

people.

2 Q So this statement is based on your experience?

3 A Primarily, yes.

4 (Witness Cosgrove) I might add that I can't
5 cite the title, but that is definitely a tenet in training
6 and learning, that the credibility of the instructor is
7 a crucial element in instruction. And if we have time, I
8 will research it and come up with a title for you.

9 Q Would you turn to Pages 47 through 48 of your
10 testimony?

11 A (Witnesses complying.)

12 Q Lt. Fakler, on Page 47 you quote a statement
13 from a videotape, and the statement says, "in light of
14 recent scientific information that indicates that
15 nuclear accidents would not produce nearly the serious con-
16 sequences that we always assumed they would."

17 Isn't that factually a true statement, that
18 recent information indicates that nuclear accidents will not
19 produce nearly the consequences, serious consequences, that
20 it was once assumed they would?

21 A (Witness Fakler) Not in my estimation.

22 Q What is that estimation based on?

23 A Readings, personal feelings. You mix them up,
24 they are all there.

25 Q You are not aware of any --

#10-4-SueT¹

2 A Particular literature or the names of that
fact?

3 Q No, sir. Let me finish the question, if you
4 would.

5 A I'm sorry.

6 Q You are not aware of any recent literature or
7 newspaper articles which would lead you to believe that
8 at least in the nuclear industry recent information indicates
9 that nuclear accidents would not produce nearly the serious
10 consequences that it once was suspected they would produce?

11 MR. MILLER: Objection, Judge Laurensen, to the
12 relevancy of this testimony.

13 JUDGE LAURENSEN: There are a couple of "nots"
14 in that question. To the extent the objection goes to the
15 form, I will sustain it.

16 WITNESS FAKLER: I think the statement is
17 reviewed --

18 JUDGE LAURENSEN: I sustained the objection.

19 MR. MILLER: Excuse me, Lieutenant. You do not
20 have to answer the question.

21 WITNESS FAKLER: I'm sorry.

22 JUDGE LAURENSEN: And when I say sustained, that
23 means --

24 WITNESS FAKLER: I should pay attention. I'm
25 sorry.

#10-5-SueT 1

BY MS. MONAGHAN: (Continuing)

2 Q Let me see if I can rephrase the question. Isn't
3 it true that recent scientific information indicates that
4 in the event of a nuclear accident more of the radioactive
5 materials would be held inside the containment than was
6 once suspected?

7 MR. MILLER: Objection, Judge Laurenson, to the
8 relevancy of this testimony.

9 MS. MONAGHAN: Judge Laurenson, it's a foundational
10 question.

11 JUDGE LAURENSEN: In light of the testimony on
12 Page 47, I think it is relevant.

13 The objection is overruled.

14 MR. MILLER: Judge Laurenson, let me just point
15 out that the testimony on Page 47 quotes what former LILCO
16 President Wilford Uhl stated in a videotape.

17 Ms. Monaghan is asking these witnesses, it seems
18 to me, their understanding of the nuclear industry's beliefs
19 and opinions regarding the scenario of radiological releases.
20 And I don't see how that could possibly be relevant to the
21 training testimony.

22 The statement by the former President Uhl goes
23 to statements he made in videotapes which goes to the point
24 of the testimony regarding incentive of the workers.

25 MS. MONAGHAN: The point of this line of questioning

#10-6-SueT 1

2 is to establish whether or not apart from the incentive
3 question, whether these statements that were made in the
4 tape that had been made by the former President of LILCO,
5 Mr. Uhl, are in fact true, factual statements.

6 MR. MILLER: Judge Laurenson, my point simply
7 is that whether true or not, the point of the testimony
8 remains the same. And that point goes to the incentive and
9 motivation of the LERO workers.

10 I don't understand how exploring the depth of
11 these witnesses' knowledge regarding radiological releases
12 and the likelihood of such releases has anything to do with
13 the point made in the testimony.

14 (Judge Laurenson is reading a document.)

15 MS. MONAGHAN: Judge Laurenson, this --

16 JUDGE LAURENSON: Let me just take a second to
17 read it.

18 MS. MONAGHAN: Certainly.

19 (Pause.)

20 JUDGE LAURENSON: I'm sorry, Ms. Monaghan, you
21 had one other thing to add?

22 MS. MONAGHAN: That's all right, Judge Laurenson.
23 I will waive it.

24 JUDGE LAURENSON: In light of the context in which
25 this quotation is used, I agree with the County that the
knowledge of these witnesses concerning the potential release

#10-7-SueT 1

of radionuclides from containment is not relevant.

2

The objection is sustained.

3

BY MS. MONAGHAN: (Continuing)

4

Q Lt. Fakler, if these statements regarding the likelihood of nuclear accidents and the consequences of those accidents which were made in the tape that was presented by Mr. Uhl are true, wouldn't you agree that it would be an important part of a training program to present that type of information to the LERO workers?

10

A Absolutely not.

11

Q You don't think it would be important for them --

12

A No.

13

Q -- to understand the context of what they would be doing?

15

A I don't see this dealing with the context of what they would be doing. If I were a traffic guide and you were telling me that I don't have to worry about it because it's never going to happen, and that's the implication here, I wouldn't be too concerned about my learning it but particularly since I'm not even tested in what I do.

21

(Witness Cosgrove) Mr. Uhl is saying it's a remote possibility, but LERO will be working only if that remote possibility comes true. He should be stressing the possibility of it happening, how important it is that they be concerned about it.

25

#10-8-SueT 1

2 Q Deputy Inspector Cosgrove, is it your testimony
3 that the LILCO training program should indicate to its
4 trainees that such an accident would be a likely occurrence?

5 A No. I think even his -- even Mr. Uhl's statement
6 I think is saying it's a possibility but a remote one. And
7 he is playing up the remoteness of the possibility. I
8 think he should say: You should learn this because you
9 may have to use it. Which is in fact the case. That's
10 more of a motivator.

11 (Witness Fakler) It's a thread that goes
12 right through the entire videotape program. Frequently,
13 it's said in the unlikely, or in the extremely unlikely
14 event, which puts the viewer right at ease.

15 Q Lt. Fakler, isn't that --

16 MR. MILLER: Excuse me, Ms. Monaghan. Excuse
17 me, Ms. Monaghan. I think Professor Lipsky was going to
18 say something.

19 WITNESS LIPSKY: I'm just reminded of recent
20 training that I've had in use of scuba equipment where
21 there are a series of very unlikely things that may happen,
22 and the instruction is continually that while this may never
23 happen to you, you need to be able to be aware of it.

24 And they virtually -- they try to frighten you
25 into remembering it, because there is a remote chance that
you might have to do it. When I viewed this videotape, it

#10-9-SueT 1

2 was clear, or it seemed to be the case, that the videotape
3 was suggesting that it was just fine to volunteer for LERO
4 because, of course, this was the introductory session and
5 that people should not have to think that they would be put
6 in any jeopardy.

7 And I was struck by the sunniness of all this
8 and the lack -- the extent to which these kinds of statements
9 put excessively to ease any anxiety that the workers might
10 have that they would ever have to use this knowledge.

11 (Witness Fakler) This is like getting on an
12 airline and they give you a three minute introduction on
13 how to use your seatbelt and everything else. They don't
14 go by the presumption that it may never happen. They are
15 telling you it's possible.

16 (Witness Lipsky) They do.

17 Q Doesn't the fact that LILCO has structured an
18 entire training program around the possibility of a radio-
19 logical accident at the Shoreham Nuclear Power Station
20 indicate that they, in fact, take seriously that some --
21 that that possibility might occur and that it is important
22 to plan for that?

23 A (Witness Fakler) I'm sure those who have to
24 look at LILCO's involvement in creating the plan would get
25 that impression. But the person at the bottom level who
has to implement the plan doesn't get that same message.

#10-10-SueIT

(Witness Lipsky) I would --

2 Q Isn't it also true --

3 MR. MILLER: Excuse me, Ms. Monaghan. I think
4 Professor Lipsky was going to add something.

5 WITNESS LIPSKY: Well, that's a very complicated
6 question. You would have to look not only at the existence
7 of the plan but the attitudes of the individuals who regularly
8 have to implement it and the kinds of sub-messages that are
9 being portrayed throughout the organization as to whether
10 or not it is taken very seriously.

11 I think our testimony raises some questions about
12 how much of the organization's effort and energy ought to
13 be devoted to it. So, I think the message is distinctly
14 mixed.

15 (Witness Cosgrove) I think, too, that if I'm
16 scheduled for a drill and I'm too busy to go, I apparently
17 don't have to go, because we have had testimony to that
18 effect. Couple that with the statement that I will probably
19 never have to use this, I really don't think it's being
20 impressed upon me how important and serious this is if I
21 am a trainee.

22 MS. MONAGHAN: I move to strike Deputy Inspector
23 Cosgrove's last statement as not responsive to the question,
24 particularly with respect to attendance at drills.

25 MR. MILLER: Judge Laurenson, I would only say

#10-11-SueT 1

that it is completely responsive.

2

JUDGE LAURENSEN: I don't remember any more what the question was. Do you remember, Ms. Monaghan?

3

4

MS. MONAGHAN: I think that the question that was asked to Lt. Fakler a few statements back was that wouldn't he agree that since LILCO has structured an entire training program around the possibility of a radiological emergency that that is indicative of the fact that LILCO, in fact, takes that possibility as a serious one.

5

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JUDGE LAURENSEN: Thank you. I believe you are correct that that is the question. But I think that his answer is responsive to that.

11

12

13

The motion to strike is denied.

14

BY MS. MONAGHAN: (Continuing)

15

Q Lt. Fakler, you have reviewed the videotapes that are used in the LERO training program; is that correct?

16

17

A (Witness Fakler) Yes.

18

Q Have you reviewed all of the videotapes?

19

A Yes.

20

Q And, therefore, you have reviewed the introductory videotape that was presented, I think it was called "Emergency Preparedness Overview or General Knowledge?"

21

22

23

A Yes.

24

Q In that videotape, isn't it true that Joseph Acker, who is Vice-President of LILCO, makes statements

25

#10-12-SueT 1

2 about how LILCO has always believed that it is essential
3 to prepare for emergencies and they discuss the preparation
4 that LILCO has taken for emergencies with respect to ice
5 storms, blizzards, hurricanes, fires, et cetera?

6 And they -- is that correct?

7 MR. MILLER: Excuse me. I object, Judge
8 Laurenson. That's a compound question. I object to the
9 form.

10 MS. MONAGHAN: I will go back and break it up,
11 Judge Laurenson.

12 BY MS. MONAGHAN: (Continuing)

13 Q Lt. Fakler, in that first videotape that you
14 viewed, do you remember that there was -- that Joe Acker,
15 who is the Vice-President of LILCO, made some statements
16 in that videotape?

17 A Yes. Vaguely. That's such a long time ago, and
18 I haven't re-reviewed it but I do remember, yes.

19 Q All right. Do you remember that he made state-
20 ments concerning the fact that LILCO believes that emergency
21 preparedness was very important or essential?

22 A Generally, yes.

23 Q And do you remember that he made statements that
24 over the years LILCO has developed a number of emergency
25 plans to deal with different kinds of emergencies?

A Generally, yes.

#10-13-SueT 1

2 Q And some of the emergencies he listed were things
3 like blizzards, snowstorms, downed power lines; is that
4 correct?

5 A Yes.

6 Q Do you also remember that during that discussion
7 Mr. Acker talked about another emergency plan that LILCO
8 was getting ready to implement and that that would be the
9 radiological emergency response plan for the Shoreham
10 Nuclear Power Station?

11 A He commented on it. Yes. I don't recall the
12 quote.

13 Q Do you also recall that in that videotape Mr.
14 Acker makes the statement, and I will quote to you from
15 that videotape, "We recognize that despite the stringent
16 safety standards under which Shoreham was built and operates
17 that there is a need for an emergency plan to protect the
18 people in our community?"

19 A Sounds familiar.

20 Q All right. Do you also remember that he made a
21 statement in which he said, "Our radiological response
22 details all the actions and activities to protect our
23 neighbors that we would initiate in the unlikely event
24 of radiological material being released into the environ-
25 ment?"

MR. MILLER: Excuse me, Lieutenant. Judge

#10-14-SueT1

2 Laurenson, I would suggest that we just show the videotape
3 to the Board because it sounds like Ms. Monaghan is going
4 to read it all in.

5 I object to the questions being asked by Ms.
6 Monaghan. The witnesses are sitting here. It has been
7 a while since they have seen the videotape, and she is ask-
8 ing them do you remember such and such a quote. I don't
9 see the point of this.

10 JUDGE LAURENSEN: Up to this point, it appears
11 that the witness does remember. At least, he has indicated
12 that he does.

13 The objection is overruled.

14 WITNESS FAKLER: Do I remember that last comment?

15 BY MS. MONAGHAN: (Continuing)

16 Q Do you have any recollection of that last comment
17 or something to that effect?

18 A That one is a little more vague. But I presume
19 it is if you are reading it.

20 end #10
21 Joe flws

22

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11-1-Wal

1 It is an interesting point here while you are
2 waiting. Sometimes the context of reading it like this and
3 restating something, which are factual words that we can
4 all perceive differently don't necessarily come through that
5 crystal clear when somebody is talking. We are getting into
6 a discussion maybe on the talking head regardless of who that
7 person is.

8 I happen to think that Wilford Uhl's message was
9 put together rather well. He, as a personality, apparently
10 came through. I don't believe Acker's presentation was that
11 convincing. But we are talking now not about the words used;
12 we are talking about the individual giving of feeling.

13 Q Lieutenant Fakler, do you know either Mr. Uhl or
14 Mr. Acker?

15 A No, I do not.

16 Q And do you have any idea of how the LILCO employees
17 who would have viewed those video tapes would have felt about
18 either Mr. Uhl or Mr. Acker.

19 A Isolated, yes. I do have some reactions from
20 some friends.

21 Q And what was that reaction?

22 A Well, the first one, Uhl, yes; the second one,
23 Acker, not necessarily.

24 Q Yes what?

25 A Convincing.

1 Q Convincing. And they saw those video tapes in
2 the LERO training program, those people with whom you
3 spoke?

4 A Yes.

5 Q And their impression was based solely on the
6 video tapes?

7 A Yes.

8 Plus that is my reaction, by the way. For the
9 record, that is the way I felt about it.

10 Q Lieutenant Fakler, isn't it true that during the
11 video tape made by Mr. Uhl that it also included statements
12 about the importance of emergency planning?

13 A I am not sure. I would have to go back and
14 review it. He did a nice job. That is about the thrust
15 of all I can say about that.

16 JUDGE LAURENSEN: You will have to keep your
17 voice up, Lieutenant Fakler.

18 WITNESS FAKLER: I am sorry, yes, sir.

19 JUDGE LAURENSEN: Move the microphone a little
20 closer.

21 BY MS. MCNAGHAN: (Continuing)

22 Q Turn to page 49, please. On page 49 of your
23 testimony, Dr. Lipsky, you discuss the depositions that
24 were taken of selective LERO workers. Before drafting your
25 testimony, did you read the depositions of Messrs. Biggers,

1 Barrows, and Brady?

2 A (Witness Lipsky) Let me look.

3 Q Certainly.

4 A My recollection, I did review a variety of
5 depositions that were supplied to me, and I believe that
6 these were among them.

7 I did review -- I do remember -- I have a
8 recollection that these sorts of responses were character-
9 istic of the randomly selected workers.

10 Q But you don't recall the depositions at this time,
11 -- any specifics from the depositions?

12 A I remember specifics enough to believe that,
13 indeed, these depositions provide underlying support for the
14 statements that we made.

15 Q Do you know whether or not the LERO workers who
16 were deposited, Mr. Biggers, Mr. Barrow and Mr. Brady, had
17 completed the classroom portion of their training at the
18 time of their deposition?

19 A I believe they had. At least some of them had
20 completed some of the training -- of the classroom training.

21 Q But you don't know whether or not they had
22 completed all the classroom training that they would be
23 receiving?

24 A I don't recall at this time. I may have known
25 at the time.

1 Q Do you know whether or not they had participated
2 in any drills at the time their deposition was taken?

3 A I don't recall.

4 Q Turn to page 50 of your testimony. Actually, it
5 is pages 49 through 50. Dr. Lipsky, before drafting your
6 testimony, did you read the letter from J. Monaghan to J.
7 Burkenheier, dated February 2, 1984, on which you rely on
8 page 50?

9 A I don't recall. I may have become aware of that
10 letter during the period of the preparation of material. So,
11 it was -- it may have been in the drafting, but not necessarily
12 before the drafting, and certainly before -- I read it before
13 these materials were submitted.

14 Q Does that letter, to the best of your recollection,
15 which described at the County's request the meaning of the
16 term, 'practical demonstrations' as used in the LILCO
17 Transition Plan, include video tapes among the practical
18 demonstrations?

19 A I don't recall.

20 Q Lieutenant Fakler, isn't it true that table tops
21 or seminars, if you will, are a useful method of reviewing
22 procedures and practicing management decision making?

23 A (Witness Fakler) Yes.

24 Q To your knowledge, do other emergency response
25 training programs employ table top drills, or seminar-type

1 format in their training programs?

2 A Seminar-type formats, as opposed, to table tops,
3 we don't refer to them much at all. They seem to be the
4 least significant. But conference-types, yes.

5 Q Lt. Fakler, I would like to ask you a series
6 of yes or no questions, if you would. Just to move this
7 along.

8 Lt. Fakler, in the police DIT training, isn't
9 it true that an officer views the video tape, and then takes
10 a test on that?

11 A True.

12 Q Isn't it also true that if the officer fails the
13 test, he is given an opportunity to review the video tape
14 and take the test again?

15 A True.

16 Q What period of time could elapse between the
17 two tests?

18 A Very little. It is done right away.

19 Q Within the same day?

20 A Yes. Our goal is to keep him until he demonstrates
21 he has the level of knowledge prescribed.

22 Q Is he given the same test again, or a different
23 test?

24 A Different test. Same objective, different test.

25 Q Is it your opinion that a written examination

11-6-Wal

1 should take place in the classroom portion of the training
2 program?

3 A A written examination in the classroom portion?
4 Are you referring to DIT now, again?

5 Q No, we are not referring to --

6 A You are back into classroom sitting. Should
7 an exam be given right away?

8 Q Yes, as a part of the classroom, the cognitive-
9 type training.

10 A Yes. Well, we do that in block testing. It may
11 not come immediately, that same moment. If there are more
12 than the prescribed amount of hours in one day. In other
13 words, if we have a six hour block, they will get their
14 exam at the end of the six hours dealing with that topic,
15 yes.

16 We want to check the progress of the individual
17 as quickly as we can. As a matter of fact, the value of
18 it is that we determine on an individual basis right away
19 what their progress is, so that we can weed out the weaknesses,
20 and carry on from there.

21 Q Lt. Fakler, isn't it true that an experienced
22 trainer could write an examination that would be structured
23 in such a manner, such that all of the examinees would pass
24 that test?

25 A It is hard for me to perceive an instructor

1 willingly doing such a thing. I think it wou'd be difficult
2 to get into that kind of position where he would want to do
3 that.

4 But, could he do it?

5 Q Yes, could he do it?

6 A Sure.

7 Q And couldn't he also do it such that all of them
8 would fail?

9 A I don't think so. Not legitimately. I think
10 the students would revolt on the spot.

11 (Laughter)

12 Q But it would be possible to draft such an
13 examination.

14 A I am well aware of it. We have a very -- it is
15 an elaborate thing to stop that kind of an event happening.
16 We are able to perceive how everybody on the job, of twenty-
17 five hundred people, has answered any given question, and we
18 can see if, in fact, there are any trends in weaknesses,
19 whether it be on the part of the question or under the
20 information that brought it.

21 So, we have kind of a constant check to see that
22 that doesn't happen.

23 A (Witness Cosgrove) I would think that would be
24 a terrible evaluation of the instructor if all his students
25 failed. You see, the test doesn't only measure the trainee,

1 it kind of measures your training program and your instructor
2 at the same time.

3 If all the trainees failed, well, then the
4 instructor failed to meet his objectives.

5 A (Witness Fakler) And we don't use curves. We
6 deal with the straight material. The objective is clear,
7 and the result has to be clear.

8 Q Lt. Fakler, taking it out of the context of
9 Suffolk County Police Department's training program itself,
10 my question is a hypothetical one. Isn't it possible to
11 draft an examination such that anyone who took it would
12 pass?

13 A Isn't it possible to draft -- oh, sure. Oh, yeah,
14 that is very obvious.

15 Q On page 55 of your testimony, you state that
16 -- Lt. Fakler, I would like you to answer this one
17 if you could. Simulated experiences is helpful, but it is
18 not sufficient to prepare emergency response workers for
19 their job. Does that contradict your prior testimony that
20 so-called simulation could prepare workers for their jobs.

21 A Let me read that. Where are we? In the middle
22 of 55?

23 Q Let me see. It is at the top of the page, at
24 the very end of the paragraph which begins on page 55.

25 A Simulated experience?

1 Q Yes.

2 A And you say that contradicts --

3 Q My question to you is, does that contradict your
4 prior testimony that some simulated experience could prepare
5 workers for their jobs?

6 A No.

7 Q Why not?

8 A Why does it?

9 (Laughter)

10 I am missing the point here, obviously.

11 Q Your statement here is that simulated experience
12 would be helpful, but it is not sufficient to prepare
13 emergency workers for their jobs.

14 A You need the real life experience on top of
15 that.

16 Q So, simulated experience without real life
17 experience being coupled with it would not be sufficient.

18 A I believe.

19 Q That it would not?

20 A That is right.

21 Q Lt. Fakler, wouldn't you agree that the traffic
22 guide training provided by Doctor Harry Babb provides the
23 LILCO traffic guides with an opportunity to practice the
24 skills they need to perform their traffic guidance job?

25 A Up to a point, it is beautiful. But it doesn't

1 go all the way.

2 Q Would you turn to page 58 of your testimony.
3 Page 58 of the testimony, the paragraph that begins around
4 the middle of the page, you state that --make the statement
5 that you never have adequately practiced, let alone performed
6 their actual emergency jobs before they are called upon to
7 respond to a real emergency.

8 Is your standard for an acceptable training
9 program for bus drivers that the bus drivers must drive buses
10 over the routes?

11 A Absolutely. Shall I elaborate on that, or do
12 you want just a simple answer?

13 Q A simple answer would be better, I think.

14 A Absolutely.

15 A (Witness Cosgrove) You know, in the LILCO
16 witnesses testimony they kept relying on the State licensing
17 test as an evaluation, and if you look at the New York
18 State Vehicle and Traffic Law, none of the LILCO bus drivers
19 comply with the New York State requirements for people
20 employed as bus drivers.

21 True, they obtained a Class 2 license, which is
22 the beginning of a process, but in the New York State Vehicle
23 and Traffic Law, it calls for yearly observation, and a bus
24 full of passengers by a qualified supervisor. It calls for
25 medical examinations. It calls for driver review records.

1 So, when LILCO says we are relying on the New
2 York State evaluation system, they really are not. They
3 have just cracked open the door for bus drivers.

4 Q Deputy Inspector Cosgrove, do you know whether
5 or not LILCO intends to have its people go through the annual
6 reevaluation process that is required by New York State?

7 A I have no information that they are going to, no.

8 Q But you have no information that they will not
9 either, do you?

10 A No. No.

11 Q Lt. Fakler, getting back to what you would
12 consider an acceptable standard for an acceptable training
13 program for bus drivers, you stated that you felt it was
14 absolutely necessary for the bus drivers to drive the routes
15 with their buses.

16 Do you also believe that they must pick up the
17 public in order to have an adequate training program?

18 A (Witness Fakler) Not the public per se. It
19 could be in a role play way, yes. I think there should be
20 very prescribed events occur while coming into a bus, so that
21 it doesn't have that very virgin atmosphere about it, I
22 think, as we heard a little bit earlier.

23 Everything seems so crystal clean from the
24 descriptions in the programs particularly. Showing a bus
25 driver traveling his route. I think once the realism creeps

1 into it, some real learning will occur, and then, yes, you
2 can make a true evaluation as to whether the individual can
3 deal with it.

4 We have seen cases where they say one bus driver
5 isn't even enough, there should be somebody to deal with the
6 map, which already says that a map itself does not do the
7 job. Does the bus fit on this street? Can he make his
8 turn adequately? Is he familiar with every route that he
9 may go on, whoever he may be.

10 There is a lot to be answered still. It seems
11 like a good start, but never quite finished.

12 Q Lt. Fakler, do you know what an RN 14 is?

13 A An RN 14? Can you give me a hint?

14 (Laughter)

15 Q Bigger than a bread box, and smaller than an
16 elephant. The RN-14 is the radiation monitoring equipment
17 that is going to be used under the LILCO Transition --

18 A I deal with that in general categories. I know
19 what it looks like because I watched your tape, and I see
20 what the procedure is to deal with it, but I know what
21 a difficult task that can be.

22 Q Have you ever used an RN-14, Lt. Fakler?

23 A No, I haven't.

24 Q Have you ever designed a training program for
25 the use of an RN-14?

1 A You know I am going to say, no.

2 Q What would your standard be for an acceptable
3 training program for monitoring and decontamination
4 personnel?

5 A Having somebody be able to demonstrate, under
6 again, a somewhat realistic condition that they are capable
7 of performing the functions as they are laid out.

8 End 11
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Sim 12-1

1 Q How often do you believe that a decontamination
2 personnel who had been trained would have to exercise
3 that skill in order to maintain proficiency?

4 A (Witness Fakler) That is a tough one. It
5 all depends on the individual and how many functions he
6 has. If it is just somebody that has got to deal with
7 a thyroid, maybe it wouldn't take as much time as the
8 person that has got to deal with a car.

9 If it has got to be somebody that has got to
10 deal with people going into the shower before and after,
11 that might be a different ball game, too.

12 I really can't be too specific. It depends
13 on the task.

14 A (Witness Cosgrove) I can relate it to our
15 breathalizer training which we train people to use a
16 piece of equipment also, and that is three days, three
17 eight-hour days in the Academy, plus then they are
18 certified and they have to use it so many times within
19 a six-month period. They are usually assigned to that
20 duty anyway. So maybe you can make a correlation between
21 the breathalizer training.

22 A (Witness Fakler) Not only that, but as time
23 goes on, we are all adults and we are all in the same
24 boat and I don't think we are talking out of school when
25 we say that we forget as time goes on, particularly when

Sim 12-2

1 it comes to procedures. I am sure there are many tasks
2 that you have learned in life that if you had to go back
3 to them tomorrow, it would take you a few minutes to get
4 back into the swing, and the least time you would want
5 to do that is in a serious event.

6 Q Is it your understanding that the LILCO
7 training program provides for a continual training program?

8 A Yes, maybe not adequately as far as drills are
9 concerned.

10 Q Are you talking about adequacy with respect
11 to number, Lt. Fakler, the number of times that one would
12 be drilled?

13 A Again, I have to be vague only because we don't
14 now which task we are talking about when. If we are talking
15 about the monitoring device, then it takes the person with
16 the thyroid more time or less time than the person with
17 a car. I would say he needs more drilling in the car.
18 So I really can't come up with a specific.

19 Q Is it your understanding that the person who
20 does thyroid monitoring has a more complex task than the
21 person who monitors the vehicles?

22 A Not necessarily. It is just from what I see,
23 it is a very sensitive job and obviously a very important
24 one because you are dealing with people and not just
25 static individuals who will smile while you are doing it.

Sim 12-3

1 These are people that are going to have a little adrenaline
2 at the same time and be a little concerned about your
3 activities. So I think dealing with people could be even
4 more critical than dealing with the vehicle, although
5 if you take my new car away from me during this process,
6 I sure want to know what is happening, and of course you
7 are not going to let me do that because you are going to
8 take it away to another place. There are a lot of sensitivity
9 things involved here with people that I think should become
10 part of that training.

11 If people are thrust into that kind of an
12 example and they have to make judgments and decisions,
13 and they do it well and they do it within the time frame
14 that you prescribe, that would probably be adequate training.

15 Q Would you turn to page 67 of your testimony.

16 (Witnesses comply.)

17 Lt. Fakler, if I could have a yes or no
18 answer to this question. Would you expect a police
19 officer to direct traffic in an intersection that he may
20 never have seen before?

21 A Yes.

22 Q Isn't it true that you don't train each
23 officer for specific intersections?

24 A True.

25 Q Isn't it also true that when you provide

Sim 12-4

1 traffic guide training to police officers that the training
2 is geared towards typical intersections that one would
3 find?

4 A At the front end, yes, but when we get them
5 out into the field, there is no such thing as typical.
6 He is dealing with everything possible.

7 Q Lt. Fakler, based on what you have just told
8 me, do you still agree with the statement in your testimony
9 on page 67 that traffic guides should not be expected to
10 direct traffic at intersections which they have never seen
11 before?

12 A I think we are talking here about the LERO
13 group in particular because police officers, as you know
14 by now, do it as a constant diet and they are familiar
15 with territory, and even if they are not, they can adapt
16 more readily and easily, where I don't think that is the
17 case with LERO, especially if they don't live anywhere
18 near the area, traffic guides that is.

19 So it would probably, in this case in particular,
20 be wise to design a program where all traffic guides would
21 know where those points are and would become familiar with
22 them. It would probably lessen the amount of training
23 required.

24 A (Witness Lipsky) Since traffic guides will
25 have so much uncertainty in their work anyway by virtue

Sim 12-5

1 not doing this job in any situation that simulated reality,
2 it might make sense to lower the degree of uncertainty
3 that they will be experiencing by introducing them to the
4 points that they might have to go to.

5 A (Witness Fakler) I am convinced that if they
6 come out of a parking lot from LILCO, even though it is
7 a simulated mock scene and it is a good preliminary start,
8 that it is going to be an entirely different experience
9 when you get on the corner of William, Floyd and 25A.

10 Q Would you turn to page 72 of your testimony,
11 please.

12 (Witnesses comply.)

13 On page 72 of the testimony, Deputy Inspector
14 Cosgrove and Lt. Fakler, you make the statement that
15 anxiety on the part of a radio user often leads him to
16 talk too fast to be understood, and further in emergencies
17 there is often confusion among the personnel in attempting
18 to use the radio frequencies and heavy radio traffic taxes
19 the system of the response organization.

20 Isn't it true that the basis of that statement
21 if your own experience in the Suffolk County Police
22 Department?

23 A (Witness Cosgrove) That and the comment sheets
24 we receive from the drills.

25 Q Was that an emergency situation that took place

Sim 12-6

1 in the drills?

2 A I believe it was an attempt to simulate
3 an emergency situation.

4 Q So it is true, isn't it, that during LILCO's
5 drill and exercise program that LERO workers used the
6 communications equipment that they would be using during
7 an actual emergency?

8 A Many of them did not according to the drill
9 responses right now.

10 Q Who of the LERO workers uses communications
11 equipment to your knowledge, Lt. Fakler?

12 A (Witness Fakler) Traffic guides, route
13 spotters, controlling points, staging areas and that is
14 about it. That is our concern especially in regards to
15 the testimony.

16 Q Do you know whether there is anyone at the
17 EOC who uses a radio?

18 A I believe there is, yes.

19 Q Is there any indication in the drill comments
20 that you reviewed that people at the EOC did not have
21 that equipment available to use during the drills and
22 exercises?

23 A No, not available, but they had difficulty
24 in its use.

25 Q What do you mean by difficult in its use?

Sim 12-7

1 A I don't know. I would have to find the thing.
2 That isn't where my focus was. My focus was pretty much
3 out in the field.

4 A (Witness Cosgrove) I can recall one where
5 a traffic guide called in for instructions and he said
6 awaiting instructions. Apparently it was misunderstood
7 at the EOC. I am sorry, I guess I am referring to the
8 staging area because he eventually came in and as he
9 walked in the door they were radioing his instructions
10 out to him when he was already there.

11 Q Deputy Inspector Cosgrove, did you say that
12 some of the basis for this testimony is these drill comment
13 sheets?

14 A No. I meant to say they supported the testimony.

15 Q At the time you wrote the testimony you didn't
16 have the drill comments sheets, did you?

17 A No, we did not.

18 Q So that your testimony was really based solely
19 on your own experience?

20 A Our combined experience.

21 A (Witness Fakler) Not just police though. We
22 have a chance to overhear and combine our networks with
23 others. I have one classic example. When we went to
24 Shoreham we had a chance to see and hear other communications
25 systems as well as ours, and they have the same difficulties

Sim 12-8

1 in a moment of truth.

2 I mean when you have about 300 people attempting
3 to come over fences and everybody is trying to radio back
4 what is going on, that is maybe a wild example, I mean
5 a strong example, if you will, but nevertheless, what is
6 said and the problems and the difficulties in working with
7 radio are very, very obvious then.

8 Q At Shoreham, which was when there was the
9 demonstration at Shoreham, is that the time that you are
10 referring to?

11 A Yes, way back.

12 Q Did that response function effectively?

13 A What do you mean by response?

14 Q There were demonstrators there; is that correct?

15 A Right.

16 Q And as I understand it from the testimony
17 of other officers at these hearings, the Suffolk County
18 Police Department prepared to respond to demonstrators
19 coming over fences and things like that; is that correct?

20 A Yes.

21 Q Did you have any difficulty in executing that
22 response to demonstrators?

23 A You bet. It was a tough job to say the least.
24 I am not sure, what do you mean, the specifics?

25 Q Was that based on communications equipment,

Sim 12-9

1 problems with communications equipment that you had
2 difficulty?

3 A No, no, no. We made provisions to avoid
4 that. As a matter of fact, we used television instead
5 so we could see what was going on. We didn't have to
6 listen and hear. We didn't rely on radio transmissions
7 in all cases because we appreciate the difficulties that
8 were about to occur.

9 Q In your experience as police officers, in the
10 event of an emergency when individuals are using communica-
11 tions equipment, has there been an occasion where the
12 information was not relayed because of the fact that there
13 was anxiety on the part of the radio user?

14 A (Witness Cosgrove) I had that happen in my
15 precinct about two weeks ago. I was out of an evening
16 on what they call District Commander duty and there was
17 a riot in Central Islip. Two officers had pulled over
18 a car and a crowd of about 100 people came out.

19 One of the officers was screaming for assistance
20 into his radio so excitedly that nobody could find out
21 where he was. We could not read the streets and we could
22 not hear the street location and it took some time before
23 we located him. So that was an example, and this was an
24 officer with about two years experience. I mean not an
25 oldtimer, but not really a rookie by any means and there

Sim 12-10

1 was an incident.

2 Q So, therefore, what you are saying is that
3 it could happen to anyone, that sort of anxiety producing
4 that trouble with the communications equipment, isn't
5 that true, Deputy Inspector Cosgrove?

6 A Not only could, but probably would. It probably
7 would happen to anyone.

8 A (Witness Fakler) That was a rather severe
9 example, by the way. This is not the normal fare that
10 I think you would see in regular transmissions. Errors
11 can still be made there. We like to think that the
12 discipline on our radio right now is pretty good. If you
13 were going to talk on a scale of 10, I would say up around
14 9. There is room for error in everything, but if we look
15 at some of the real responses here, it seems to be a constant
16 and frequent pattern of failure. They have difficulty
17 in not only getting the right equipment, but when they
18 do there is, as they call it, joking around and horseplay,
19 which is a difficult thing to deal with unless you can
20 work with it frequently.

21 A (Witness Cosgrove) I might add, we have just
22 gotten new radios in the department. So at this point
23 there is a problem with experience and new equipment. We
24 are sort of in a training area right now ourselves.

25 Q Turn to page 77 and 78 of your testimony.

(Witnesses comply.)

Sim 12-11

1 On those pages of the testimony you make the
2 statement that, second, radio experience in non-emergency
3 situations is irrelevant because the volume of traffic
4 is so much lower.

5 I would like a yes or no answer to this,
6 Lt. Fakler. Isn't it true that the basis for this statement
7 that in essence there would be a large number of communica-
8 tions during an emergency is your experience with the
9 Suffolk County Police Department?

10 A (Witness Fakler) Okay. I just picked up
11 on "Second," and give me a second to read what I wrote.

12 Q Sure.

13 (Pause while witness reviews document.)

14 A Again, I am sorry, the question?

15 Q Would you like the question again?

16 A My apologies, yes.

17 Q That is all right.

18 I would like a yes or not answer to this, if
19 you would. Isn't it true that the basis for this statement
20 in your testimony that in essence there would be a large
21 number of communications during an emergency is your
22 experience with the Suffolk County Police Department?

23 A Partially that. Yes, I must say partially
24 that. I have seen a lot of transmissions at one time
25 there and of course I presume in any kind of radiological

Sim 12-12

1 event that the same thing would occur and there would be
2 a lot of transmissions.

3 Q And that presumption is based on your experience
4 with the Suffolk County Police Department?

5 A Yes.

6 Q And the way in which they conduct their
7 radio communications in their responses to an emergency?

8 A Yes.

9 Q Would you turn to page 87 of your testimony.

10 (Witnesses comply.)

11 At that page you make the statement that
12 simply put there is no assurance that these groups -- and
13 you are referring there to non-LILCO emergency workers --
14 will receive any training at all, including training designed
15 to offset the effects of attrition.

16 Lt. Fakler, are you aware that the United
17 States Coast Guard has received and completed training?

18 A Yes.

19 Q Are you also aware that LILCO and the Coast
20 Guard have an agreement which is included in the Coast
21 Guard's own contingency plan that the Coast Guard will
22 notify LILCO in the event that retraining is required
23 prior to the regularly scheduled annual retraining?

24 A Yes. I believe I did read that. Yes.

25 Q On that basis do you have any reason to believe

Sim 12-13

1 that the United States Coast Guard would not notify LILCO
2 if in fact its members needed additional training?

3 A That is difficult to say. When you don't have
4 control over the line of events, there is no way that you
5 can guarantee that things will occur, especially in
6 institutions of large size and scope. Things have a way
7 of getting lost, mislaid or forgotten and, you know, when
8 you are going to hang your hat on just a few words as
9 opposed to facts, things occurring, the minute it is out
10 of your organization's control, you don't have control
11 regardless of what a piece of paper may say in a letter.
12 So I have no way of knowing, to be quite frank with you,
13 and I wouldn't guarantee it and I wouldn't consider it
14 possible, that is for sure. I think it would be part of those
15 who have the responsibility to do the training to ensure
16 that somehow those checks were put in place.

17 Now we have , for instance auxiliary policemen,
18 and they don't work directly for the Police Department,
19 but it is our job to see to it that they live up to all
20 of the prescribed agreements that are involved.

21 Q Lt. Fakler, isn't it true that LILCO is
22 developing a training program for organizations that are
23 expected to take actions during an incident at Shoreham
24 such as schools, hospitals and other special facilities?

25 A I don't know about the training program. I have

Sim 12-14

1 heard them say they would offer it, but I don't know what
2 it constitutes.

3 Q Do you have any reason to believe that
4 organizations which have committed to assisting LILCO
5 in responding to an emergency at Shoreham would not notify
6 LILCO of the need for retraining caused by attrition?

7 A Attrition? I have no way of knowing.

8 A (Witness Lipsky) The question gets to the issue
9 of whether organizations that are strapped for manpower
10 will put this at the very top of their list or among those
11 things that are of highest priority.

12 So one could turn the question around and say
13 what is the guarantee of the County that these organizations
14 will put these things at the level of highest priority.
15 One knows in all organizational work that organizations
16 often make agreements which they don't intend to dishonor,
17 but they simply do not implement because they are not of
18 highest priority.

19 Q On page 91 of your testimony, gentlemen, you
20 make the statement that indeed, many of them -- meaning
21 non-LILCO organizations -- may not even know that they
22 have a response role.

23 What is the basis for that statement?

24 A (Witness Lipsky) Where is that?

25 Q Page 91.

Sim 12-15

1 A (Witness Cosgrove) I can give you one example,
2 and I would think off the top of my head that the people
3 in the schools, because they have not been given any
4 kind of training, a lot of them don't even know that they
5 have a role in your plan. And the basis for that is my
6 wife who works in the Wading River School who knows what
7 she knows through me. She has no idea that she is going
8 to be called on to take certain actions and she has no
9 idea how to shelter children, I will tell you that.

10 Q Has any one in the Wading River School District
11 received training, to your knowledge?

12 A In the school district? Not to my knowledge.
13 I don't know.

14 Q So if training in fact hasn't been given to
15 anyone in the Wading River School District, it would not
16 be unusual for your wife not to know anything about it
17 because she hasn't received any training; isn't that
18 correct?

19 A Wait a minute. I am sorry, I didn't get the
20 question.

21 Q If training hasn't been provided yet, it would
22 not be peculiar for your wife not to know what she would
23 need to do in the event of a radiological emergency because
24 she has not yet been provided with training.

25 A That is what my statement is, that they haven't

Sim 12-16

1 been.

2 Q Does that preclude them from being provided
3 with training in the future?

4 A Oh, no. I guess you could change the plan.

5 A (Witness Lipsky) The statement in full context
6 gets to the issue of whether or not attrition will lead
7 to the fact that people may not know they have emergency
8 response roles and that statement is based upon reasoning
9 that follows from my earlier statement that organizations
10 may not supply retraining on a regular basis or seek
11 retraining on a regular basis because, as Lt. Fakler
12 suggested, LERO would not have control over whether or
13 not this retraining was given.

14 If there is a significant time period that
15 goes by between the initial training, if it were to
16 occur as in a school, and the retraining because, let's
17 say, 20 percent of the faculty or the staff of a school
18 had been changed over the year, if there had been a
19 significant change let's say in the school system, in
20 September you are getting to know the kids, in October
21 you are sort of getting your curriculum in shape and so
22 it is only later in the year that you want to devote a
23 half a day which the teachers don't want to give you
24 particularly because they are very jealous over their
25 time. So you have to put aside time and you can't do

Sim 12-17

1 that perhaps until the middle of the year.

2 Well, your retrainig has been delayed because
3 of organizational reasons outside of your control and
4 you have an organization that because of attrition
5 hasn't received retraining. That is why we might say
6 that they might not even know that they had emergency
7 response roles.

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Q Dr. Lipsky, what does the LILCO Transition Plan say about the training that will be offered to non-LILCO organizations such as schools?

A (Witness Lipsky) I believe the plan says that training will be offered to those organizations.

Q What does it say about retraining?

A I believe it says virtually the same thing.

Q Does it give any indication of the frequency with which retraining will be offered?

A I'm not sure. I would presume that it offers to retrain at the request of the organization. I could be wrong as to my --

Q Do you know --

A -- memory of the plan.

Q Do you know whether it offers to give retraining on an annual basis?

A I don't recall the frequency of the retraining offer. If I had to guess, I would say that the plan offered to do retraining in a fairly responsive way; that is, when the organization asked for it, I would presume that the people who wrote the plan would like to give that fairly quickly to that time.

Do you want to point me to the place in the plan where this is?

Q No. I'm just seeking to obtain your understanding

#13-2-SueTl

2 of what type of program is being offered here, because your
3 testimony, as you have stated it, indicates that you are
4 concerned about whether adequate retraining would be provid-
ed.

5 A My statement is not based upon any belief that
6 the retraining offer would not be forthcoming.

7 It's the -- the question that we have been address-
8 sing in this section is to the likelihood that people re-
9 sponsible for offsite emergency work who are not part of
10 LERO will ask for the training that LERO offers, and whether
11 it will do it on a timely basis.

12 Q Lt. Fakler --

13 A (Witness Fakler) Uh-huh.

14 Q -- are you familiar with what a frequency
15 distribution analysis is?

16 A Yes, I've heard the term. But I won't explain
17 the process to you if that's what you are asking for.

18 Q Do you know how the process is done?

19 A No.

20 Q You do not --

21 A No.

22 Q -- know how it's done?

23 A No.

24 Q Deputy Inspector Cosgrove, do you know a
25 frequency distribution analysis is?

#13-3-SueT

2

A (Witness Cosgrove) Yes, I do.

3

Q Do you know how one does a frequency --

4

A Yes, I do.

5

Q -- distribution analysis?

6

A Yes.

7

Q Would you explain that to me?

8

A Well, if you were taking a range of test scores, for example, you would indicate on a scale, either a range of score or an individual score, it might be 80 to 85, 86 to 90, and then indicate how frequent each of those scores appeared in a particular group of measurement, a particular measurement group.

9

10

11

12

13

Q Lt. Fakler, do you know what a content analysis is?

14

15

A (Witness Fakler) If it means what it implies, I can presume. But I couldn't give you a formula.

16

17

Q Deputy Inspector Cosgrove, do you know what a content analysis is?

18

19

A (Witness Cosgrove) Referring to a test instrument?

20

21

Q Excuse me?

22

A Referring to a test instrument or to a statistical analysis?

23

24

Q A statistical analysis?

25

A No, I do not.

#13-4-SueT1

2 Q So, you wouldn't know how you would evaluate
the reliability of a content analysis then, would you?

3 A How I would evaluate the reliability of a
4 content analysis? By reliability, now you are not using
5 it the way Dr. Mileti used it; he misused it. We are
6 talking about consistency now, right? Reliability.

7 Q Yes.

8 A Okay. No, I would not.

9 Q Deputy Inspector Cosgrove --

10 A Yes.

11 Q -- you and Lt. Fakler in your supplemental
12 testimony state that you have performed -- you have
13 reviewed, analyzed and evaluated these critique forms that
14 were provided.

15 A Supplemental, yes. Okay.

16 Q What methodology did you employ to do that?

17 A Well, we did not use a statistical one. What
18 we did is, we received the documents, which I have here in
19 front of me. They were in -- apparently had been broken
20 down. They were documents representing four different --
21 now, I assume they were exercises in the way I use the word.
22 They are labeled "Drill Exercises." So, I'm not really
23 sure.

24 But, in any event, there was one from November,
25 one from January, two from February. We looked at the one

#13-5-SueT 1

2 from November. It was -- it looked like a graphic rating
3 scale with various activities. And apparently the controller
4 was to rate them.

5 The very first one was an indication that the
6 controllers were confused. They were circling multiple
7 numbers. They weren't sure which extreme on the scale was
8 yes, which ones were no. They were writing comments in
9 here.

10 We immediately abandoned any kind of quantitative
11 analysis and started to read the summary sheets and the
12 comments that they had written in on the side. As we
13 started to read through them, again this was a -- the
14 November drill, we noticed also that apparently from the
15 scenario a controller would be in charge of a particular
16 area of the drill scenario. He would be the only one
17 commenting on that particular area.

18 So, we didn't worry about whether this comments
19 were supported by other controllers, because presumably
20 they wouldn't see what he is looking at anyway. They would
21 be evaluating their own area.

22 We noted that almost every sheet had negative
23 comments on it. And if this were, in fact, an exercise
24 that would be disturbing because the exercise is when you
25 would expect them to be performing at a pretty high level.
But it might have been a drill. We weren't quite sure.

#13-6-SueT 1

2 So we read through those forms, and then we went
3 into the next one to find out if the problems identified
4 in the November event, drill or exercise, or whatever it
5 was, were corrected. And then we started to find out that
6 no, they apparently were not. We then broke the forms down
7 into areas.

8 I know we dealt with lack of briefings for con-
9 trollers. These were comments that we saw on occasion.
10 And then we started to break them down into various problem
11 areas to see just how far they went. And in several instances,
12 it says in the supplementary testimony, we found that pro-
13 blems identified in November were not corrected in January,
14 were not corrected in either of the February drills.

15 And as a training director, that just bothered
16 the hell out of me.

17 (Witness Fakler) I just wanted to add a comment
18 to this, again in a very layman pragmatic way. If, in fact,
19 these controllers who were making the observations were
20 relied upon to study the reactions of a group of people, and
21 I'm sure in most cases that's just what it was, not just
22 one, I would say you would have to rely very heavily on
23 their judgment because it's the only avenue that you have
24 to get any feedback as to whether in fact an event is occur-
25 ing or not. And to the quality of it.

 Now, you can talk about quantities, and you can

#13-7-SueT 1

2 discount groups because of numbers, that certainly will
3 leave a vacuum. If we, for one minute, didn't go by an
4 individual performance appraisal we would be in deep water
5 as far as liability is concerned.

6 That may or may not be a problem for LILCO. But
7 when it comes to the safety of individuals I think it still
8 has to be done on an individual basis.

9 (Witness Cosgrove) A statistical analysis would
10 have been totally inappropriate, because when you only
11 have one controller evaluating a group such as maybe the
12 EOC, or he is at a traffic control point, and he records
13 negative comments, I don't think it's so important if there
14 are ninety or a hundred positive comments. There was still
15 a problem at his control point. And that's what we were
16 looking at. Was that problem corrected in the next drill.
17 And apparently it was not, as these documents indicated.

18 So, that's what we were looking at. We weren't
19 looking at a statistical analysis to give an overall rating
20 to the training program or to give an overall rating to the
21 drill per se. What we were looking at was if there was
22 in fact a series of events -- and again as a training director
23 when we used to do analyses at the Academy I never wanted
24 positive comments, because when I planned the program I
25 expected that. I wanted to know what was wrong with my
program so I could fix it. So, we were looking here.

#13-8-SueT 1

2 After a while, we got into the January drill to
3 see if they fixed what was wrong. And they didn't. And
4 then by the time we got into the February drill we were
5 strictly looking for those same problems again. And they
6 were there in both of the February drills.

7 So, that was how we went through it.

8 (Witness Fakler) And we did presume that the
9 observers were chosen because of their skill and ability to
10 do the job.

11 Q Deputy Inspector Cosgrove, you said after you
12 began looking at the November forms that you looked at the
13 first few forms and you looked at the rating sheets, and
14 that there was circling of more than one, in some instances
15 there was circling of more than one rating; is that correct?

16 A (Witness Cosgrove) Yeah. That was even where
17 the answer was yes or no. They had both yes and no circled.

18 Q Let's see if we can limit these to yes and no
19 answers and move through this fairly quickly.

20 Isn't it true that you stated that you abandoned
21 any kind of quantitative analysis based on having looked at
22 the ratings and the fact that more than one answer was
23 circled?

24 A No, that --

25 MR. MILLER: Excuse me. Excuse me, Inspector.
Judge Laurenson, I object to the form of the question. I

#13-9-SueT 1

2 believe Ms. Monaghan has asked if these gentlemen abandoned
3 a quantitative analysis.

4 I think their explanation is very clear; they
5 did not abandon anything. They explained their process.
6 They chose not to select that kind of a process.

7 MS. MONAGHAN: I believe that that was the word
8 that was used by Deputy Inspector Cosgrove, Mr. Miller.

9 JUDGE LAURENSEN: I frankly don't recall what
10 word was used at the time. But I think the Inspector can
11 answer the question if he wants to qualify it.

12 The objection is overruled.

13 WITNESS COSGROVE: All right. No. One of the
14 reasons we didn't go into quantitative analysis was because
15 of the apparent ambiguity on the part of the controllers
16 in filling out the form. And the other one was that we
17 really just didn't think that it was appropriate. We weren't
18 doing that kind of analysis.

19 We were only trying to come up with an absolute
20 good drill, bad drill, good training program, bad training
21 program. We were looking for specifics. We weren't looking
22 to weigh the good against the bad in any particular instance.

23 We were looking to see if, in fact, there was
24 bad or there was good and if the bad was corrected. So,
25 a statistical analysis was, if you want to say abandoned,
but it wasn't even applied at any point.

#13-10-SueT1

BY MS. MONAGHAN: (Continuing)

2 Q You didn't consider doing a statistical analysis
3 after --

4 A No.

5 Q -- a quick review of what the results were?

6 A No.

7 Q There are rating forms that are there and there
8 are comments that were written on those rating forms;
9 is that correct?

10 A That's correct.

11 Q When you reviewed these forms in order to do
12 your analysis, did you review the written comments?

13 A We reviewed both, yes. The written comments
14 were one of the ones that we relied, I would say, probably
15 most heavily on.

16 Q Did you take into consideration the comments
17 that were on the forms, the rating portion of the forms?

18 A Yes. The scale forms had writing, and we took
19 those comments also.

20 Q You took the written comments and you took the
21 scale comments?

22 A No, no. On the form there was apparently a
23 numerical scale followed by a summary sheet. We took the
24 comments from the summary sheet, but also some of the
25 evaluators -- I'm guessing -- did not understand the numbering

#13-11-Sue71

1 system so they wrote in comments where the numbers should
2 have been circled. We took those comments, too.

3 Q So, if -- let me see if I understand the process
4 that you went through.

5 If there was a comment on the summary portion,
6 did you go back to the rating portion and look at the
7 rating?

8 A Yes.

9 Q If there was no comment on the summary portion,
10 did you look at the rating portion?

11 A Well, the way the form is set up, the rating
12 portion precedes the summary portion. So, we would have
13 looked at the rating portion.

14 Q All right. For one of these statements that
15 you make in your testimony --

16 MR. MILLER: Excuse me. Judge Laurenson or
17 Ms. Monaghan, would this be an appropriate time for a break
18 before we actually get into the substance of the supple-
19 mental testimony?

20 MS. MONAGHAN: We could take a break now or just
21 continue on through, Mr. Miller.

22 MR. MILLER: I would propose a break then, Judge
23 Laurenson.

24 JUDGE LAURENSEN: All right. We will take a
25 ten minute recess at this time.

#13-12-Sue

(Whereupon, a recess is taken at 3:30 p.m.,
to reconvene at 3:46 p.m., this same day.)

JUDGE LAURENSEN: All right.

BY MS. MONAGHAN: (Continuing)

Q I believe that we were discussing the methodology
that was employed by you when you did the analysis of these
critique forms.

Let me just be sure that I understand exactly what
it was that you did and when you did the analysis. Was
a different critique form used during the course of these
different drills?

A (Witness Cosgrove) Yes. In the later drills,
you got away from the numerical rating scale and went to a
yes, no, not observed, not applicable scale.

That was -- I believe that started in the
February drill.

Q Did that cause you any problems with respect to
your review and analysis of these forms?

A No. Apparently there was still some confusion,
because one of the raters circled the N.O., not observed,
and then put a footnote: That should be read as no.

So, they were still misreading the forms. So
we still went with the comments as opposed to the numerical
ratings.

(Witness Lipsky) It would have been inappropriate

#13-13-SueT

to have a --

2

MS. MONAGHAN: Objection.

3

WITNESS LIPSKY: -- response if the change was

4

for the --

5

MS. MONAGHAN: That is an objection. I have an

6

objection to Professor Lipsky responding to these questions

7

and adding supplemental testimony, which I voiced earlier.

8

It seems to me that he did not participate in the review

9

and evaluation of these.

10

My question goes solely to the methodology that

11

was employed in reviewing and evaluating these forms.

12

JUDGE LAURENSEN: Sustained.

13

MR. MILLER: Excuse me, Judge Laurenson. I would

14

like to be heard on this point.

15

On the transcript -- I refer the Board to

16

the transcript from Wednesday, June 13. During the testi-

17

mony of the training witnesses where when I asked a question

18

of a particular witness -- and I believe the question was

19

asked of Mr. Berger, though I'm not sure, Mr. Daverio or

20

another witness answered who had not sponsored the testimony.

21

Judge Laurenson, during the course -- refer

22

you to Pages 11,408 through 11,411, there was a discussion

23

between yourself, Mr. Christman and me primarily regarding

24

the propriety of a non-sponsoring witness answering a

25

question posed to the panel. I refer you specifically,

#13-14-SueT

2 Judge Laurenson, to Page 11,409 where Mr. Christman argued,
3 in arguing that the LILCO witness should be able to respond
4 although he had not specifically sponsored the testimony,
5 Mr. Christman states: My recollection is similar to yours --
6 talking about you, Judge Laurenson -- and I think the point
7 here is that one of the witnesses has something responsive
8 and relevant to add. And he ought to be allowed to add it.
9 My impression, and I can't prove it, but my impression is
10 that we have been -- you have been fairly liberal in letting
11 others supplement the answers.

12 There was more discussion between the parties.
13 Eventually the Board ruled in favor of LILCO. The Board's
14 ruling is set forth on Page 11,411 over to Page 11,412,
15 where you ruled as follows, Judge Laurenson: We have
16 considered this request and the rule will be that any non-
17 sponsoring witness may add relevant testimony to supplement
18 an answer as long as it does meet all of our other tests
19 concerning relevancy to the question asked. So, now if
20 anybody can remember what the question or answer was, Mr.
21 Daverio can respond.

22 The standard, clearly, Judge Laurenson, is one
23 of relevancy to the testimony and the question posed. And
24 any non-sponsoring witness can respond in that regard.

end #13 24

Joe f 25

JUDGE LAURENSEN: I don't disagree with

1 anything you just said. But the ruling is still the same,
2 because the question that Ms. Monaghan asked was what
3 procedures were followed by Deputy Inspector Cosgrove in
4 analyzing the data, and Professor Lipsky's response does not
5 and cannot go to that answer.

6 MR. MILLER: Judge Laurenson, I would only point
7 out that Ms. Monaghan's questions go to methodology. Professor
8 Lipsky has been involved in discussions with Inspector
9 Cosgrove and Lt. Fakler regarding the review process, and
10 therefore, I would think that his comments are probative
11 and relevant to the question of methodology being explored
12 by Ms. Monaghan.

13 JUDGE LAURENSEN: Not as to what they did in
14 analyzing the data and preparing this testimony, because
15 Dr. Lipsky is not a co-sponsor of the testimony. Now, he
16 may have other relevant information to add. We haven't gotten
17 to that point yet, but I don't believe that the question
18 that was asked is one that is subject to being supplemented
19 by Professor Lipsky. Unless I am wrong. Maybe I misunder-
20 stand the whole thing. Maybe you did analyze the data,
21 Professor Lipsky. Did you do that? And then we have
22 a different situation here.

23 WITNESS LIPSKY: To be quite frank, the questions
24 as I heard them were related to the question of the adequacy
25 of the approach, and I have had conversations, and I am aware

1 of how the material was put together, although as you point
2 out I did not do it directly.

3 And I -- my response, and I think my contribution
4 would be related to offering observations that would be
5 helpful in accessing the adequacy of the approach.

6 JUDGE LAURENSEN: As I understand -- maybe again,
7 we have had a long conversation here, and I may not remember
8 the exact question any more. Perhaps Ms. Monaghan can help
9 me, but I thought the question that was asked related to
10 -- specifically to the analysis of this data.

11 WITNESS LIPSKY: She asked whether or not they
12 use the same evaluation forms. The point of that question,
13 I presumed, was that -- was to get to the question: Can one
14 do an analysis when one is analyzing, in a sense, apples and
15 oranges.

16 That is, two different kinds of forms in the
17 same analysis.

18 JUDGE LAURENSEN: I think you are one question
19 ahead of where we are.

20 WITNESS LIPSKY: So, I was going to make a comment
21 about what that implied. So, now you have my understanding
22 of what I was doing.

23 JUDGE LAURENSEN: You are correct in terms of the
24 question that was asked, and I still, in light of the
25 question that was asked and the answer that was given, the

1 ruling remains the same at this point, in light of your
2 statement that you have not analyzed these forms themselves,
3 the ruling stands.

4 The objection is sustained.

5 BY MS. MONAGHAN: (Continuing)

6 Q Just to refresh my memory of what happened, is
7 my understanding correct, Deputy Inspector Cosgrove, that
8 the fact that there were two different forms used did not
9 affect your analytical methodology that you employed when
10 you were analyzing?

11 A (Witness Cosgrove) No. Because we were
12 primarily looking at the written comments anyway.

13 Q You were looking at the written comments. You
14 mentioned previously that in one instance an observer had
15 circled the N.O. comment, which stands for, 'not observed,'
16 and had made a notation on the bottom that that should be
17 read as a, no.

18 When you were evaluating the forms, how did you
19 read the N.O. rating?

20 A You mean when I did that form, or --

21 Q All of them.

22 A All of them? Primarily as, 'not observed,' but
23 again, I would kind of skim down and go right to the
24 comments. I wasn't really reading the scales as much as
25 I was reading the comments, and if the comment had a specific

14-4-Wal

1 reference to this scale, I would go back to the scale. I
2 put very little credence in this scale because of the errors
3 that I found in them.

4 Q Lt. Fakler, you also reviewed these forms and
5 analyzed them, is that correct?

6 A (Witness Fakler) Yes.

7 Q Did you rely on the rating forms that were used,
8 or did you look primarily at the comments that were being
9 made?

10 A A combination, but primarily on comments.

11 Q Were either of you, Deputy Inspector Cosgrove
12 and Lt. Fakler, concerned with the sample size that you had.
13 In other words, the number of forms that had been provided
14 to you?

15 A Well, I was concerned with the fact that we
16 only had documentation from four drills, when I understand
17 there were about thirty.

18 But see, when you are getting into sampling,
19 you are talking again about making a comment about the
20 sample that is applicable to the whole universe. We were
21 not trying to do that.

22 We were trying to isolate patterns of problems
23 that we had anticipated probably would have happened after
24 our review of the other training material. So, we really
25 weren't trying to take a small sample, make a determination

1 of the characteristics of that sample, and then apply it to
2 the entire population. We were just trying to find out if,
3 in fact, the problems that existed in November created a
4 patter of problems right through all the four drills.

5 I would much rather have had the thirty drills
6 to work with. But that concerned me. But that was the only
7 concern we had.

8 Q You didn't believe that the number of forms that
9 you had was too small to provide you with any reliable
10 results, did you?

11 A I still don't think you understand what we were
12 looking for. I wasn't going to take these documentations
13 from four drills, make a determination of the characteristics
14 of them, and then say that is what the other thirty drills
15 were like.

16 We weren't doing that. We weren't doing a
17 statistical analysis. We were looking to see was there
18 a pattern of problems that began in January and carried
19 through to February. That is what we were looking for,
20 and sample size would have been irrelevant.

21 Q Basically, what you are saying is that you
22 couldn't construe from what happened in these particular
23 drills what would have taken place in the other thirty
24 drills, is that correct?

25 A I have no way of knowing. The only thing I know

1 is that these are the latest drills. So I would make an
2 intuitive presumption that the performance would have been
3 best at the later drills.

4 So, if anything, I would make an assumption that
5 it probably was poorer on the earlier drills, but that is
6 strictly an assumption.

7 Q Deputy Inspector Cosgrove, you said that you did
8 look at the evaluations on the rating forms themselves, in
9 addition to looking at the comments.

10 A (Witness Cosgrove) Yes.

11 Q How did you do that?

12 A I don't understand what you mean by, 'how did
13 I do that.' I read them.

14 Q You read them?

15 A I read them. I probably should clarify. When
16 we started with the November drill, the very first one,
17 there is apparently a lot of yes and no answers, and the
18 rater used number 5 to indicate yes. On the very next
19 question -- because he wrote it in under the five -- on the
20 very next question he used Number 5 to indicate, no; and
21 on the very next question he used the Number 5 to indicate,
22 yes, again. And he also circled the 1 in each of those.

23 So, he had yes, no, no, yes, yes, no, all
24 circled. So, I immediately knew that there was going to
25 be a problem interpreting that one. I did that with about

1 three forms, and then I -- primarily on the comments.

2 Q Deputy Inspector Cosgrove, do you know how many
3 of the items on the rating form used the yes, no, format
4 for five and one, as opposed to the rating scale?

5 A You are talking about that first one that I
6 read?

7 Q Yes.

8 A On the first page, there is about half a dozen
9 I would say yes, no's.

10 There are some that ask a question that I would
11 have interpreted yes, no. Apparently, the rater didn't,
12 because he circled three. So, I guess it was up to the
13 interpretation of the rater, whether it was a yes, no, or
14 a matter of degrees.

15 Q Deputy Inspector Cosgrove, did you compare in
16 any way the positive comments on the rating forms with the
17 negative comments on the rating forms? I am not talking
18 about the written comments here, I am talking about the
19 scales that were used.

20 A No. The only thing that we did is if we saw
21 a -- in the comment sheet, a negative comment, I would
22 check to see if he had circled the positive rating scale,
23 again because at that point I intuitively felt that they
24 didn't understand the form, and I wanted to see if the
25 raters were contradicting themselves in the comment as

1 opposed to the rating scale.

2 I did not find any instances of that.

3 Q Thr did not contradict themselves?

4 A No

5 Q When there were positive comments on the rating
6 forms, what did you do with those positive comments. Did
7 you take them into account in any way in your analysis?

8 A No, not for what we were looking for. Once we
9 had gotten through the November drill, what struck us -- I
10 don't know how deep we can get into these, but I do know
11 that what struck us was that a lot of the problems that
12 were occurring were problems that we mentioned at highly
13 probable in our testimony.

14 So, when we got into January, we wanted to see
15 if a pattern of those problems existed, so we were really
16 looking a little bit more specifically. -- again,
17 coincidentally, new problems arose, so when we got into the
18 last two, we were really trying then to see if, in fact,
19 there was a pattern of these problems.

20 I mentioned earlier as a training director, if
21 I have a training program, and it is running smoothly, I
22 don't have to take any action.

23 So, the positive comments do nothing more to me
24 than reinforce that the action I have taken was correct.
25 The negative comments are much more important, because they

1 are going to move me to action. I have to take some
2 corrective action.

3 And I was looking to see if that corrective
4 action was taken.

5 Q When you looked at the rating forms for all
6 the drills, did you look at -- did you look for any improve-
7 ment in the frequency of positive comments -- positive
8 ratings? As opposed to handwritten comments.

9 A As opposed to handwritten comments. No.
10 No. By the time we had gotten into the February comment
11 sheets, I had lost all confidence in the rating scales.

12 Q So you were looking only at the written comments?

13 A Only at the comments. As I said, some of the
14 scales had comments written on them, and I would take those
15 into account, but I felt there was less room for error if
16 we just took the person's own words.

17 Q Deputy Inspector Cosgrove, when you looked at
18 the critique forms, there were handwritten comments and
19 there were rating forms that were used. Did you include
20 in your analysis the negative comments on the rating forms
21 as well as the negative written comments?

22 A I think we did if they were expanded -- if they
23 were written out.

24 Q In other words, if there was a negative rating
25 which had a handwritten comment in addition to the negative

1 rating, then you took that into account?

2 A We certain'y would have then, yeah. I am just
3 trying to recall if we took any that just had a number
4 circled. I really don't recall. I think we went on the
5 written comments only.

6 Q Are you aware that the critique forms themselves
7 require the controllers and observers to comment on and
8 explain any negative comments?

9 A I believe I heard in here that if they give a
10 two or a one, they must make a comment. So, if my recollection
11 is correct, I am aware that they must make comments on
12 those. I don't know if the same is true of exceptionally
13 high.

14 Q And there was no requirement for a comment if
15 the rating was from three to five, is that correct?

16 A I don't know. I would assume not for three. I
17 don't know if it is true for four or five. I just happened
18 to recall hearing somebody say if they give a one or a two,
19 they have to expand.

20 I remember that coming out in testimony. I
21 don't know if the same is true if they give an exceptionally
22 good rating. I have no idea.

23 Q Did the rating forms indicate in any way whether
24 that was necessary -- where comments were were necessary?

25 A If there were any forms we had, no.

1 Some of them, by the way, apparently are two pages, or
2 they wrote on the back, because they wrote over, but our
3 copy didn't have the backside on it, so of course, those
4 comments are not included in the analysis at all.

5 Q Was that a frequent occurrence?

6 A I can recall two. Two times that it happened.

7 Q Deputy Inspector Cosgrove, the rating forms used
8 in the November and January drills, requested at the end
9 of the rating sheet, under the heading: Summary, that the
10 controller or observer, and I am going to quote you the
11 language from the summary, and you can probably find it on
12 one of the forms there.

13 It says: Describe any problems noted by the
14 area being evaluated. Provide a description of the
15 problem, its outcome or effect, and any recommended
16 corrective courses of action to alleviate or correct the
17 deficiency. Any of the previously listed areas that receive
18 an evaluation grade of two or one require an explanation
19 on this page.

20 Do you see that?

21 A I have one, yes.

22 Q In your opinion, would that elicit negative
23 handwritten comments from the controllers?

24 A In the summary?

25 Q Yes.

1 A If they had circled negative numbers, I would
2 assume they would have to expand on it here. In some it
3 didn't.

4 In some, they didn't fill out the summary
5 at all, even though they had low numbers. That is what
6 I am saying, I really don't believe the controllers under-
7 stood the form, you know, so I would say: Are they
8 supposed to? I would say, yes.

9 Q Were they supposed to provide handwritten
10 comments based on the summary paragraph that you have looked
11 at and I read to you, if the ratings were from five to three,
12 which were, essentially, the positive ratings?

13 A It doesn't say anything here to that effect, no.

14 Q So those comments were not -- the positive
15 comments, handwritten positive comments, were not elicited
16 by the forms themselves, is that correct?

17 A No, but they were provided. See what I am
18 saying? There was no consistency. There were positive
19 comments written out, even though, apparently, there was
20 no need for them.

21 Q Did the positive comments outweigh the number
22 of negative comments?

23 A We didn't count them. It wasn't a quantitative
24 analysis. This wasn't what we were looking for.

25 Q Would you look at one of the forms for one of the

1 February drills.

2 A February? Yes.

3 Q On those rating sheets that were used in the
4 February drills, what statement was included after each
5 of the activities which were to be observed that required
6 the controllers to explain deficiencies. I believe the
7 statement begins with the sentence: In your own words --
8 I will wait until you can find it.

9 A I got it. I have one, I believe. Describe
10 and evaluate?

11 Q Yeah.

12 A Okay.

13 Q It says, in your own words, describe and
14 evaluate the demonstrated activities, capabilities and
15 resources, or lack thereof, covered by this Section. Put
16 the facts recorded in the yes, no, questions in
17 perspective. Explain the deficiencies, and also note
18 exceptionally good performance.

19 Do you see that?

20 A Yes, I do.

21 Q Does that explain, in some respect, why there
22 were negative comments written in there on those summaries,
23 because they were solicited by the forms themselves.

24 A The way I read this, they are soliciting all
25 comments, good and bad. So would that cause bad comments;

14-14-Wal

1 only if there was bad performance, I would assume.

2 Q Doesn't the statement that I read to you ask
3 that the controllers and observers explain the deficiencies,
4 but only request that they note exceptionally good perform-
5 ance, so that it does not require an explanation of
6 satisfactory performance.

7 A Right. I would expect there would be no expansion
8 of satisfactory performance in here. Just exceptionally good
9 and deficient.

10 Q Based on the fact that the evaluation forms
11 themselves requested explanation of negative comments,
12 wouldn't you expect, Deputy Inspector Cosgrove, that the
13 majority of the written comments would be explanations of the
14 negative ratings?

15 A No. It is asking for both. I wouldn't go in
16 with that kind of a bias. It says exceptionally good or
17 deficient performance.

18 If it is a late drill, as this is, I would expect
19 exceptional performance.

20 My question to you is: Wouldn't you expect that
21 the comments that would be handwritten in response to the
22 statement: Explain deficiencies, and also note exceptionally
23 good performance; would either be an explanation of the
24 deficiencies, or some notation of exceptionally good
25 performance?

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MR. MILLER: Objection, Judge Laurensen. Asked
and answered.

JUDGE LAURENSEN: Sustained.

End 14.
Mary fols.

BY MS. MONAGHAN:

Sim 15-1

1 Q Deputy Inspector Cosgrove, do you have any
2 idea what the proportion of positive and negative hand-
3 written comments were?

4 A (Witness Cosgrove) No.

5 Q Did you make any attempt to weigh the positive
6 handwritten comments against the negative comments?

7 MR. MILLER: Objection, Judge Laurenson, asked
8 and answered about four times now.

9 JUDGE LAURENSON: I am not sure we have asked
10 specifically on only the handwritten comments. We were
11 talking about the ratings before. Overuled.

12 WITNESS COSGROVE: Well, the only thing that
13 we were able to come up with was that on this entire
14 pile of evaluations that there was at least a negative
15 comment on every sheet of paper that was filled in, the
16 ones that weren't blank, but we didn't actually do a count.
17 And those negative comments seemed to create a pattern.
18 They all fell into certain problem areas, but we didn't
19 count them.

BY MS. MONAGHAN:

20 Q Each of those forms requests comments on
21 specific areas, for example, command and control or
22 communications. Did you evaluate each of those areas
23 when you reviewed the forms?
24

25 A (Witness Cosgrove) When you say evaluate each

15-2

1 of those areas, do you mean read the forms in each
2 area?

3 Q Did you look at the comments under each area
4 that was in the forms?

5 A Yes.

6 Q Did you take all of the comments into considera-
7 tion under each of the different areas?

8 A We took all of the negative comments and the
9 positive comments only were relevant to us if they
10 indicated that a prior problem had been solved.

11 Somehow I still think you think is there more
12 good than bad, and that was not at all what we were doing.
13 I don't know if I can get that through to you and make
14 that clear. But we are not trying to measure whether there
15 were more good than bad.

16 If I am a training director and I put on a
17 program and I have got one bad problem and everything
18 is running fine, I am still concerned with the one bad
19 problem and I want to correct it. I don't care that the
20 rest of my team is working well. I want to correct the
21 one deficiency.

22 So we were looking in fact to see if that
23 was the case and we were looking to see if there was
24 a pattern of recurring problems. So we were only looking
25 at the positive comments if they would indicate that a

Sim 15-3

1 recurring problem had been solved.

2 JUDGE LAURENSEN: One if one controller saw
3 the problem that you are talking about, but let's say
4 nine others indicated satisfactory performance in that.
5 Now would that be something that would be considered?

6 WITNESS COSGROVE: No. The way we understood
7 it, Judge, was that when they deploy these controllers
8 in a drill, you might be responsible for one area, I would
9 have another area and he might have another area.

10 You are the only one commenting in your area.
11 So whatever you say is significant to me. No one else
12 saw what was going on in your area and you are the sole
13 evaluator in that area and I am the sole evaluator in my
14 area. So if your area is working well and he area is
15 working well, to me that is irrelevant that my area was
16 not working well.

17 JUDGE LAURENSEN: Well, was there any attempt
18 to weigh, for instance, in a communications area if you
19 reviewed 10 sheets, 10 controller sheets and let's say
20 9 of them related a particular area as adequate or better
21 and one showed a deficiency, how would you weigh that
22 in arriving at the summary that you prepared?

23 WITNESS COSGROVE: Well, No. 1, that is not
24 what happened. We found numerous problems in that area.
25 But if in fact that were the case, and again I am identifying

Sim 15-4

1 with this because we did this in our own training program,
2 I would way to know why there was a problem in that area.
3 You know, maybe it wasn't a training problem. In fact,
4 quit^t frankly, I think some of these might have been
5 equipment problems. You know, there wasn't enough equipment
6 in some cases. That is not a training problem. Of course,
7 it is of concern to the trainer because I want my equipment
8 to be available so they learn to use it, but that is not
9 a fault of my training. That is the kind of thing that
10 I am talking about. You have to analyze the problem.
11 This just identifies them.

12 So we were looking to see that once the problems
13 were identified was anything done about them, and because
14 the seemed to occur drill after drill in the same problem
15 areas, it would appear that nothing was done with them.

16 JUDGE LAURENSEN: What I am trying to understand
17 is if nine out of ten controllers didn't see a problem
18 that you identified as a significant problem, why should
19 we consider it to be a significant problem?

20 WITNESS COSGROVE: Well, if one controller
21 saw it, he was the only controller in that area, and who
22 else are we going to rely on.

23 JUDGE LAURENSEN: But then isn't it an isolated
24 example if it only ---

25 WITNESS COSGROVE: If it only happens once

Sim 15-5

1 in one drill in one area, yes, but that is not what we
2 have. We have instances of several areas in a drill in
3 one drill after another.

4 MR. MILLER: Excuse me. If I might, Judge
5 Laurenson, point out because I think there might be
6 some confusion in the way terms are being used, and please
7 ask the witnesses to make sure I am telling you the correct
8 thing here, areas being used by Inspector Cosgrove relate
9 to geographical areas such as the staging areas or the EOC
10 and not to subject matter areas.

11 So that is one distinction that I am not sure
12 if there is understanding between you and Inspector Cosgrove
13 on this point.

14 The second point from my understanding is that
15 these critique forms did not go to individuals of LERO
16 per se. They went to the area, the personnel forming
17 a response function at a particular geographical area.
18 So they weren't so discrete as to comment upon an individual
19 person's performance. They went to the performance of
20 a group of individuals in that sense.

21 JUDGE LAURENSEN: I am probably just muddying
22 the waters, but I am trying to understand the answers
23 to some of Ms. Monahan's questions in this weighing element
24 and how do we attach significance to patterns and how do
25 we determine that these patterns did exist?

Sim 15-6

1 WITNESS LIPSKY: May I make a comment that
2 gets to how one should weigh it in response to your
3 concerns, and you can strike it if you don't like it?

4 (Laughter.)

5 JUDGE LAURENSEN: Again, I was only asking
6 how they did it, but I have no problem with you telling
7 me how we should weigh things.

8 WITNESS LIPSKY: My understanding of this ---

9 MS. MONAGHAN: Excuse me, Professor Lipsky,
10 I just want to lodge an objection ahead of time because
11 Professor Lipsky hasn't sponsored this testimony.

12 If we permit him to offer testimony at this
13 late date, this is a surprise witness and I want to be
14 sure that my objection is at least noted on the record
15 prior to any comments that he might make regarding
16 methodology.

17 .WITNESS FAKLER: The simplest picture that ---

18 MR. MILLER: Excuse me, Lieutenant. Let's
19 let Professor Lipsky go ahead with his comment.

20 WITNESS LIPSKY: I just would make two points.

21 One is that you are often in a situation where
22 in an organization you have to use the best information
23 available. These materials are only four out of a certain
24 number of drills and, unfortunately, that is all the people
25 who put this information together had to go on.

Sim 15-7

1 So the material was used in the best possible
2 way. That is, is it useful and do we learn anything.
3 My understanding of the utility here is that they were
4 looking for patterns that were consistent with the problems
5 that we had identified as in the training program, and
6 the testimony is that there is a significant number of
7 comments that would give one pause and lead one to believe
8 that some of the things that have been said about the
9 earlier evidence indeed showed up in the limited kind of
10 evidence that is available with respect to the actual
11 performance of the trained people.

12 The supplementary testimony does not identify
13 every place where one controller has found a deficiency.
14 I think the standard that was used was is there a pattern
15 here such that would lead us to believe that it is the
16 kind of thing that one ought to bring to the attention
17 of the Court because it is consistent with the earlier
18 materials.

19 I would argue that if there were not argument
20 about problems in the training, then this would be must
21 less weighty. But if you identify problems at various
22 stages of the training program, and then in the limited
23 numbers of materials with respect to evaluation that you
24 are given access to you also find similar kinds of problems
25 in a sense that you anticipated by virtue of the kind of

Sim 15-8

1 thinking that you applied to the earlier materials, it
2 does have weight with respect to adding to, not definitely
3 proving, but adding to the case that was made with regard
4 to the standard testimony.

5 JUDGE LAURENSEN: What I was still trying to
6 get at from Inspector Cosgrove is you have got a stack
7 of papers in front of you several inches thick, and I
8 guess probably one isolated comment alone doesn't establish
9 a pattern, but what does?

10 Is there any kind of numerical system that
11 you use, quantitative system that you use to decide what
12 was or what was not a pattern?

13 WITNESS COSGROVE: No, we did not use any kind
14 of numerical system. No.

15 BY MS. MONAGHAN:

16 Q Deputy Inspector Cosgrove, you had comments
17 from drills in November, January and February, you had
18 drill critiques from those drills, and you have stated
19 that you looked at the handwritten comments and that your
20 testimony is based on the handwritten comments that were
21 on those drill forms.

22 A (Witness Cosgrove) Yes.

23 Q Why didn't you consider the rating forms which
24 present the bulk of the information concerning whether
25 or not certain activities were performed proficiently or

Sim 15-9

1 inefficiently?

2 MR. MILLER: Judge Laurenson, this question
3 has been asked an answered. I object.

4 JUDGE LAURENSEN: Overruled.

5 WITNESS COSGROVE: It was apparent to me that
6 they were unreliable because the raters did not understand
7 the form. In fact, one of the patterns of comments we
8 found was that controllers were inadequately briefed. That
9 seemed to be a recurring problem in the comments sheets
10 and, as I said, where they were circling No. 3 in answer
11 to a yes or no question, and there were multi-circled
12 questions circling yes and no and how do you interpret
13 that?

14 It is much easier to interpret when someone
15 is at least writing it out in language than when they
16 were doing things like that. They didn't seem to be of
17 any value to us really.

18 BY MS. MONAGHAN:

19 Q How many comments were there that the
20 controllers felt that they were not adequately prepared?

21 A (Witness Cosgrove) I can let you know in a
22 second.

23 (Pause.)

24 Q Deputy Inspector Cosgrove, maybe I can make
25 it easier. Did you attempt to quantify in any way how

Sim 15-10

1 many of the controllers or observers felt that they had
2 been really prepared when you did your analysis?

3 A No.

4 Q Did you attempt to quantify in any way what
5 percentage of the forms were filled out incorrectly which
6 led you to believe that you could not rely on the rating
7 forms?

8 A Not in a strict sense, but more of an estimate.
9 I would estimate that half of them were blank, maybe not
10 quite half, maybe 40 percent, which is another reason it
11 made them, you know, a little unreliable.

12 Q Were entire forms blank?

13 A Yes.

14 Q Do you have any idea what percentage of those
15 forms were blank?

16 A As reading through it, I know I came to one
17 pile that seemed like I was going forever. They were
18 batched together here and batched together there. I would
19 say of the whole pile was, you know, somewhere between
20 30 and 40 percent off the top of my head that were either
21 blank or that were to us illegible and not useable, you
22 know, because of multiple circles and what-have-you.

23 Q Do you know whether all those forms were for
24 the EOC? The ones that were blank, did you look at that
25 in any respect?

Sim 15-11

1 A For the EOC? No, I have no idea.

2 Q Do you know whether they were for the staging
3 areas?

4 A They were scattered about in between all of
5 them. In fact, at the later drills where they are supposed
6 to fill in what they were for, it wasn't filled in.

7 Q When you did your review and you looked at the
8 written comments and you looked from the drills in November
9 to the drills in January to the drills in February, you
10 said that it established a pattern for you that there were
11 certain problems. Did you attempt to quantify in any way
12 the number or percentage or gravity of the problems in
13 November?

14 MR. MILLER: Judge Laurenson, I think we
15 have pursued this long enough. My objection will be
16 asked and answered and it certainly has been.

17 JUDGE LAURENSEN: I think she has added a
18 new term "gravity" that hasn't been discussed before.
19 The objection is overruled.

20 WITNESS COSGROVE: I guess I could say that
21 any time you have a training problem that doesn't meet
22 its objectives that that is a grave problem. But, no,
23 we didn't we count them. Certainly if it was one, that
24 would probably have flown by us, definitely more than
25 one, and the gravity of the problem, I don't remember

Sim 15-12

1 anything that we didn't consider grave. I mean there
2 were problems with communications, people not showing
3 up and security. Those are all to me serious. The
4 whole myriad. I can't think of a position in LERA where
5 it isn't grave if they don't perform a function.

6 So gravity, I would say, we just considered
7 them all pretty grave.

8 BY MS. MONAGHAN:

9 Q Did you attempt to make a comparison from
10 drill session to drill session of the quantity of problems
11 that showed up? Did you attempt to quantify in any way
12 from drill session to drill session whether there was an
13 increase or decrease?

14 MR. MILLER: Judge Laurenson, my objection
15 is going to be asked and answered. Again, these witnesses
16 have stated that they did not quantify either the
17 deficiencies or the positive comments. Therefore, these
18 questions can only have one answer.

19 JUDGE LAURENSEN: Overruled.

20 WITNESS COSGROVE: No, we didn't count.

21 Actually they probably went up only because the number
22 of sheets went up because the drills got bigger in scope
23 or wider in scope I guess you would say. So again
24 intuitively they probably went up, but that was explained
25 by the entire stack going up for each drill.

Sim 15-13 1

2 MS. MONAGHAN: Judge Laurenson, at this time
3 we would request that the Board make its rulings on
4 the Suffolk County's motion for reconsideration of the
5 motions to strike because if you admit some of that
6 testimony, we may find it necessary to cross-examine on
7 that testimony.

8 JUDGE LAURENSEN: We are going to have to defer
9 a ruling on that. If we grant any of the County's motions
10 for reconsideration, you will be given the opportunity
11 at that time to question the witnesses on any of the
12 areas of testimony that would be admitted.

13 The statement made by Mr. Miller earlier was
14 that this panel of witnesses would be available.

15 At this point does that complete your cross-
16 examination?

17 MS. MONAGHAN: That completes my cross-
18 examination.

19 JUDGE LAURENSEN: Mr. Zahnleuter.

20 MR. MILLER: Judge Laurenson, I would like
21 to state one thing for the record.

22 Up until two seconds ago I had been advised
23 by LILCO that their estimate of cross-examination time
24 was a day and a half, and that did not include the supple-
25 mental testimony.

Now after maybe three-fourths of a day they

Sim 15-14

1 are through with their cross-examination. It is not the
2 first time that LILCO has done this. In fact, it is
3 fairly consistently the practice that they give the
4 other parties a cross-examination time estimate and at
5 the last minute advise everybody that they are through.

6 I think in terms of keeping the parties advised
7 as to how the case is proceeding and other issues that
8 will be coming up, it would be just simple fairness for
9 LILCO to try to advise parties when they are about to
10 finish cross-examination, especially when they cut their
11 cross-examination down by one-half.

12 JUDGE LAURENSEN: I think that Mr. Miller is
13 right in that this is a significant deviation from the
14 estimates that were supplied, which were initially from
15 one and a half to two days, and then yesterday you filed
16 another cross-examination plan indicating another two
17 hours of questioning.

18 So I think by reducing it to the time that
19 you have taken today, that this does impact upon the
20 readiness of other parties to conduct cross-examination
21 of the next panels and planning for that. So to that
22 extent I think that the County is correct that when it
23 became apparent to you that you were going to finish in
24 substantially less time than you had anticipated, I think
25 it was incumbent upon you and on all parties to notify

us when this happened.

By and large people have done that in the past. I think last week I recall Mr. Christman indicating that he estimated that he was approximately half through or whatever, but some interim kind of statement.

I don't think there is any remedy called for at this point, but I would just state this as a precautionary matter that everybody has plans to make in terms of when they are going to be prepared for the next item on the agenda, and when there is a significant deviation, that it would be helpful to notify everyone of that fact.

Sim 15-15

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CROSS EXAMINATION

#16-1-SueT 1

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BY MR. ZAHNLEUTER:

INDEXXX 3

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Q Gentlemen, to maintain continuity, I would like to ask you some questions about your supplemental testimony first. And, first of all, I have some confusion about what exactly goes on when an observer makes a comment about the performance of the LERO workers.

For example, do you know if the observers -- well, let's take one staging area, for example, say a Patchogue staging area. Do you know if there are a number of observers that are sent to that staging area to observe?

A (Witness Fakler) I'm not aware of how many.

(Witness Cosgrove) But that's my understanding, yeah.

Q It's a number such as X could be ten, could be twenty?

A Well, some will be at a transfer control point, some may be observing traffic guides. I believe there will be a lead observer actually either at the staging area or at the EOC, you know, and he will have his team of controllers out, presumably each with an assignment to control or observe a particular area.

Q I would like to look at it from another point of view. That is, just one location, one staging area.

Is it your understanding that there are a number

#16-2-SueT¹

2 of observers at that staging area roaming around the stag-
ing area, observing and making comments?

3 A No. It's my understanding that there will be
4 perhaps one responsible for staging area operations. There
5 may be other controllers there, but they may be observing
6 the deployment of traffic guides, you know. Another one
7 may be observing the staging area coordinator and how well
8 he is performing.

9 That's what I mean by areas. In other words
10 they all have their area of responsibility to observe.
11 That's my understanding.

12 Now, there may be several of them there. They
13 then may even accompany the transfer point coordinator out
14 to his post and then observe from there on. They may,
15 at other times, if the group they are observing happens to
16 be in the staging area they may be in the staging area
17 also.

18 But my understanding is that each evaluator
19 submits his form on the group or the function that he was
20 evaluating. And I think we only get one for each function.
21 That's my understanding.

22 Q That's the point I'm trying to zero in on. Say
23 there was a function at a staging area to be evaluated such
24 as the adequacy of the briefings that are given at the
25 staging area. Do you know how many observers would be

#16-3-SueT 1

2 present at that one staging area at one drill to make an
3 observation about that one function?

4 A I would say probably one would be responsible
5 for determining whether whoever it was that was supposed
6 to give the briefings gave the briefings. There may be
7 another who might be in charge of observing the traffic
8 guides, and he may note that they were never briefed by
9 whoever it was that was supposed to brief them. So, that
10 may appear twice, you know, both on the receiver of the
11 communication or the intended communication and the giver,
12 you know.

13 Q If that occurred, would you say that would more
14 or less be the result of an overlap or an accident that's
15 not a designed result?

16 A Yeah. My understanding of the plan is, yeah,
17 there is one person responsible for a particular function.

18 Now, if the function is giving out briefings at
19 the staging area by the coordinator, for argument sake,
20 there is probably one controller checking to see if that's
21 done.

22 Q So, there would only be one comment --

23 A There would only be one comment.

24 Q -- concerning that one function?

25 A That was what I was trying to get through before.
That's why to me one was significant, because I thought he

#16-4-SueT 1

2 would be the only controller. He or she would be the only
3 controller submitting comments on that functional area. I
4 wouldn't expect others to be commenting on that particular
5 functional area.

6 Q The last sentence in your supplemental testimony
7 is on Page 20, and it says, "It is apparent that in LILCO's
8 case those in charge have not learned from their experiences
9 and as a result LILCO has failed to adapt its training pro-
10 gram to correct the problems either when they first occur
11 or even over time."

12 Is it your testimony that a training program
13 should correct the problems when they first occur, putting
14 aside the question of a pattern over time?

15 A Most definitely. The point that I was trying to
16 make earlier, when we used to do our evaluations at the
17 Academy, if -- in fact, we only used a narrative to be
18 sure there would be no misunderstanding. And, as the
19 training director, it was nice to let the staff read the
20 positive comments.

21 But I used to specifically ask for negative
22 comments. I saw myself as a diagnostician. I wanted to
23 know what's wrong with the program. I already know what's
24 right with the program; I designed it. I want to know what's
25 wrong. What do I have to fix. And when I got those negative
26 comments, I wanted to find out why I got them, was it a

#16-4-SueT

1 training problem, did we have to fix the program. We took
2 whatever action we felt was necessary and then looked in
3 the next batch of evaluations to see if, in fact, we had
4 corrected the problem or if we had created new ones.

5 That's an ongoing problem. Every training pro-
6 gram must be evaluated ongoing. And I don't believe it has
7 been happening here.

8 Q Now, I would like to switch to your initial
9 testimony, not your supplemental testimony.

10 Have each of you read LILCO's prefiled testimony
11 on the training contentions?

12 A (Witness Lipsky) Yes.

13 (Witness Fakler) Yes.

14 (Witness Cosgrove) Yes.

15 Q And, Inspector Cosgrove and Lieutenant Fakler,
16 am I correct in stating that you were both present for the
17 cross-examination of the LILCO witnesses?

18 A (Witness Fakler) Yes.

19 (Witness Cosgrove) Yes.

20 Q Would you turn to Page 13 of LILCO's testimony
21 on training?

22 A (Witnesses complying.)

23 Q And I refer you to the second and third sentences
24 where a basic approach to training is outlined, and then
25 this testimony says, "The LERO training program follows

#16-5-SueT

1 this accepted educational design strategy."

2 Do you agree, first of all, that the basic
3 approach which is set forth in the second sentence there
4 is accepted educational design strategy?

5 A Well, as always, it follows a good recruitment
6 and selection process.

7 (Witness Fakler) And an evaluation. Not a
8 critique.

9 Q Okay. The second sentence says, "The basic
10 approach to training program design is presentation of the
11 information to the learner, application of the information
12 by the learner and critique of the application by the
13 instructor."

14 Do the things that you just mentioned, which I
15 believe were recruitment and selection, fall into those
16 three items?

17 A (Witness Cosgrove) No. But, you see, if you
18 add that, again I don't know how they are using this word
19 "training program." If they are talking about a certain
20 phase of the overall process, you know, have a selection,
21 recruitment and selection, and then training, if that's
22 what they are talking about, that phase, Phase 3, Phase 3
23 is broken down into three categories, presentation of
24 information, application of information and some sort of a
25 feedback.

#16-6-SueT 1

2 I really think what happened here is. I think,
3 somebody probably found out, you know, whether through
4 experience or reading that that was the design, but I
5 think they didn't understand the design. Those three
6 phases occur continually through the training program. In
7 other words, in the LERO sessions, in the classroom infor-
8 mation should be presented to the learner, the learner
9 should be made to apply that information through some sort
10 of a testing device, and then there should be a critique
or a feedback.

11 Those are not three separate entities where we
12 use the classroom for Phase 1 and the drills for Phase 2
13 and the exercise for Phase 3. We use all those three steps
14 through the exercises, through the drills and through the
15 classrooms. It's an ongoing process. They are not isolated
16 instances.

17 You don't do number one and then number two and
18 then number three. You do it one, two, three all the time.

19 Q Do you think an efficient training program --

20 A (Witness Lipsky) Excuse me. We also believe
21 that the critique is faulty because individual testing is
22 not part of the effort that they make, and in that respect
23 the LERO training is deficient and does not follow accepted
24 design strategy as they allege.

25 (Witness Fakler) That's a critical point.

#16-7-SueT

1 Without that, the rest is immaterial. I mean, we could
2 pass information on. We could watch people do their thing.
3 But when the moment of truth comes to evaluate their per-
4 formance, that becomes a very important stage of the pro-
5 cess. And it seems to be lacking.

6 Q Could you explain why the factors that you
7 mentioned earlier, recruitment and selection, why they
8 are accepted educational design strategies?

9 A (Witness Cosgrove) Well, I talked about them
10 as being part of the training program design as opposed to
11 educational design strategies.

12 But why they are important to the overall
13 program is because it's only through recruitment and selection
14 you get your raw materials. Your finished product is only
15 going to be as good as the material you start with. It's
16 the old, you know, you can't make a silk purse out of a
17 sow's ear. You know. You have got to start with good
18 material, your good people, motivated people, capable
19 people. You have got to start with that before you can
20 come out with a well trained, you know, performing individual
21 at the other end.

22 So, it starts with recruitment and selection.

23 Q In your review of the LILCO plan, did you find
24 these two elements of recruitment and selection?

25 A Well, I found what I believe was called recruitment

#16-3-SueT

1 and selection but not what I would call an adequate recruit-
2 ment and selection process at all. There was no minimum
3 qualifications for LERO. Anybody could volunteer. There
4 was testimony that there was an attempt to match LILCO job
5 skills with LERO job skills which is apparently at least an
6 acknowledgment that there is some value to prior experience.

7 But that was ludicrous. The recruitment and
8 selection process, it really didn't identify the most
9 capable individuals, the most motivated individuals at all.

10 People were approached, asked if they wanted to
11 belong, and if they said yes they were in the training pro-
12 gram.

13 (Witness Lipsky) An additional reason why you
14 are concerned, or should be concerned, with recruitment and
15 selection is that you want to gear your training to the
16 people who are being trained. In our testimony, we made a
17 point that many of the specific job classifications had the
18 same orientation materials made available to them.

19 One would question whether that implies probably
20 incorrectly that everyone was at the same place, everyone
21 had the same amount of skills, motivation, preparation for
22 the job and so on.

23 (Witness Fakler) That's the important point
24 especially as far as the selection process is concerned, to
25 bring everybody in at a level of knowledge that you can deal

#16-9-SueT1

1 with them as a group, if you must deal with them as a group.
2 Otherwise, it almost mandates that you deal with them
3 individually. Otherwise, you waste the time of a lot of
4 people, to say nothing of the fact that you have to put so
5 much more effort in.

6 And it's like zero based anything. You start
7 from scratch if you don't know what you are working with.

8 Q In your review of the plan, did you find that
9 the plan adequately addressed the three factors or pre-
10 sentation, application and critique?

11 A (Witness Cosgrove) Well, I would say material
12 was presented. There was no application -- well, let's
13 take the classroom, because they have it broken down into
14 three categories.

15 These three steps were not done in the classroom
16 setting. In the drill setting, I think they might have
17 gotten through one and two, but they certainly never got to
18 three. And actually I never saw any exercises, because the
19 exercises became drills and it was always a prompting situation.

20 So, I would say no, I didn't see the three steps
21 of the design strategy here.

22 There was no critique. No one individual was
23 told how he was doing in that program, how he was progressing
24 individually. You know, what was he doing in relation to
25 his peers, how was he accepting that information. People

#16-10-SueT1

2 went through the classroom phase and then they went into
3 the drill or the application phase with obviously different
4 levels of knowledge, and no one seemed to care whether they
5 had the knowledge or not.

6 They weren't going to bother testing for later
7 on down the road. Then, if an individual could not perform
8 then you don't know if it's because he didn't learn the
9 classroom material, he didn't learn the drill. Where was
10 the breakdown? Because we didn't check it as we went along.
11 We waited until the end.

12 And we never really checked the individual. We
13 checked the group. So, if we had a poor individual in a
14 good group, they could carry him. We would never identify
15 him. We would have a clunker in the system right along. And
16 you can only handle so many of those.

17 (Witness Fakler) Determining your student's
18 progress in the instructional area in the classroom was
19 left strictly to the student. It wasn't left in the hands
20 of the instructor at all, just to solicit what's on your
21 mind. Are there any questions. That certainly doesn't
22 tell you, as an instructor, what kind of effectiveness it
23 was in the transfer of any kind of information.

24 So, there was left obviously some void which
25 showed up later in drill when they got there unprepared.

Q During the cross-examination of the LILCO

#16-11-SueT 1 witnesses, Mr. Berger was asked why pretesting was used
2 in designing training programs, and he testified that pre-
3 tests are used to determine the skill levels of individuals
4 so as not to require them to go through a training program
5 which is essentially designed to teach them a skill that
6 they already have.

7 Do you recall that testimony?

8 A I recall that testimony, yes.

9 (Witness Fakler) Yes.

10 Q Okay. Do you recall also Mr. Berger stating
11 that such a situation could cause motivational problems?

12 A Yes.

13 (Witness Cosgrove) Very true.

14 Q Do you agree with --

15 A Yes.

16 Q -- Mr. Berger in that regard?

17 A (Witness Fakler) Definitely.

18 Q Could you explain why?

19 A (Witness Cosgrove) Well, if you have an indivi-
20 dual in the classroom and you are giving him training that
21 he doesn't need, he is going to be turned off. It is
22 almost an insult to the individual because you are not recog-
23 nizing the abilities that he does have, because by giving
24 him training you are telling him he doesn't have a certain
25 ability that is needed and you are going to give it to him

#16-12-SueT¹

1 through training. If he has already got that ability,
2 there is already some sort of a put down, some sort of an
3 ego attack there. That's going to turn them off. They
4 are not going to have any motivation to pay attention.
5 They are not going to have any motivation to participate,
6 because they have nothing to gain from it. They have
7 already gotten the information.

8 They already know what it is that they have to
9 know. So, there is no motivation, there is no incentive
10 for them at all.

11 (Witness Fakler) We subscribe to that philosophy.
12 As a matter of fact, the decentralized training system we
13 use now is an offshoot of that problems that occurred when
14 we used old methods. By that, I mean bringing experienced
15 people together and trying to give them information and
16 they have various degrees or levels of knowledge.

17 When you do that, you are really creating pro-
18 blems that weren't there before. It was nice to hear Mr.
19 Berger talk about how you could take people with experience
20 on the one hand and no experience on the other and by
21 manipulating them make it an interesting session.

22 In fact, that's not the way the training was
23 going on in LILCO, and it certainly isn't the way we are
24 doing it in our continuous training. So, we are concerned
25 with an individual's level of knowledge. So, we go for

#16-13-SueT1

2 pretesting and we only give him the information he needs to
3 bring him up to the level that we want him at before he has
4 to demonstrate his ability.

5 So, in fact, we do agree with his statement.

6 (Witness Cosgrove) I might also add from a
7 management point of view, to invest money in giving an
8 individual unnecessary training is certainly very wasteful.
9 You are losing productive manhours. You are paying instructors
10 and there is no transfer of information going on anyway.

11 So, certainly pretesting is a way of determining
12 training needs, and all training should be based on ful-
13 filling a need. It shouldn't just be given just for the
14 sake of giving training.

15 MR. ZAHNLEUTER: It's almost five o'clock. May
16 I suggest we take the second afternoon break now?

17 JUDGE LAURENSEN: We will take a ten minute
18 recess.

19 (Whereupon, the hearing is recessed at 4:50 p.m.,
20 to reconvene at 5:05 p.m., this same day.)

21 end #16
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(5:05 p.m.)

JUDGE LAURENSEN: Back on the record. Mr. Zahnleuter.

BY MR. ZAHNLEUTER: (Continuing)

Q Concerning the area of pretesting, I would like to clarify one thing. In your review of the LILCO Plan, did you find adequate provisions for pretesting?

A (Witness Cosgrove) No, there are no provisions for pretesting, nor post testing, for that matter.

Q Inspector Cosgrove, do you recall Mr. Berger's testimony that LILCO's personnel attend their classroom training sessions as evidenced -- let me withdraw that and start again.

Do you recall when Mr. Berger testified that LILCO employees attend training sessions, and that attendance shows an intent to learn?

MS. MONAGHAN: Objection. I believe that mischaracterizes the testimony that Mr. Berger gave. I am not sure that is exactly what he said.

JUDGE LAURENSEN: Do you have the record there in front of you, Mr. Zahnleuter?

MR. ZAHNLEUTER: Yes, I do. Are you asking me to find it.

(Laughter)

JUDGE LAURENSEN: I thought you had the specific

1 page from Mr. Berger's testimony.

2 MR. ZAHNLEUTER: I do.

3 JUDGE LAURENSEN: As long as you have it here,
4 we will give you the opportunity to find it, because I don't
5 recall the specifics of all of Mr. Berger's testimony last
6 month.

7 MR. ZAHNLEUTER: It is transcript page 11,260,
8 Line 9, and the question is would you say then, Mr. Berger,
9 that if students in the case of adults do not come to the
10 classes, that is, that attendance would be low, that that
11 would say something about the intent of the students or
12 trainees to learn.

13 And the answer is: Well, there could be a number
14 of reasons why people do not attend the classes.

15 Then the next question is: That could be one
16 of the reasons, though.

17 And the answer is: It could be one of the
18 reasons.

19 JUDGE LAURENSEN: Now that we have had that
20 background, maybe you should set the question for us again.

21 BY MR. ZAHNLEUTER: (Continuing)

22 Q I think my question was: Inspector Cosgrove,
23 do you recall that testimony by Mr. Berger?

24 A (Witness Cosgrove) Now that you have read it, I
25 do, yes.

17-3-Wal

1 Q And do you remember Mr. Varley, stating to the
2 same effect, subsequent to that? That LERO trainees are
3 motivated simply by virtue of their attending the training
4 sessions?

5 A Yes, I recall that.

6 Q Now, do you believe that attendance at training
7 sessions indicates a motivation to learn, and therefore makes
8 it unnecessary for an instructor to provide such motivation?

9 A Not at all. That violates the first commandment
10 to training: It says there shall motivate. Just as Mr.
11 Berger said, there could be any number of reasons for
12 inattendance, there could be any number of reasons for
13 attendance.

14 It may be a rainy day. It might be nicer to
15 sit in the classroom than to be out climbing up the poles
16 repairing power lines. That could be his motivation to
17 be in the classroom. That doesn't mean he is going to
18 absorb the material that is about to be presented.

19 There could be any number of reasons why the
20 trainee would be there. Peer pressure. He might have been
21 ordered there by his supervisor. Fear of reprisals. Any
22 number of reasons to be in that classroom. That doesn't
23 mean that he is also motivated to learn, and he has to be
24 motivated to learn, or he won't.

25 Q In LILCO's testimony, on pages 31 through 34, there

1 is a discussion of LILCO's proposal for annual retraining of
2 LERO personnel.

3 Are you familiar with that testimony?

4 Do you see it is Question 21, on page 31?

5 A Yes.

6 Q And do you have an opinion regarding the annual
7 retraining of personnel as described by LILCO?

8 A Well, I think we kind of approached it before.
9 I think they have come up with a training program for
10 initial training, and because they feel like, you know,
11 they must provide this on-going training, they are just
12 going to use the same program. People are going to go in
13 and out of the same program over, and over, and over. I
14 think that is going to be totally ineffective, because I
15 think the people going there, if they learned it the first
16 time, and if they retained it, then they shouldn't be going
17 back to it, and if they didn't learn it and retain it the
18 first time, then that should not be the initial training
19 program.

20 I think it is sort of a self-contradiction. If
21 you have a good initial training program, you are not going
22 to give them the same program the very next year, and the
23 very next year, and the very next year. That would indicate
24 to me you expect them to forget the material that you are
25 teaching them in the first place.

1 If you don't think they are forgetting that
2 material that you are teaching them in the first place, then
3 why are you giving it to them over, and over, and over again?

4 A (Witness Fakler) Pretest alone should tell you
5 whether or not that they require the information again. We
6 are talking about information. This is classroom sessions
7 now.

8 Now, on the other hand, to mix two kinds in the
9 same audience are distractors, they are problems. The ones
10 that we covered just a little while ago.

11 A (Witness Cosgrove) I would wonder if the workbooks
12 and the video tapes are aimed at an individual that is
13 considered to have no knowledge. I would assume they are,
14 because they are being used for initial training.

15 So, that when you put an individual who does have
16 some prior knowledge through his past training into that
17 classroom, he is at a different level than the new trainee,
18 and the whole training media is not aimed at his level. You
19 are going to lose his attention.

20 He could become disruptive. Any number of problems
21 with the retraining program.

22 A (Witness Fakler) Particularly with video tapes
23 that are used. In many cases they do use redundant statements,
24 or a lot of identifiers, as far as positions are concerned.
25 Things that aren't important to everybody who is learning

1 a specific job.

2 But as it is put in that cast, an overview, you
3 tend to fall asleep. It is as simple as that, and that is
4 not an ambiguous statement.

5 I think anybody that has to watch that, that
6 doesn't have, or get something directly related to what
7 they are going to do, is going to be affected by the way
8 that material is presented. There is a lot said. A lot
9 of it is done by one person talking, and it is very easy
10 to drowse.

11 Now, if you get somebody who has been through
12 it before, and you are asking him to be subjected to the
13 same material again, without at least weeding out whether
14 he needs it or not, you are really not going to have any
15 effective training or retraining.

16 A (Witness Cosgrove) I also wonder how many
17 copies of the workbook a worker is going to maintain.
18 Is he going to get a new workbook each time he goes? After
19 ten years, he could have ten copies of a workbook, and is
20 he really going to read it each time before he goes to that
21 test in the back; that self-rating exercise?

22 You know, the whole program is aimed at initial
23 training, and now they are just plugging it into a need for
24 retraining. And you just can't use one to resolve another
25 problem.

1 Q Okay. I think in your statements you made a
2 reference to mixed kinds of audiences? Were you referring
3 to the side-by-side presence of a new trainee and an old
4 trainee, who has seen the program once before?

5 A (Witness Fakler) Yes. Attrition is one of the
6 things that will generate new people. And there is plenty
7 of generation going on right now.

8 Q Is it your testimony that the coincidental
9 training of both of those types of people is not appropriate?

10 A Yes, it certainly isn't. To have somebody who
11 is familiar with the information mingle with somebody who
12 has to get the very basics -- we have seen that happen, by
13 the way. We have had those experiences over the years,
14 because it is not illogical to have a body of information
15 handed to a group, and present it through the methodology
16 described both by LILCO, and as you know, we do.

17 But when you mix the two groups together, a
18 definitive distractor is there as far as whether they are
19 going to absorb and whether they take the information
20 seriously.

21 A (Witness Cosgrove) Consider the fact that the
22 individual is in there for retraining. Probably knows as
23 much, if not more, than the instructor, because that is the
24 only material the instructor gets; that and a little chat
25 with Mr. Bear.

1 So, the guy that is in there for retraining knows
2 as much as the instructor.

3 Now, if a new trainee asks a question, you might
4 even get conflicting answers; one from the instructor, and
5 one from the old veteran, and both of them have had the same
6 training.

7 In fact, the veteran -- this might be his third
8 time through, and the instructor might have only had it
9 one time before.

10 So, it is very possible then that in the retraining
11 session the students would have been exposed to this training
12 more times than the instructor.

13 And that becomes ludicrous, I think.

14 Q Inspector Cosgrove, do you recall Dr. Milet's
15 testimony regarding the fact that he had held discussions
16 with LERO personnel, and that that discussions constituted
17 training?

18 A Yes, I recall that.

19 Q In your opinion, does a discussion with an
20 individual constitute training?

21 A I think that was probably stretching the word,
22 'training' to its utmost. If that be the case, because I am
23 a trainer, when I chatted here today, did I, in fact, conduct
24 a training session for everybody? Can I now put that in my
25 resume that I conducted training for the Licensing Board

1 and LILCO?

2 That is ludicrous. In fact, as a trainer I took
3 it somewhat as an insult. I wonder if Doctor Mileti would
4 consider me a sociologist because I once watched a crowd
5 of people. I mean, that is the analogy I can make.

6 It was just so ludicrous as to be ridiculous.

7 Did he have a lesson plan? Did he have objectives?
8 Did he have an evaluation device? I really think that was
9 ludicrous.

10 Q I would like to refer you to page 27 of LILCO's
11 testimony. Specifically, Question 13. The question
12 asks: How will LILCO ensure for the long term that there
13 are an adequate number of trained personnel to respond to
14 an emergency?

15 And the answer states that: LILCO will ensure
16 that an adequate number of trained personnel are available
17 to respond to an emergency, -- and the answer goes on.

18 Are you familiar with that portion of the
19 testimony?

20 A Yes, I am.

21 Q Do you believe that LILCO can provide an adequate
22 assurance that there will be an adequate number of trained
23 personnel always available to respond to an emergency?

24 A Absolutely not. Not only do I feel that the
25 training program is not being offered frequently enough,

1 but again, if we look at the present situation, LILCO has
2 all of its non-management people out on strike. As -- under
3 my new duties in the Third Precinct, the Brentwood operations
4 center is in my precinct, and as a result I had to get
5 involved in some strike planning, and I had a conversation
6 with Inspector Myers, who was our department's strike task
7 force commander, who had told me of a conversation that
8 he had with a Mr. Anzalani, of Local 1049, whereby he was
9 advised that all the Union members had withdrawn from
10 LERO.

11 To my understanding, that means twelve hundred
12 of the eighteen hundred members of LERO no longer exist.
13 So, LERO is being manned now by about six hundred management
14 people, less about fifty or so who have been laid off. I
15 think right now LERO has a tremendous attrition problem,
16 one that I can't imagine how they are going to surmount.

17 And not only that, the argument might be made:
18 Well, the strike might be a temporary thing, and they may
19 come back and hard feelings may be soothed over; but these
20 are still utility company employees with an absolute right
21 to strike. They could go out next year, they could go
22 out the year after. I don't think LILCO can ensure that
23 there will never be another strike.

24 Public workers, of course, are enjoined by law
25 from striking. Private workers enjoy the right to strike,

1 and they can exercise it, obviously, whenever they seem fit.
2 I don't think LILCO can ever ensure that it won't happen
3 again.

4 Q I would like to refer you to page 16 in the
5 LILCO testimony. And I would like to address the statement
6 there that says: The workbooks are designed to provide
7 a means for the LERO trainees to engage in self testing.
8 That is at the bottom of the page?

9 Do you agree with the assertion that these
10 workbooks do provide a means to engage in self testing?

11 A (Witness Fakler) To some degree.

12 Q Well, does such self-testing ensure that
13 trainees will verify that they have remembered and
14 understood --

15 A No, not a bit. As a matter of fact, in some
16 of the lesson plans we have seen, if they can call them
17 that, because they were occasionally called that by LILCO,
18 but they are workbooks. There are exams in there that
19 for the most part the questions are either True and False,
20 or they really don't deal with an objective that should
21 have been clearly stated up front.

22 They weren't clearly stated. And there is
23 no way of gauging whether anybody fails this information,
24 and how much he really puts in or gets out of it. There
25 is no measurement. There is no involvement with the student

1 to that point, other than by the description we have gotten,
2 of a question being offered by a student, if he doesn't have
3 an understanding.

4 There is a presumption that everybody cares
5 and is intently involved, and is very studiously trying
6 to resolve the questions in the book.

7 At this stage, I would say, no.

8 A (Witness Cosgrove) During discovery, I received
9 copies of some of those exams, where answers were put in
10 and eventually changed no doubt by the student.

11 The question is, was that something that the
12 student finally realized he had put a wrong answer down,
13 and corrected himself. Was that done during the review by
14 the instructor? There is no way of knowing that.

15 In any event, when it was turned in, all these
16 changes were made, and of course, whoever collected them,
17 if in fact they were graded, would have no way of knowing
18 when those changes were made.

19 Did the student have a problem understanding?
20 Was he too embarrassed to make a point of it, so he changed
21 his answers, and now they are correct? That is a real
22 problem. And quite frankly, it is important to let the
23 student know how they are doing, but it is more important
24 for the instructor to know how the student is doing.

25 So, self-testing never tells the instructor

1 that. Does this student need more testing? Is he ready to
2 go on to the next phase?

3 It is nice that he, the student, knows that,
4 but the instructor, the trainer should know that, and of
5 course, this doesn't provide for that at all.

6 A (Witness Fakler) Workbooks are a very useful tool
7 for individualized training, because it helps the person
8 interact which he goes to the next stage after he demonstrates
9 an understanding.

10 But there is no individual understanding that
11 he move along approach here.

12 Q I would like to ask you some questions about the
13 area of the LILCO video tapes, and the LILCO witnesses have
14 indicated that the classroom training sessions are effective
15 partly because of the video tapes. Does the use of the
16 video tapes, in your opinion, necessarily ensure that the
17 instructions will be complete?

18 A No, it doesn't ensure that. Many of the programs
19 are generic in type, which means that they are adopted for
20 larger audience, or many facets, many tasks involved.
21 And as a result, the individual who isn't particularly
22 concerned with some of the information there, particularly
23 the hierarchy structure of it, can easily lose interest,
24 and not be receptive to the information. Another point
25 would be, as I mentioned a little bit earlier, the idea

1 of someone, a person, a personality, delivering
2 information. That tantamount doesn't go much further
3 than a person reading off of a piece of paper, because
4 that personality could interfere, if we read on a piece
5 of paper sometimes -- we can have our own perception of
6 what the words mean.

7 But if we see a personality, he could actually
8 affect how we take the information from him. Those are
9 ambiguities; things that we don't have a reason to hold --
10 other than to say, I have to say again, that there was
11 so much of that in some cases that it was very difficult
12 to stay with, even though they were shorter, than I am
13 sure it would have taken if somebody was instructing
14 in the classroom.

15 Then, also, we have the question of the ideal
16 circumstance in every case. Every time a procedure was
17 depicted, it was an ideal circumstance, and it was simplistic
18 -- so simplistic, that it didn't come close to realism. It
19 was more like a moving slide show, if that makes any sense
20 to you.

21 Those are some of the factors that I think didn't
22 contribute to the overall possible impact of video being
23 used in modules like this in the classroom setting.

Sim 18-1

1 WITNESS LIPSKY: This is why you have to
2 distinguish between whether video tapes in general are
3 good educational media and whether or not in this event
4 the video tapes realized the potential that they could.
5 And it is in this respect that I recall in the testimony
6 that LILCO filed there is the phrase "graphic representation"
7 of the situations in which people would find themselves
8 as emergency workers.

9 It struck that it wasn't at all graphic because
10 it didn't utilize the potential that video tapes would
11 have to show the kind of situations that workers might
12 encounter.

13 And I would like to offer a suggestion as to
14 why this was. LILCO had two problems. One was to train,
15 but the other was to recruit and to obtain an emergency
16 response organization that was ongoing, that had membership
17 about which there was little dissent and so on.

18 So if they had depicted the kind of graphic
19 situation that I think we have been advocating as an
20 educational training matter, they might have encountered
21 some resistance on the part of people who they were
22 trying to recruit for these various emergency roles.

23 WITNESS FAKLER: I might add in one particular
24 case particularly, one of the programs was totally
25 irrelevant to the instruction, and I am talking now about

Sim 18-2

1 the engineering video program that was used on the preliminary
2 block of instruction for traffic control.

3 It is okay if you had an engineering placing
4 traffic lights hither and yond, which is not the job of
5 anybody in LILCO, but that is what the thrust of that whole
6 thing was. And I would presume if I were a student in
7 that class to be asking that question, why did they show
8 me that program?

9 BY MR. ZAHNLEUTER:

10 Q Okay. I want to follow up on several of the
11 parts of this answer.

12 I take it then, Lt. Fakler, that you believe
13 it is important that the video tapes be geared toward a
14 particular audience?

15 A (Witness Fakler) Yes. That should be taken
16 into consideration when the program was put together and
17 researched.

18 Q Is that what you mean by your example of the
19 engineer?

20 A In particularly that one. Yes, that is a
21 classic example.

22 Q Do you think the video tapes in general
23 that LILCO has used have taken into account the audiences?

24 A The attempt was there, but I don't think the
25 message was that clear for the individuals in their tasks,

Sim 18-3

1 in other words, some tapes being too generic and the
2 other ones probably containing too much talking person.

3 Q Okay. Talking person is another thing that
4 I wanted to follow up on. I think you said before that
5 it was a function of the personality of the person making
6 the presentation.

7 Does LILCO use this technique, or does LILCO
8 use this I think what you characterized as an undesirable
9 technique, does LILCO use this technique of a talking head
10 in its video tapes?

11 A Yes. There is one person in particular who
12 is threaded through the whole series of modules. He becomes
13 as we can train him and he calls himself that, the
14 instructor. As much as I know the individual and I
15 admire him and he is a very bright guy, there is no
16 way of determining how an audience responds to him as
17 an individual and I do believe that that counts, and I
18 know for darn well that it did count in even my watching
19 him once and actually began to doze off.

20 A (Witness Cosgrove) You know, when you have
21 a talking head or a talking person, just because he is
22 on a TV screen doesn't mean you are using modern training
23 techniques. That is still a lecture.

24 In fact, a video tape lecture is probably worse
25 than a live lecture.

1 A (Witness Fakler) No question about that.

2 That is a fact, unless there is a very specific quality.
3 Unless you are watching Johnnie Carson or if you like
4 a particular entertainer or if you have the selection
5 capability in that, there are very few institutionally
6 produced programs for industry or the corporate world
7 that have a talking head, and when they do and he is an
8 authority, he is there about that much of the time to lend
9 a point and then he usually is disappearing, but the content
10 or the information may be there as they depict the situation.

11 Q You also referred to the fact that video
12 tapes are unrealistic.

13 MS. MONAGHAN: I would like to move to strike
14 a portion of the last part of the testimony. I believe
15 that the Board has not admitted the testimony concerning
16 whether the LILCO video tapes are primarily a lecture
17 type tape with a talking head, and I am not entirely sure
18 whether that was stricken or that is one of the things
19 that is under reconsideration at this point.

20 JUDGE LAURENSEN: It was stricken and it is
21 probably also under reconsideration. As I recall, I think
22 we struck 12 passages and the County moved to reconsider
23 10 of them.

24 MR. MILLER: Nine, Judge Laurenson.

25 JUDGE LAURENSEN: You said nine but I have
still got ten on my list. I don't know how you snuck an

Sim 18-5

1 extra one in there. But in any event, it is probably
2 both, and let me just check my notes on the ruling
3 initially since that is what is in issue here.

4 MR. MILLER: Judge Laurenson, it is my
5 recollection that the Board did strike from the County's
6 testimony some issues regarding video tapes, I think
7 the content of video tapes.

8 It is my recollection that that is part of
9 the mot. for reconsideration pending before the Board.
10 I don't think that that is relevant to Ms. Monaghan's
11 request to the Board right now. I am not even sure what
12 she is requesting the Board to strike right now.

13 Portions of what was just said by the witnesses,
14 what that is and how that is to be done, I am not sure,
15 but I will simply state that the witnesses responded, and
16 they were very responsive to the question posed by
17 Mr. Zahnleuter, and the question was probative and it is
18 relative and the answers were as well.

19 I think the Board should deny the request
20 by LILCO.

21 MR. ZAHNLEUTER: In my defense, I really wasn't
22 probing the contents of each particular video tape, and
23 I was using LILCO's testimony on page 17 and 18 as a
24 reference point. That testimony addresses the question
25 of why did LILCO choose to use video tapes.

Sim 18-5

1 MR. MILLER: As you recall, Judge Laurenson,
2 a large part of the County's motion for reconsideration
3 is based upon the fact that there is corresponding testimony
4 in LILCO's own testimony regarding training issues, and
5 I think Mr. Zahnleuter points out very correctly that
6 his question was based upon a passage from the LILCO
7 testimony and he was asking these witnesses for their
8 opinion regarding the LILCO testimony which has been
9 admitted into evidence by the Board.

10 MS. MONAGHAN: Judge Laurenson, my motion to
11 strike goes to the portion of I believe it was Deputy
12 Inspector Cosgrove's statement which was given in response
13 to a question asked by Mr. Zahnleuter, and I think he
14 expanded it beyond the question posed by Mr. Zahnleuter.

15 The response that I am concerned with was one
16 which basically stated that the video tapes were taped
17 lectures, and I believe that the Board had stricken those
18 passages. I just can't find them right now.

19 JUDGE LAURENSEN: Well, let me just take a
20 moment to review our prior ruling on this.

21 (Pause.)

22 JUDGE LAURENSEN: One page 45 of the County's
23 testimony there was a motion to strike granted from line
24 17 on page 46 concerning allegations that the video tapes
25 contained contradictory and misleading information. I

Sim 18-7

1 don't know whether that is the same area that you are
2 talking about here.

3 MS. MONAGHAN: No, Judge Laurenson. I think
4 basically testimony concerning whether or not the video
5 tapes were primarily taped lectures was stricken in the
6 past as being beyond the scope of the contentions. I am
7 not sure whether the Board actually struck the testimony
8 on that, the County's testimony on that. I can't find
9 the page at which you did, but it is beyond the contentions
10 and I believe that that was one of the subparts of the
11 contentions that was stricken at the outset.

12 (Pause.)

13 JUDGE LAURENSEN: Just to put it in perspective,
14 I recall that there were some contentions that we did not
15 admit. Now that may be what you are talking about here.
16 I can't find anything in my notes indicating a specific
17 motion to strike on this area. There were some motions
18 to strike references to video tapes.

19 I think that the answer that you are objecting
20 to here and moving to strike does not really go to the
21 extent of raising this as a new issue in the case.

22 The motion to strike is denied.

23 BY MR. ZAHNLEUTER:

24 Q Let's leave the subject area of video tapes.

25 Throughout the LILCO testimony there is a

Sim 18-8

1 phrase that is often used, and the phrase is "skills
2 program." To give you some context of how it appears,
3 and it is on page 24 of the LILCO testimony. Mr. Berger
4 testifies there that "The LERO training program is the
5 most extensive and comprehensive skills program I have
6 encountered."

7 Could you tell me what is your understanding
8 of a skills program?

9 A (Witness Cosgrove) Well, skills generally
10 has a connotation of doing something as opposed to knowing
11 or feeling something. So a skills program would be a
12 program designed teaching you how to do something. That
13 is what I would define a skills program as.

14 Q Do you consider LILCO's training program to
15 be a skills program?

16 A Most definitely not.

17 Q Could you explain why not?

18 A Yes. I believe the program is designed to
19 teach the students what they are supposed to do, but it
20 doesn't go far enough in teaching them how to do it.

21 You know, if you can make a comparison with
22 other off-site evacuation plans, generally the off-site
23 response team already knows how to do what it is they are
24 supposed to do. So all they have got to be trained in
25 is what it is they are expected to do.

Sim 18-9

1 But in this case they are dealing with people
2 with no prior emergency response experience. So not only
3 must they be taught what has to be done, but they have
4 to be given the skills to be taught how to do it. And I
5 think the LERO training program has missed the boat in
6 that area.

7 A (Witness Fakler) The three phases that they
8 claim helps prove their point there of classroom activities,
9 drills and exercises is where part of our complaint must
10 be took because as much as a drill and an exercise occurs,
11 it really isn't evaluated down at the practitioner's level.
12 By that I mean right out into the field. There is no
13 evaluation of each person doing their performance, each
14 one of those, route spotters, traffic guides, and we
15 are back to the routine positions out in the field again,
16 bus drivers. They are not seen doing their job. There
17 is no way of honestly evaluating their performance under
18 realistic conditions.

19 So the most important phase of a skills
20 program is missing. So to call it the most extensive
21 and comprehensive falls short.

22 A (Witness Lipsky) I was just going to add that
23 this is a unique situation. So when someone says
24 effusively that it is the most comprehensive skills
25 program that he has encountered, if you consider Mr. Cosgrove's

1 point that in other emergency response plans that the
2 workers who are supposed to do the responding already
3 have the skills, then it would not be surprising that this
4 were the most comprehensive plan and still could fall far
5 short of being an adequate skills program.

6 Q Could you turn to page 33 of the LILCO
7 testimony.

8 (Witnesses comply.)

9 The last sentence on that page states that
10 "The structure of the training program also provides the
11 capability for a new LERO worker to complete his initial
12 classroom training within six months."

13 Is it your understanding that it will take
14 at least six months for new workers to complete their
15 trainign program?

16 A (Witness Cosgrove) I believe that is probably
17 a worst case situation. But in any event, I would think
18 that is still too long. In fact, it might be six months
19 before they receive the generic radiological training and
20 then the job specifics since each one is offered in a
21 different quarter.

22 He may receive his overall training at the
23 beginning of the first quarter and not receive his job
24 specific until the end of the second quarter, and by the
25 time that he is going into the second classroom session,

Sim 18-11

1 he may have already forgotten certainly what happened
2 six months ago.

3 It just seems that to try to put all that
4 together, I would assume it wouldn't make any sense to
5 send him to any drills until he has received his job
6 specific training which would take perhaps six months.

7 So for the whole six months that this individual
8 would be at LERO, they would not have received any job
9 specific classroom training, and presumeably would not
10 have participated in any drills because it has been
11 testified to here that the purpose of the classroom is
12 to prepare the trainee for the drill. So if you haven't
13 had the prep course, I would assume that you don't have
14 the drill.

15 So six monthos with absolutely no drill and
16 six months before job specific training as a possibility
17 just seems to me to be totally inconceivable.

18 Again, considering a situation right now,
19 1,200 hundred replacements needed in LERO. They may not
20 be there for six months, if they are ever going to be
21 there.

22 Q You stated that six months would be inconceivable.
23 Could you distill your answer perhaps to a yes or no and
24 tell me do you think that the six-month proposal is an
25 adequate proposal?

Sim 18-12

1 A Yes, but I would just like to explain. It
2 is my understanding that the classroom training only takes
3 fifteen and a half hours, and why does someone have to
4 wait six months to get that much training.

5 Q Could you turn to page 42, please.

6 (Witnesses comply.)

7 At the top of the page there is a reference
8 in the testimony to a real emergency. Is it your opinion
9 that the LILCO drills provide the opportunity to LILCO
10 personnel to practice their emergency jobs in such a real
11 emergency?

12 A (Witness Fakler) No. Nowhere do we see any
13 evidence of that.

14 A (Witness Cosgrove) I would say that a good
15 portion of the LERO organization in the event of an
16 evacuation is going to be dealing with the public, and
17 I am now talking about the traffic guides, the security
18 personnel and monitoring decontamination, route alert
19 spotters, and all of the drills say that they cannot
20 impact the public. So anybody's whose job would ordinarily
21 impact the public really do not drill in a realistic
22 situation. But most of LERO will be impacting the public.

23 I mean the people at the staging area and
24 the decision-makers, as important as they are, numerically
25 probably constitute a smaller number than the people that

Sim 18-13

1 are deployed in the field, and those people in the field
2 are not going to interact with the public in a drill
3 situation, and yet that is exactly what their LERO job is
4 going to call for in the event of an evacuation.

5 So I mean an important element of realism is
6 going to be lacking.

7 Q Do you think it would suffice ---

8 A (Witness Lipsky) Can I just add to that?

9 We do in responding to your question have to
10 take up the fact that LERO plans call for people dealing
11 with sub-situations, which is part of the testimony that
12 you have drawn our attention to here. Here we have to ask
13 once again whether or not the plan as written and the plan
14 in reality are the same thing.

15 The sub-situations that they have inserted,
16 as far as I can see, because they realize that free play
17 of decision-making is required, this sub-situations
18 are trivial interruptions of the otherwise free flowing
19 plan.

20 For example, they mention a report of a tree
21 falling across the road and the traffic guide has to
22 report that in, or somewhere else they mentioned that
23 someone will have to leave his post in order to make an
24 unsheduled report. That is not the equivalent to being
25 exposed to the hurley-burley of real-life situations and

Sim 18-14

1 doesn't get to the spirit of what is meant by free play
2 in decision-making.

3 We would assume that free play in decision-
4 making has to be experienced not only by high-level
5 decision-makers who are having to make decisions about
6 unexpected occurrences in the scenario about the developing
7 accident, but also people who are field workers and are
8 likely to experience no less serious unscheduled situations.

9 Q Inspector Cosgrove and Lt. Fakler, do you agree
10 with the statements just made by Dr. Lipsky about free
11 play for decision-making?

12 A (Witness Cosgrove) Yes. In fact, when he
13 was just talking about field personnel I thought of an
14 example of a traffic guide whose radio goes out on him.
15 That is a sub-situation and now he is isolated, so to speak,
16 and he has got his own devices to help resolve that
17 situation, you know. That is sort of free play for
18 decision-making, or a traffic guide with gridlock, and
19 we mentioned that earlier. That doesn't even come into
20 play here, and yet I see that is a very real possibility.
21 How is he going to resolve that now?

22 In the drills it was testified to I believe
23 that free play for decision-making was an incident presented
24 to a traffic guide where he had to call it in, and that
25 doesn't seem to me to be too difficult or involve too
Suefols must judgment or decision-making.

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#19-1-SueT 1

(Witness Fakler) But if my car is towed on the road and they are going to come to remove it, I would like to know what kind of real activity will go on during that episode, at what point will they find out that they are not going to move my car.

All kinds of interruptions are possible that haven't been looked at.

Q I take it from your nod before, Lt. Fakler, that you do agree --

A Yes.

Q -- with Dr. Lipsky?

A Yes.

Q And, Inspector Cosgrove and Lt. Fakler, is it your opinion that these subsituations which LILCO uses to simulate the actual emergencies are also not adequate?

A (Witness Cosgrove) Yeah, for the same reason, because I don't think they do provide free play for the decision maker.

MR. ZAHNLEUTER: Okay. Thank you. It's about 5:45 now so I can rest until tomorrow morning if it's okay with you, Judge Laurenson.

JUDGE LAURENSEN: I see by the clock on the wall that it is now 7:15, so I guess we can go to the next stage here.

(Laughter.)

#19-2-SueT

1 Let me just review the estimates of time for
2 this panel again. Mr. Zahnleuter, do you have an updated
3 estimate as to how much longer you anticipate?

4 MP. ZAHNLEUTER: Yes. I anticipate that I will
5 take about another hour.

6 JUDGE LAURENSEN: And the Staff's estimate is
7 the same?

8 MR. PIRFO: About five minutes.

9 JUDGE LAURENSEN: What about the redirect, Mr.
10 Miller?

11 MR. MILLER: Judge Laurenson, forty-five minutes
12 to an hour for redirect.

13 JUDGE LAURENSEN: So that under the schedule we
14 are working on, we would expect that we would be starting
15 the LILCO panel on Contention 81 some time tomorrow morning,
16 then.

17 All right. The witnesses are excused. We will
18 see you at 9 a.m.

19 WITNESS FAKLER: Thank you.

20 (The witnesses stood aside.)

21 JUDGE LAURENSEN: Is Mr. Irwin here to present
22 LILCO's argument?

23 MR. CHRISTMAN: He is on his way.

24 (Off-the-record.)
25

#19-3-SueT 1

JUDGE LAURENSEN: Back on the record now. We have had a discussion off the record concerning the scheduling of revised testimony by the County on Contentions 85 and 88 in response to our ruling of last week with regard to LILCO's revised and amended testimony on those two contentions.

And with the assistance of all parties here, I believe we have negotiated a schedule that is satisfactory to everyone. And just to summarize it, the County will file revised testimony on Contentions 85 and 88 on or before August 1st. And the parties will file oral motions to strike, if any, when that testimony is heard with notice to the Board in advance as to specific areas that will be the subject of such motions to strike.

(Judge Kline is conferring with Judge Laurenson.)

Yes. Judge Kline reminded me that the notices are to the Board and to the other parties. Sorry about that.

Based upon our current estimates for the rest of this week, it appears that we will not be in session next week, but that the testimony remaining after this week should be able to be completed during the three weeks in August. To review, the remaining testimony is the balance of the FEMA testimony which will begin on August 14th; thereafter, both the LILCO and Suffolk County testimony on

#19-4-SueT

1 relocation centers and on the brochure, and the NRC Staff's
2 testimony on Contention 11, along with the recently added
3 testimony of both the County and LILCO on Contentions 85
4 and 88.

5 And based upon what we all know up to this point,
6 the expectation of all the parties is that this hearing
7 should be concluded by the end of August.

8 Have I correctly stated what our discussion was
9 off the record?

10 MR. MILLER: As far as the County is concerned,
11 Judge Laurenson, your summary was a fair and reasonable
12 summary of what was discussed by the parties.

13 MR. IRWIN: LILCO agrees with that. I just want
14 to add two understandings that have gone into this, or my
15 understanding of the background.

16 First, that the County expects that its revised
17 testimony on Contentions 85 and 88 will be on the same order
18 of length as its current testimony. And, secondly, that
19 its expected cross-examination of LILCO's witnesses will be
20 on the order of a day in length.

21 MR. MILLER: Those are very rough estimates but
22 at this time I have no reason to disagree with that, Mr.
23 Irwin.

24 JUDGE LAURENSEN: Anything further for the hear-
25 ing today?

#19-5-SueT

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(No reply.)

All right. We are adjourned until 9 a.m.
tomorrow morning by Eastern Daylight time.

(Whereupon, at 6:12 p.m., the hearing was
adjourned, to reconvene at 9:00 a.m., Wednesday,
July 18, 1984.)

* * * * *

END

CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings before the
NRC COMMISSION

In the matter of: LONG ISLAND LIGHTING COMPANY

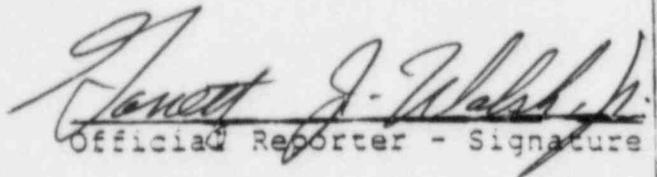
Date of Proceeding: Tuesday, July 17, 1984

Place of Proceeding: Hauppauge, New York

were held as herein appears, and that this is the original
transcript for the file of the Commission.

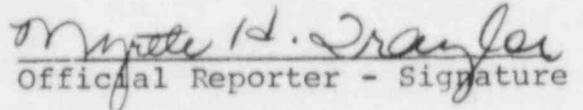
GARRETT J. WALSH, JR.

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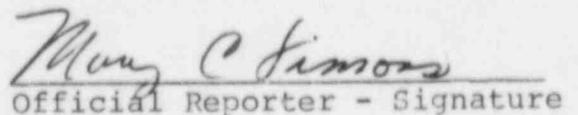
MYRTLE H. TRAYLOR

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MARY SIMONS

Official Reporter - Typed


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