UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the matter of

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

Docket No. 50-322-01-

Hauppauge, New York

Pages: 12,842-13,070

Date: Friday, 13 July 1984

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TAYLOE ASSOCIATES

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1	UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION			
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3	BEFORE THE ATOMIC SAFETY AND LICENSING BOARD			
4	X			
	In the Matter of:			
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6	LONG ISLAND LIGHTING COMPANY : Docket No. 50-322-OL-3			
	(Shoreham Nuclear Power Station, : (Emergency Planning)			
7	Unit 1) : (Emergency Flamming)			
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	x			
9	Court of Claims			
10	State of New York			
10	State Office Building Room 3B46			
11	Veterans Memorial Highway			
10	Hauppauge, New York 11787			
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13	Friday, 13 June 1984			
	The hearing in the above-entitled matter resumed			
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15	at 9:00 a.m., pursuant to lecess,			
	BEFORE:			
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17	JAMES A. LAURENSON, ESQ., Chairman			
	Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission			
18	Washington, D. C. 20555			
19	DB TEDBY VIINE Member			
	DR. JERRY KLINE, Member Atomic Safety and Licensing Board			
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23	U.S. Nuclear Regulatory Commission			
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120,184				

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(9:12 a.m.)

P-R-O-C-E-E-D-I-N-G-S

JUDGE LAURENSON: Lets go on the record. Before the start of this morning's hearing, we had an off the record discussion of certain procedural matters and disputes concerning scheduling of the FEMA testimony, depositions, and we have directed the counsel for FEMA and the County to confer and determine what matters are still in dispute so that those matters can be presented to us before the close of business today.

We also off the record received a revised estimate from LILCO concerning their cross examination of the FEMA panel of witnesses, and that is that they had yesterday indicated that it would take an hour and a half, and today they have now indicated it would take approximately one half hour.

As we indicated off the record, even prior to that time the Board had discussed the question of the County's questioning of this panel and the limitation we had placed on it on Tuesday, and we had indicated at that time that the Board found in light of the County's representation that they did have additional questions to ask of these witnesses that they should be given all of the remaining time this morning after we complete the oral argument on the two Motions, and we will proceed accordingly on that basis,

and depending on how long the other questioning of the FEMA witnesses take, we will consider other revisions to this schedule at that time.

So, at the present time we are ready to hear the oral argument on the two LILCO Motions that we have before us, and let me ask the parties, do you want to argue these two together, or do you want to separate them?

MR. MILLER: Judge Laurenson, I think a combination. I think some points go to both Motions, and for the sake of efficiency I will try to handle it that way. There are some few different points between the two Motions.

JUDGE LAURENSON: Let's try to combine the two arguments, then.

MR. MILLER: I intended to make my arguments at the same time, but there will be some distinctions.

JUDGE LAURENSON: Fine, let's do that, and we will start with the County.

MR. MILLER: Judge Laurenson, I will begin by stating that the first point of our response to these Motions by LILCO goes to both the Motion on Centention 85 and the Motion regarding Contention 88, and that is that the County, as we have stated before, is prejudiced by having to proceed orally at this time in response to LILCO's Motions in light of the fact we have not had any opportunity to review

Revision 4, which of course, from reading the Motions constitutes the underlying basis for LILCO's Motions.

It is interesting to the County, Judge Laurenson, that FEMA as of yesterday in written documents provided to the Board and the parties, indicates that it needs until November 15th of this year to complete a review of Revision 4 of the LILCO Plan, and yet when the County has asked for some time to review Revision 4, it has been provided not a single day.

So, we are proceeding here in a vacuum, and I will proceed in that context.

With respect first to LILCO's Motion to admit supplemental testimony on Contention 85, as the Board has made clear in the past, Judge Laurenson, the admission of supplemental testimony must meet a higher standard than is required for initial testimony.

The Board's standard I think initially was set forth in its Order of February 28, 1984, and the -- in response to the County's Motion to file rebuttal testimony by Doctors Cole and Tyree. That standard, as set forth by the Board, is that supplemental testimony, and for that matter rebuttal testimony must be relevant to an important point in the direct testimony; two, that such testimony must re relevant to an issue of decisional importance in

the proceeding; three, that such testimony must not be

cumulative with other testimony in the record, and; four, that such testimony must be incapable of having been filed in a more timely fashion.

With respect to LILCO's Motion regarding

Contention 85, LILCO has failed to meet either the first

or the last criterion.

Reading the Motion, Judge Laurenson, it is clear that LILCO's proffered supplemental testimony does not, is not relevant to an important point in the direct testimony filed earlier by LILCO on March 21st of this year.

In fact, the supplemental testimony is not relevant to any point in the direct testimony filed by LILCO. If you look at the Motion -- the two page Motion, Judge Laurenson, it states very clearly on page 2 that this testimony is directly relevant and material to the central issue of Contention 85. It also states that the testimony is limited to a discussion of an issue previously raised in the FEMA RAC report and Mr. Minor's testimony; Mr. Minor being a consultant on behalf of Suffolk County.

The testimony, in short, responds to previous testimony filed by the County, and it responds to the FEMA RAC review findings, but it does not raise any point that was raised in LILCO's initial direct testimony.

It, therefore, does not meet the first standard.

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End 1 10 Sue fols.

With respect to timeliness and the incapability of the testimony to have been filed earlier, Judge Laurenson a brief historical review of this issue demonstrates that this testimony is untimely.

LILCO's testimony on Contention 85, and the County's testimony on Contention 85 were filed on March 21st of this year. The FEMA Report to which LILCO's supplemental testimony attempts to respond was filed -- officially filed on March 15, 1984.

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LILCO met with the RAC Committee on May 11th of 1984 to present its response to the RAC review findings, including a response to the issues raised in Contention 85.

Judge Laurenson, this testimony was served on the County, received by the County, on July 5th of 1984.

For that matter, it's clear that this testimony could have been filed earlier. The testimony is very late. It has been filed at the Eleventh Hour; it has been filed with prejudice to the County in terms of going forward, and it has not met the Board's standard for filing the testimony in a timely fashion. The testimony is clearly based on revisions made by LILCO to its plan. Those revisions constitute Revision 4, which were also filed just a week ago.

We would request, Judge Laurenson, that the Board inquire of LILCO when Revision 4 was first drafted and prepared, specifically when OPIP 3.10.2, the basis for this motion on Contention 85, was prepared and drafted by LILCO. It would appear to the County that this testimony could have been filed earlier, clearly could have been filed earlier, because of the RAC report having been released months ago and because of the County's testimony having been filed months ago, and also it would appear to the County that this testimony could have been filed earlier because Revision 4 could indeed have been filed earlier.

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I would just note that the pages in Revision 4, unlike pages to previous revisions of LILCO's plan, are not dated in this case.

I guess one of my last points, Judge Laurenson, regarding Contention 85 is that this testimony does not constitute supplemental testimony. If anything, it's rebuttal testimony to the testimony of Mr. Minor. And that is made clear again by the reference on Page 2 of LILCO's motion where it says that this testimony is limited to a discussion of the issues raised in the RAC report and Mr. Minor's testimony.

Therefore, the County considers this motion to also be premature, to be prejudicial to the County. The County now faces the prospect of having to litigate a new procedure, Procedure 3.10.2, and then having to put on direct testimony which has been prepared on the basis of information contained in Revision 3.

Laurenson, the Courty must be given an equal right to submit new testimony if necessary. And in the County's view, the introduction by LILCO of a new Revision 4 procedure, in and of itself constitutes new testimony which the County must be given a right to respond to, including the right to revise Contention 85 if necessary, and including the right to file new testimony on behalf of the County if that is

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considered to be necessary by the County's expert witness, Mr. Minor.

My points regarding Contention 88 are in some ways very similar. Contention 88 is different obviously because it is a motion to file revised testimony rather than a motion for supplemental testimony. I will not repeat my arguments, Judge Laurenson, regarding the prejudice to the County in not having an opportunity to review Revision 4 and having to respond in a vacuum to this motion.

Again, it would appear to the County that this motion could have been filed much earlier. Again, the points made in the motion indicate that it is being filed in response to the RAC report and also to the testimony of the County, both of which have been filed for months in this case.

Although LILCO styled this motion a motion to file revised testimony, it would again appear to the County that this testimony constitutes rebuttal testimony to the testimony of Mr. Minor. For that reason, Judge Laurenson, the fourth criterion of the Board's standard regarding timeliness also applies to this motion by LILCO, and the same arguments apply to the County's position regarding that the motion and the revised proffered testimony is untimely and that if the testimony is admitted the County must be given equal footing with LILCO to consider whether it needs to

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revise Contention 38 and to consider whether it, too, would want to file new testimony before this Board.

This testimony offered by LILCO on Contention 88 is not revised testimony; it's new testimony based on new evidence with prejudice to the parties.

I guess I would end, Judge Laurenson, by posing a rhetorical question, and that is does LILCO intend to file new testimon, on all the issues that are affected by Revision 4 to its plan?

JUDGE LAURENSON. Before we turn the microphone over to Mr. Zahnleuter, let me just inquire what the County would have us do, for instance, on the 88 testimony? Do you prefer that we should litigate the testimony that is already on file, on a revision of the plan, Number 3, that has been abandoned?

MR. MILLER: Judge Laurenson, the County's position I think has been consistent in this matter. We don't prefer to litigate old matters or matters which according to LILCO have been made moot by a revision to its plan.

But we need equal for ing. And we need time to

look over Revision 4 and to file -- to determine first

whether we need to revise our contentions. Maybe withdraw

our contentions, I don't know. But to determine whether

we need to do anything with respect to the pending contentions

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and to determine whether we, too, would need to revise or modify our testimony pending before the Board.

I can state to the Board, I represent to the Board, I did this I think on Tuesday, that there are not attorneys available in our office that know anything about the Shoreham matter available to conduct such a review of Revision 4 at the present time. I have been authorized by Mr. Brown, Mr. Lanpher of my office, who are the managers of this case, to state that if the Board does not accept my word for this as an officer of the court, that they would be glad to take the flight up here, swear under oath that there are not attorneys available.

There aren't attorneys available. And, two, we have a problem with our expert witness, Mr. Minor. Mr. Minor is very much involved right now, and has been, with the low power issues before another Board in this case. That testimony on low power I believe is due to be filed on Monday, July 16th. Low power issues go to trial on July 30th.

Mr. Minor can only do one thing at a time, although he has lately been trying to do two things at one time. We have problems with our resources and whether we can respond and decide whether we need to make changes and revisions to this material submitted by LILCO.

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The parties aren't on equal footing merely because it's obvious that LILCO and its attorneys have known about matters regarding Revision 4 for a much longer time than the other parties who received this material a week ago. Well, July 5th.

We don't wish to litigate stale matters, but we wish to litigate on an equal footing.

JUDGE LAURENSON: Mr. Zahnleuter.

MR. ZAHNLEUTER: The State concurs with Suffolk County's position, especially as it pertains to the untimely nature of LILCO's motions.

It appears from the face of LILCO's motions that LILCO took the months of April, May and June to contemplate preparation of this testimony and to actually prepare it. And now LILCO is asking the other parties to study it and cross-examine on it within a matter of a week or two weeks.

I think that is disproportionate and unfair.

JUDGE LAURENSON: Mr. Bordenick.

MR. BORDENICK: The Staff has no objection to either motion.

JUDGE LAURENSON: All right. We will consider the LILCO motions and the arguments made here today, and we will have a decision on these two motions before the end of the day.

MR. IRWIN: Judge Laurenson, could I address briefly a couple of points that Mr. Miller made with respect to notice to the County? If the Board thinks it has adequate information, I am not going to insist on it.

(The Board members are conferring.)

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1 JUDGE LAURENSON: The Board believes that the 2 matter of timeliness of the motion is one that was 3 addressed by LILCO in its original motion and that there hasn't been anything presented in the argument here which would create an exception to our prior rule that replies 6 to motions are not generally permitted. So LILCO's 7 request is denied. 8 I believe we are ready to resume with the 9 panel of FEMA witnesses. And again, just to reiterate 10 the Board's prior determination that as of right now, 11 we are extending the time available to the county to cross-15 examine this panel of witnesses until completion of this 13 morning's session. 14 MR. BORDENICK: Judge Laurenson, I don't 15 know where Mr. Glass went, and I will go try to find him. 16 (Pause.) 17 JUDGE LAURENSON: Mr. McMurray? 18 Whereupon, 19 THOMAS E. BALDWIN 20 JOSEPH H. KELLER 21 ROGER B. KOWIESKI 22 and 23

PHILIP H. MC INTIRE

resumed the stand and, having been previously duly sworn, were examined and testified further as follows:

### XXXXXXXXX

## CROSS-EXAMINATION

BY MR. MC MURRAY:

Q Gentlemen, I just want to go back to contention 66 for a second.

I believe you stated yesterday that you were aware of some figures in the LILCO plan from which you could determine the number of vehicles which would be on the road during an evacuation of the ten-mile EPZ and also be able to perhaps figure out the vehicle miles traveled.

Do you recall that yesterday?

(Witness Baldwin) I recall a discussion of population. I don't recall the discussion about vehicles.

A (Witness McIntire) What I recall is, I believe I testified to the fact that it was my understanding that there are several studies available dealing with the subject of evacuation, number of vehicles, average miles per hour, those types of things.

Mr. Baldwin, let's back up a bit then.

You are aware of figures in the plan which would let you know how many people would be involved in the evacuation of a ten-mile EPZ, correct?

- (Witness Baldwin) Yes, that is correct.
- You are not aware of figures in the plan that

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would let you know how many vehicles would be involved in such an evacuation?

A Okay. I am aware of that data, too. Before we were talking about our discussion yesterday, but what you are asking me, is there data about the number of vehicles, and, yes, it is in Appendix A on each of the descriptions for each zone. There is population, 1980 and 1985, and there is also data about the number of vehicles.

Q I take it from our discussion yesterday that you did not take that data into account in determining that the provision in the plan to use tow trucks to remove obstacles from the road was adequate?

A That is correct.

A (Witness Kowieski) If I may add, we have not done any calculations to determine if number of tow trucks specified in the plan is too many or too little.

Q Let us then turn forward to contention 67, again.

May I please have a description, a brief description,

from the panel of its understanding of LILCO's bus

transportation scheme for the transit-dependent population?

A (Witness Baldwin) The procedures call for drivers being notified and going to the staging areas, receiving instructions, dosimetry, and cards for their dosimeters, and then receiving directions or being dispatched to a bus vehicle pick-up point, which it indicates are garages, and

to pick up a bus and then drive to the transfer points.

And then the transfer point coordinator at that point would dispatch the bus to run a particular route. The busses would run those various routes and bring the passengers back to the transfer point.

They would disembark at that point and get on transfer point busses which would then take them to a relocation center.

And that is a description of the transportation arrangements for transit-dependent general population.

Q What were the comments regarding this particular bus scheme by the RAC members?

(Pause.)

Gentlemen, you seem to be looking through documents.

Does anybody recall what the comments were of the members of the RAC?

A (Witness Keller) We first have to establish which of the criteria elements -- excuse me.

MR. GLASS: When you say "comments," are you referring to the final -- in the final RAC report? Is that correct?

MR. MC MURRAY: No. I am talking about the comments that were submitted by individual RAC members and the discussion of those comments before the finding was

1 | finally made.

MR. GLASS: At this point, Judge Laurenson,

I wonder about the relevancy. What we are talking about
right now is the FEMA testimony, the final ratings.

There has been testimony before that there has been full
consensus by the RAC memoers in the final ratings, and
I wonder what the relevance of prior comments is to
this particular hearing.

It may be appropriate for discovery, but I don't know where it helps the Hearing Board.

JUDGE LAURENSON: I think the county should be allowed a reasonable opportunity to probe this.

The objection is overruled.

WITNESS KELLER: To finish my answer that I started, we first have to establish which criteria element is the correct one which goes to the basis of your question.

We can then, from that, go back and try to find out -- the documents we were looking at, both of us, wewe 0654, to establish the criteria element designation.

(Witnesses conferring.)

WITNESS KOWIESKI: NUREG element that deals with relocation is J.10.G, entitled, Means of Relocation.

In our review comments, we stated -- our evaluation in the RAC review on page 36, RAC members, some of the RAC members, at least two, were concerned about

commitment of resources; specifically two RAC members expressed concern about that LILCO provided only letters of intent.

Q Were there any other comments or concerns regarding this scheme?

A To the best of my recollection, there were no other concerns expressed by the RAC members.

Q Were there any comments at all?

A The comments were that this element, three RAC members felt that LILCO transition plan meets NUREG standards.

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And the others were just concerned about the letters of intent, and nothing else?

That is correct.

Mr. Baldwin, what was looked at in determining whether or not the bus transportation scheme was, in fact, adequate and I -- let's not go over the issue of letters of intent, okay? Let's talk about the mechanism. The actual working of the bus transportation scheme.

A (Witness Baldwin) What was looked at there was whether the provisions for relocation were stipulated in the Plan, and those provisions were there.

(Witness Kowieski) Also, when we evaluated the scheme as such, the thought process that went into it made sense. So we evaluated it -- there was command and control, there was good coordination. We felt that in our opinion this should work. If it will work, it will be determined during the exercise.

In other words, the concept, what we saw in the past during the previous exercises for other nuclear sites, it is not exactly the same. You have different conditions. However, whatever we saw, whatever we read in the Plan made sense to us, and in our opinion it should work. If it will work, the exercise will tell.

Let me -- are you talking about your thought processes, or are you speaking for other members of the RAC,

Mr. Kowieski.

A It is my thought process. Again, I can only anticipate it went to the other RAC members though process, because other RAC members were with me during the previous exercises, so we observed the same sites, same situations.

So, I will say they used the same expertise, similar experiences that I had during the previous exercises.

Q Well, let's go to the January 20th meeting.

Was there a detailed discussion about the scheme, where
you said: This part makes sense; or this part makes sense,
or are you just talking about what you thought?

A When I opened the meeting, first of all I put together -- we put together the document, what we call the draft document, the working document which was distributed to the RAC members on January 20th.

I opened the meeting. I explained the groundrules. I stated that we are going to review every single
NUREG planning criteria. If people have any concerns and
comments, I asked them to express their comments, and we
incorporated those comments. If you ask me if we discussed
this particular element, yes we did. To what extent, okay,
as I explained, two RAC members expressed concern about
letters of intent.

Q And that was the extent of the discussion?

Mr. Keller is nodding his head.

A If you ask me right now have I instant replay of the situation, I don't. If you ask me if there was a discussion, there was a discussion.

Q But you don't recall the discussion other than that it dealt with letters of intent.

A (Witness Keller) My recollection is that the discussion involved letters of intent, and therefore, the lack of commitment of resources. And as Mr. Kowieski said, the Plan does contain discussion, does have route maps, et cetera, and therefore there was no reason for us to believe there was any difficulty in the plan if they could get the buses.

There was another item that was discussed in the RAC review about notification call out lists for the drivers. That was added, and it is in the testimony.

Q (Witness Baldwin) Yes. As I recall the discussion, it focused on the letters of intent, and that a strategy for relocation was located in the Plan. I should say that the variety of strategies that we see in the Plan review is very wide indeed, and so you have to -- I, personally, take this into consideration in looking at a procedure to see that those various considerations that Mr. Kowieski mentioned are there.

Command and control decision-making procedures.

Drivers. Vehicles. Route maps to follow. And knowledge of those people as to what it is they are to do.

Those things are set forth in the Plan and procedures.

Q Those things are set forth, but other than reading the words on the page you have not -- on the pages of the Plan, you have not done anything to determine whether or not that scheme will work, correct?

A (Witness Kowieski) Again, it is stated for the record, this will be the next step -- next stage. When we go to the exercise, prior to the exercise we will spend grest deal of time developing exercise objections and exercise scenario, and we will go to the -- and when we go to the exercise we will be well prepared to test, and we will test, whether the scheme is going to work or not.

A (Witness McIntire) May I complete an answer, please. Mr. Kowieski has also testified that based on the RAC members and his own personal experience of observing exercises, that knowledge entered into the discussion of this point.

Q Have you reviewed other plans that have used the transfer point scheme?

A (Witness Kowieski) Not in Region II.

(Witnesses confer)

No, we did not. To answer your question, if

that exact same scheme was used for other sites that I am responsible for, the answer is, no. There is some modification to the scheme presented in the LILCO Plan, where in one Plan the bus would go around the county parameter to just pick up passengers on the outer limits of the County.

- Q How is that akin to a transfer point?
- A I am saying it is not exactly the same concept.
- Q So, this is really the RAC's first time being confronted with a scheme that involves a transfer point, or multiple transfer points, correct?
  - A At least RAC and FEMA Region II.
- Now you did say yesterday that you went beyond the bare pages of the Plan by performing a rough calculation to see whether they had the right number of buses, correct?
  - A (Witness Keller) That is correct.
- I believe you said yesterday that you took
  the figure in the Plan, I believe, for the number of
  estimated transit dependent people and divided that by
  forty, which represents the capacity of the buses and came
  out with a number that was roughly 333, correct?
- A We included in this calculation a rough estimate of the number of runs, and I think we used an average of two runs for each bus -- the evacuation buses, not the transfer buses. And then we added to that the number of

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buses that were used according to the Plan to go from transfer points to relocation centers, and I believe what we said, I hope what we said, is that we came out close.

I don't think we said we came to exactly 333, but the number was in the ball park. It didn't appear to be grossly in error.

We made some assumptions in this calculation.

We assumed that there were two runs per bus on the evacuation routes, and I don't believe that is an exact representation of what the Plan says, but it is close. We did use the 40 passengers. We did not use any capacity figure, and there is, I believe, as I recall, a capacity figure in the Plan.

We basically ascertained that their arithmetic sas reasonable.

Q Well, buy using that figure 40, you are assuming that the buses will be filled to capacity in making the runs -- at the end of a run, correct?

A As we just said -- or as I just said -- we did not, in a rough calculation, we did not use any capacity figure at all. We did assume a forty passenger bus.

I would assume that in some cases the buses would be partially filled, and in some cases they may be over filled. In an emergency, I would expect that somebody might be willing to stand for a reasonable amount of time.

We did not do any of that.

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Q You would agree with me, wouldn't you, that if the buses were not filled to capacity for what ever reason, that more buses, or more bus runs would be required, correct?

A If the assumptions used in establishing the number of buses, and the capacity factors which were used in those calculations proved to be in error, for whatever reasons, it would change the number of buses required or change the number of runs that would be required. And that would impact the evacuation time.

Q And it would mean that the scheme was flawed, isn; t that correct?

A I don't agree with your word, 'flawed.' It would change the number of buses that would be required, or the number of runs, and in addition, the evacuation time.

The evacuation time estimates would, therefore, be inaccurate?

A Evacuation time estimates would therefore be inaccurate, yes.

Q If the evacuation time estimates are inaccurate, wouldn't that mean that the Plan was deficient with respect to the times estimates for transit-dependent population, because those figures were inaccurate?

A No, not in my opinion,

Q

Why?

A Because it is an evacuation time estimate.

If, and I don't believe I have ever seen a representation,
that this is the evacuation time, if that representation were
to be made, then I would agree with your premise.

That if someone represented that it takes exactly -- whatever. Six hours and forty-two minutes, and if there were an error in their assumption, right, and it actually would take six hours and forty-three minutes, that would be an error.

If I am told that this is an estimate of the evacuation time, six hours and forty minutes, an estimate, the estimate is in error but almost every estimate, by the nature of an estimate, has some uncertainty in it.

Q What level of uncertainty do you find adequate?

A I know of no criteria which gives us any guidance on estimating acceptable uncertainty.

Q Well, at what point do you --

A (Witness McIntire) May I add to that answer, please? There is something also that we have to keep in mind when we are doing this, and that is what the history of evacuations have shown in this country. We have had several well-documented evacuations, particularly from hurricanes along the coastal area, where many more people than are required for have been successfully evacuated with no

plans for using buses or other facilities.

So, there is one side that you are bringing out, but there is also another side of what the history of evacuation shows, with the absence of planning. That many successful evacuations have been carried out.

Dy Mr. McIntire. We were talking about evacuation time estimates for transit-dependent population, and the level of uncertainty involved in those time estimates. Mr. McIntire has brought in a completely different situation which is the history of evacuations without this kind of scheme.

That is irrelevant.

The LILCO Plan calls for the scheme. We are talking about the time estimates, and the accuracy of those estimates.

MR. GLASS: It has a bearing, Your Honor.

Mr. McMurray has referred to a hypothetical where he is

claiming that a number of buses, or a great number of buses,

or maybe even all the buses would not be at capacity. He

is making assumptions based along those lines, and Mr. McIntire

is providing additional information that indicates that that

may not be the possibility. That probably -- if the buses -
or the reasons the buses would not be at capacity is because

there wc.ld not be a need for the buses to be at the capacity.

I think it has a bearing on the particular hypothetical that

Mr. McMurray has posed.

JUDGE LAURENSON: As I recall, the question was whether or not -- or what level of error was acceptable or permissible in terms of the confidence in the time evacuation estimates.

MP. McMURRAY: That is correct.

JUDGE LAURENSON: Pardon me?

MR. McMURRAY: That is correct.

JUDGE LAURENSON: I think that while Mr. McIntire's supplementation of the answer does not directly address that question, it does -- it is relevant to the general area inquired into in the fact that he is supplying information on the whole nature of estimates.

And so for that reason, although I don't find it to be directly responsive to the question that was asked, I think it does provide the relevant information, and no useful purpose would be accomplished by striking the testimony.

The Motion to Strike is denied.

BY MR. McMURRAY: (Continuing)

Q Let's go back to the level of uncertainty, Mr. Keller. You stated that there are no criteria that you know of. Are you talking about just NUREG 0654, or are you talking about in your profession.

A (Witness Kowieski) NUREG element, when we

talk about there is no criteria for us, RAC, to evaluate time estimates provided in the Plan, we refer to NUREG 0654 Planning criteria J.10.L.

There is no specific requirement that RAC members will check the figures, will check the methodology, or estimates. Historically, it has been done by NRC.

We never attempted to in our reviews of other Plans, we never attempted to check the methodology. What NUREG 0654 asked for, the time estimates for evacuation of various sectors, and distances based on dynamic analysis for the plume exposure pathway, emergency planning zones, will be provided.

We have evaluated and we found the times estimates are provided in the LILCO Transition Plan for various conditions, and various populations. You have it for permanent population, transient population, general population, special population, and for normal and adverse weather conditions.

We found this to be adequate.

Q Mr. Kowieski, isn't it true that NUREG 0654 says that those time estimates should be conducted according to Appendix 4 of NUREG 0654?

A Yes. Appendix 4 of the NUREG is reference.

Q And NUREG 0654 does set out certain standards for methodology and the types of things that should be done

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in conducting evacuation time estimates, correct?

A That is correct. However, it does not provide detailed methodology how to calcuate or recheck the time estimates provided in the Plan.

Mr. Kowieski, in reviewing the time estimates in the Plan, and let's stick to the transit-dependent population, did you and the RAC measure those time estimates against the requirements of Appendix 4?

A Well, for transient population, if I refer you to the page of NUREG 0654, it states in B, transient population

I am sorry. Where are we right now?

A On page 4.3. What this particular part deals with, it deals with transient populations. That time estimates would be provided, and for various conditions. For normal or adverse weather conditions.

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Wait a second. We are talking about transit 0 population here.

(Witness Kowieski) Yes.

That is tourist volumes and employment data for large factories. That's not transit dependent population, co.rect?

A I was searching right now -- okay. Unless I misunderstood your question, are we right now switching to, and trying to limit our discussion of time estimates, for transit dependent population?

We are talking about Contention 67 now and time estimates for transit dependent population.

And, so what's your question?

Well, you referred me -- I'm asking you whether or not Appendix 4 provides guidance for developing evacuation time estimates --

It does.

-- and whether or not the time estimates in the plan -- I'm sorry, whether or not the RAC review of the time estimates compared the LILCO scheme to the requirements of Appendix 4?

Still I don't understand your question. Okay. First of all, the way I understand your question, that if RAC evaluated or measured the plan against the NUREG requirement. The answer is yes. If it is, we found it adequate,

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the answer is yes. If we took into consideration Appendix 4, the answer is yes.

Q How did you take Appendix 4 into account with respect to the transit dependent population?

A We used -- if you go to NUREG 0654, J.10.L, it is not specific, does not provide you -- give you a detail with regard to -- for what groups of population time estimates should be provided.

In addition, does not give you a detail as to for what weather conditions time estimates to be provided.

Appendix 4 gives you more guidance as to how to break down, how time estimates should be broken down. And if you go to the RAC review on Page 40 of 60 under Element J.10.L, you can see the RAC specify and acknowledge that plan, the Table 15, Page Roman Numeral V-8, confirms with the preferred format for presenting the data and results for the following types of evacuation. And we cite it.

Q You do cite that the format is adequate; I agree with that. Also, under Part 4 of Appendix 4, which begins on Page 4-6 and goes on from there, there is also a section regarding methodology.

Did you compare the methodology against these criteria that are laid out in this several pages here going over to 4-10?

A (Witness Baldwin) Having seen the detail of all

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the RAC members comments, I am not aware of any RAC member that actually took the methodology and assumptions that are contained in there apart. We looked -- my understanding of what each RAC member did that commented on this, was to see whether the provisions contained in the plan were as I had described earlier, and whether or not it met what is described here in the Introduction, it says -- to read again from NUREG, it says: This section of the report, referring to evacuation time estimates, should make the reader aware of the general location of the nuclear power plant, et cetera, and generally discuss how the analysis was done. A, site location and emergency planning zone. B, general assumptions. And, C, methodology.

And I call your attention to C, methodology: A description of the method of analyzing the evacuation time shall be provided.

Q So as long as the description is there, you feel that Appendix 4 is met?

A (Witness McIntire) We will gladly stipulate that the RAC members nor FEMA are not transportation experts. That's why we do not present the testimony on the methodology. That is presented by the NRC.

And what we do is, we accept those methodologies as being generally valid, and we go through the process which the other people have described in detail to you.

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Q Isn't it true, Mr. Baldwin, that the real basis for the RAC finding of adequacy on this, with respect to this particular contention, was the fact that the time estimates were reported in the proper format?

A (Witness Baldwin) Well, I think that is probably a fair characterization. It's important that these evacuation time estimates be included, and obviously that their accuracy be ascertained.

The evacuation time estimates are in there, however, so that these time estimates can be taken into consideration in making protective action recommendations which could include an evacuation. In other words, there are no criteria which stipulate that these times, what the parameters of which these times have to fall into.

Mr. Keller, I'm sure, can describe this better than I. But the fact is that those time estimates are there for the 'ecision maker in making a decision as to a protective action recommendation involving evacuation so that he can take those evacuation time estimates into consideration.

Q But that's an important point, Mr. Baldwin. In other words, the estimates in the plan are to be used by the decision maker. Therefore, Mr. Keller, isn't it true that although they are estimates those estimates should be as accurate as possible?

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A (Witness Keller) Absolutely. You should strive for the highest possible accuracy.

And in this previous discussion on how they could be in error in a non-conservative way, I believe my recollection is that the plan states that the assumption was made that none of the transit dependent population would obtain rides from their neighbors with cars. To the extent that this occurs, that would make the time estimates in error in the other direction.

So, there are potential for compensating differences in the estimate. Everyone should strive for the highest accuracy possible, recognizing they are probably not going to be perfect.

Q And, again my question is, while there are no criteria in NUREG 0654 as a professional, Mr. Keller, at what point -- well, let me ask you this.

What level of uncertainty for estimates of these kinds -- for these kind is -- what level of uncertainty for estimates of this kind are unacceptable?

A In the first place, I don't know -- I do not know how to ascertain what the level of uncertainty is. And before I can make a judgment on what level of uncertainty is acceptable or not acceptable. I have to have some understanding of the methodology by which I establish that uncertainty.

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If my methodology is only good to a factor of two, let's say, to establish the uncertainty I certainly should not be concerned by a factor of two. If my methodology is good to one half of one percent, that means I can rely on those estimates, the estimation of the uncertainty, to a much greater degree.

I don't have any knowledge of any of those things, so I can't say what would be acceptable or unacceptable.

Q Mr. McIntire, you mentioned that the NRC traditionally has been the one that looked -- that has looked at the methodology of the time estimates, correct?

A (Witness McIntire) Correct.

Q Is it your understanding that the NRC has looked at the methodology behind the bus transportation scheme and the assumptions on which it is based?

A We are not sure of that. We know that there have been, I believe it's two studies, done on evacuation time estimates for around the Shoreham plant. So, at this point in time, without new information being presented to us, and I will stress the fact if new information regarding the evacuation time estimates is made available to the RAC they will do their best in analyzing that to see what impact either way on evacuation time estimates this would have.

In the meantime, we are going to continue to

stick with the evacuation time estimates that we have in reviewing the plan.

Q I take it your answer is that you do not know whether the NRC has reviewed the time estimates, and I'm talking about specifically for the transit dependent population?

A At this time, no.

Q If such a review were not conducted, would you have confidence in the accuracy of the time estimates for the transit dependent population?

A If the time estimate were not done by NRC or not done by anyone? Is that your question?

Q If the time estimate was not evaluated by the NRC for the transit dependent population, would you have confidence in it?

A I think we would continue on the present process, because we would probably conclude that there was no need to do one in the judgment of NRC.

Q You have not asked the NRC to look into whether or not the bus transportation scheme and the time estimates associated with it are, in fact, accurate?

A Not specifically. But I will point out that NRC is a member of the RAC, and they do have the opportunity, as Mr. Kowieski has testified, to comment on every element in NUREG 0654. So, we draw the conclusion that if they do

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not provide us any information on this aspect of the plan, then the NRC seems to be satisfied with it.

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Q You draw the assumption that they have reviewed the time estimates and just have no concern?

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A I don't draw that assumption. I draw the assumption that they have not commented on it or requested that we pursue something, that they don't have major concerns with it.

Q Because you assume they have reviewed it?

A They have had the opportunity to review it.

Q Is there any doubt in your mind whether or not they have reviewed the time estimates for buses?

A I personally don't know whether the NRC representative did review it or not.

Q Mr. Kowieski, how many transfer points are involved in the bus transportation scheme?

A (Witness Kowieski) If you allow me, okay, let me refresh my memory on that.

(The witness is looking at a document.)

According to my records, the number of transfer points, eleven. And you can find in OPIP 3.6.4, Attachment 4, Page 3 of 4.

Q Are you aware that a number of the transfer points in Revision 3 have been changed?

A I am not aware of this fact.

(Witness Keller) A clarification. Are you saying that Revision 3 does not have eleven transfer points in it?

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Would that concern you if it didn't?

We have only reviewed Revision 3 and nothing else. So, anything --

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I have the same problem.

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So, I think we have said this before. We cannot testify on anything other than Revision 3.

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Q So it's possible, isn't it, that if there were a different number of transfer points, or if there were -if their locations were changed, the bus transportation

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scheme might not be adequate, correct?

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(Witness McIntire) This is true. And what we will point out is that we have distributed copies of letters which has committed the RAC in Region II to review Revision 4 by the middle of November. This will be one of the factors which will, of course, be reviewed in the new revision.

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So if, in fact, the bus transportation scheme has been revised, you can't say that it's adequate until you conduct that review, correct?

A That's right. And, as Mr. Baldwin testified yesterday, we have had instances where in one revision plan elements have been adequate and because of new revisions #5-10-SueT 1

they have turned to inadequate. We have had in the majority of the cases where inadequate elements, because of changes to the plan, become adequate at a later date.

(Witness Kowieski) I will say the general tendency is that plan improves when the revisions are made.

(Witness Keller) Not always.

(Witness Kowieski) Generally.

Q Mr. Keller, you said one hopes?

A (Witness Keller) No. I said but not always.

(Witness Baldwin) I know that I looked at these transfer points, and one of the concerns that could be raised is that some of those are either right on the ten mile or within it. And I would suspect that that would be -- we are in the realm of speculation here, that that would be one thing that could be changed, that they may want to relocate those -- all transfer points to be outside the ten mile EPZ.

Q In your judgment, Mr. Baldwin, would that be more prudent?

A Yes. It could be.

Q And why? Could you briefly explain your reasons for that?

A Well, it's a transfer location where people may have to wait for a bus to be taken to a relocation center.

Q And I take it, what you are saying is that it is

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A Yes.

risk?

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Q And they instead wait outside that area?

better that they not wait in an area that is potentially at

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A Yes, that's correct.

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Q Have you evaluated whether or not the transfer points have any shelter? That is, that would be adequate for sheltering purposes.

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I think, Mr. Keller, you said before -- well, I will let you answer that question.

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A (Witness Keller) We have not to my recollection.

As we testified before, our understanding of the transfer

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points, primarily they are parking lot type of areas. And

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they would be sheltered in the incoming buses but that

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gives a very minimal, if any, shelter factor.

the transfer points -- strike that.

at least they are identified, correct?

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points for potential shelter factor.

Q And I take it, Mr. Baldwin, you haven't evaluated

event, even in the best kinds of buildings, the most ideal

types of buildings. We have not evaluated the transfer

The shelter factors are not that high in any

The transfer points are set forth in the plan,

A (Witness Baldwin) My recollection, there is a list of them in Appendix A.

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Q And also the list in Appendix A does give address locations, correct?

A That's my recollection. If you like, I can look it up to be more specific but that is my recollection.

Q I think you are accurate. You haven't reviewed the plan, have you, or those transfer points to determine whether the locations within the EPZ -- I'm sorry. Strike that.

Have you reviewed those locations to determine whether or not they are adequate to perform the function of transfer points?

A (Witness McIntire) Could you be more specific?

Do you mean just the physical, having passengers get off

one bus, wait in a certain space and then get on another

one?

Q Whether they are physically adequate for that task to be performed?

A (Witness Baldwin) No. I have not been to those to do any kind of onsite reconnaissance. I personally have not.

Q You haven't, for instance, reviewed any testimony, any of the testimony, where pictures of these transfer points might have been shown?

A No.

(Witness Keller) We have not.

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(Witness McIntire) No.

Q You haven't looked at any of the letters of intent or letters of agreement to determine whether or not the area as described in the agreement is adequate?

A (Witness Kowieski) We already testified that there are no letters of agreements of transfer points.

And to add, they are not required.

Q Let me ask you this, Mr. Baldwin, and it may be that in many of your subsequent answers you may have touched on portions of this question.

But on the bottom of Page 66, the sentence going over to Page 67, says: To the extent that the evacuation time estimates contained in the plan have been assessed during the RAC review of the plan, these estimates may meet the NUREG 0654 standards, et cetera.

Do you see that?

A (Witness Baldwin) Yes, I do.

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A (Witness Keller) I don't. I believe you said "may meet" the 0654 standards. I do not see the word

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"may."

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Q If I said "may," the accurate reading should be,

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"These statements meet the NUREG 0654 standards.

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A I see that.

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Q Could you describe, in a nutshell, for me --

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we have touched on bits and pieces of this -- exactly

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the extent that the evacuation time estimates have been

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assessed in Appendix A?

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MR. GLASS: I thought we have gone over this

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quite a bit. I think it has been asked and answered.

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MR. MC MURPAY: I think we have touched on

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whether or not Appendix 4 has been reviewed. I think

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If I could get get a quick description from Mr. Baldwin,

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we could move on quickly.

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JUDGE LAURENSON: My recollection is the same

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as Mr. Glass's, but I think, if there is some question

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about it, let's try it one more time.

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The objection is overruled.

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WITNESS BALDWIN: I don't recall any specific

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comments that dealt with an analysis calibrating the

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methodology, assumptions, or data contained in the evacuation

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model described in Appendix A.

WITNESS KOWIESKI: If you would like me to restate whatever is already on the record, I will be glad to. I mentioned how the NUREG 0654 requirement as set forth in J.10.L, I went to Appendix 4, the requirements of Appendix 4, that we will evaluate certain group of populations.

If you want me again to go to the great detail, I will be glad to.

Do you want me to continue?

BY MR. MC MURRAY:

Q I don't want you to say anything that has already been said on the record, Mr. Kowieski.

A (Witness Baldwin) As a followup to what we have said in response to this question, I think it is important to mention the last sentence in our testimony, in our written testimony which states, "Any further assessment of the effect of transfer points and/or multiple bus runs on the evacuation time estimates that are contained in the plan would require technical evaluation of the methodology and/or assumptions used to develop these estimates."

That is what we said in the written testimony.

Q According to Mr. McIntire -- do you agree with Mr. McIntire, you don't know whether or not these evaluations have been conducted with respect to the transit-dependent

population, Mr. Baldwin?

A No.

Q Do you believe that someone should review those time estimates to make sure that they are adequately conducted?

A (Witness Kowieski) Again, we already stated that it is not our territory. That is NRC.

Historically, NRC has been responsible for review of evacuation time estimates.

Q I understand whose territory it is.

Don't you agree, though, that somebody who lives in that territory and whose job it is to review those time estimates should review them before the transit-dependent population time estimates are rated as adequate?

A Again, if you go on assumption that whatever is presented in the plan is incorrect, we don't have evidence -- first of all, I don't have evidence that whatever is presented in the plan is in error.

Q Don't you agree, Mr. Kowieski, that somebody should review the time estimates for the transit-dependent population to see whether they are adequate?

Mr. Keller, you say yes?

A (Witness Keller) I personally believe someone should.

A (Witness McIntire) And we think it has probably been done by the NRC and their experts. We are not sure whether they testified or not.

A (Witness Baldwin) I would follow up, to reinforce what Mr. McIntire has said, they may well have done it, but I personally am not aware of any comments that we received that articulated that.

Q I would like to go to the answer on the bottom of page 67, the last two sentences are intriguing.

It says that there that, "It should be noted, however, that in its review of the plan, the RAC noted that there are no specific provisions detailing how protective action recommendations would be developed — the absence of an actual release." There is a parenthetical there.

"Therefore, it has been recommended that the plan should specify that protective actions such as sheltering and especially evacuation could be implemented prior to significant releases based on a technical assessment of plant conditions."

Do you see that in your testimony?

A (Witness Keller) Yes. And I also see a typo.

That "should" -- the second to the last word on the third

line from the bottom should read "should be" rather than

"could be."

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Q Would you --

A "Especially evacuation should be implemented prior."

Q Okay. That is the change you wanted to make?

A Yes.

Q Could you explain, Mr. Kowieski, I think the fastest way to do this is, what is the relevance of these two sentences to the issue in this contention?

A (Witness Kowieski) I would defer this to Mr. Keller.

Q Okay.

A (Witness Keller) Any discussion of evacuation times and the time required to implement protective actions and its beneficial effect to the population depends upon the time at which this protective action is implemented, the duration of the time it will take to complete the implementation, and the presence of a risk, a plume, et cetera. Okay?

I think I would characterize my own personal belief that the biggest single issue in the RAC review of this plan, revision 3 of the plan, was that there was a deficiency in relying on plant conditions to make protective action recommendations.

In other words, to make protective action recommendations prior to the real need, the real

1 plume being present.

- Q You are talking about prior to a release?
- A Prior to release. Okay?

In that way, you have added significantly to the safety factor, if you will; if you begin to implement your protective actions prior to a real risk, the release, you have obviously added to the safety.

And that was cited as a deficiency in the RAC review of the plan, and it shows up in several places. This is one of them.

- Q This is one of them because it deals with evacuation, and what you are saying is that the decision whether or not to evacuate should be based on information available before a release?
  - A That is correct.
  - Q Okay.

You nevertheless feel that this element, the element relevant to the bus transportation scheme, is adequate?

- A Yes.
- Q How do you reconcile the fact that it is adequate with the fact that it is not based on information -- the decision to evacuate is not based on information available before the time of the release?
  - A Because we find that the bus transportation

scheme is adequate. What we find to be inadequate is the timing of the decision to implement the use of the bus transportation scheme.

Q I note that you bring up this point, particularly with respect to 67.D, which is the answer regarding the transfer points and whether or not people might be exposed at transfer points?

A Yes, because it is particularly relevant in that point. If the people are standing in an open parking lot without shelter, et cetera, whether it is inside the ten-mile EPZ or outside the boundaries of the ten-mile EPZ, it makes no difference, if these people are standing there prior to a release.

So we thought that this particular issue, item was particularly relevant in this contention. So we added it to our written testimony.

Q I take from your statement that in your opinion, protective actions, recommended protective actions should be implemented and complete or virtually complete before a release in order for that protective action to be adequate; is that correct?

A No. No.

In an ideal world, you wouldn't have to make a protective action recommendation. But if you do, the earlier you do it, the better.

The purpose of emergency planning and emergency preparedness is to reduce dose. The sooner you take the protective action recommendation prior to a release, the greater dose reduction you will have and, therefore, the better your plan will be.

We have said that we feel -- the RAC feels and FEMA Region II feels that the plan, as we reviewed it in revision 3, was not adequate because it did not rely sufficiently on taking prior account before releases of the plant status.

This does not mean the plan is inadequate, if the protective action cannot be completed prior to the beginning of a release. You have saved dose by starting early.

JUDGE KLINE: Gentlemen, that principle seems to me to be of broader significance than just applicable to this particular contention.

I would like to know, does NUREG 0654 address the issue of what you might call "precautionary evacuation" anywhere?

WITNESS KELLER: Precautionary protective action, yes, in the appendices, I believe it is in Appendix B.

I believe it is Appendix B. There is some discussion of what should be done at various levels in the plant, various recommendations that the plant should make to the

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1 off-site authorities. But in our reading of revision 3 of the plan, we felt that was not adequate. 3 JUDGE KLINE: Okav. Is FEMA -- does FEMA expect to take any or 5 formulate any statement of policy or somehow make that 6 principle more prominent than it now appears to be, or 7 at least consider doing that in emergency planning? WITNESS MC INTIRE: Yes. It is my understanding now that the NUREG 0654 is under review for revision, and 10 it is my understanding that a new revision should probably 11 be out within the next year. 12 Does anybody else have any other information? 13 WITNESS KOWIESKI: No, I don't. 14 JUDGE KLINE: Okay. Thank you. 15 JUDGE LAURENSON: Let me just follow up with 16 Mr. Keller. I don't find any Appendix B. I find 17 appendices one through five. 18

WITNESS BALDWIN: It is Appendix 1 that he is referring to.

JUDGE LAURENSON: Thank you.

WITNESS KELLER: There is a table of each of the emergency classifications in the back with expected protective actions. It is in the appendix on page 1-3, they talk about the rationale of notification and alert classifications.

(Pause.)

MR. MC MURRAY: Mr. Keller, just so we can make a determination that this is worth it, what are you looking for?

WITNESS KELLER: The fact that some of these things are discussed in NUREG 0654, but not in the criteria elements, in some of the other portions of the document.

MR. MC MURRAY: Is this in response to the Board's question?

WITNESS KELLER: I thought it was.

MR. MC MURRAY: I'm sorry.

WITNESS KELLER: Are you satisfied?

JUDGE LAURENSON: All I wanted to know was where was Appendix B?

WITNESS KELLER: Appendix B was a mischaracterization. It should have been Appendix 1.

JUDGE LAURENSON: Let's move on.

BY MR. MC MURRAY:

Q One or two more questions before we leave this contention.

Mr. Baldwin, the plan also sets out -- well, does it set out the various bus companies which are expected to provide busses for this bus transportation scheme?

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A (Witness Baldwin) The only place I recall seeing the busses set out are in the letters of intent in Appendix B. They may be contained somewhere else in there, too, in Appendix A, but I don't recall it.

Q You then have no knowledge of where the bus storage locations are located, correct?

A (Witness McIntire) I believe we testified to that fact yesterday.

MR. MC MURRAY: Judge Laurenson, I think this is a good time to take the morning break.

JUDGE LAURENSON: All right. We will take the morning recess.

(Recess.)

JUDGE LAURENSON: Mr. McMurray?
BY MR. MC MURRAY:

Q Mr. Keller, before we left, we were discussing your concern about the need for basing protective action recommendations on information available prior to release.

Do you recall that?

A (Witness Keller) Yes, sir.

Q And you were referring to Appendix 1 of NUREG 0654 as providing support for your position, support for your concerns.

Do you recall that?

- A That is correct.
  - Q Could you please, very quickly, go through those portions of Appendix 1 or identify those portions of Appendix 1 that support your position in this matter?

A I would suggest you turn to page 1-17, second half of the page, there is a notation 4 and an "A."

Do you see that?

- Q Yes, I do.
- A Would you like me to read it?
- Q No. We don't want to read it into the record.

  Anything else besides part 4.A?
- A B.
- Q Why don't you just keep listing them?
- A C. I think there are other citations also.

In addition, there is in existence, I believe they are called information bulletins which are put out from, I believe, Mr. Jordan and the NRC. I have seen a copy of it. I did not consider it in my review of the plan which my recollection is that basically it instructs the licensees to follow these provisions and to make these recommendations in a normal situation, which Shoreham is not.

But in the normal situation where you have the licensee and the state and local authorities, the licensee is obligated to make a recommendation to the state

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and the off-site authroties. In this case, that would be LERO.

My recollection of this information bulletin is that Mr. Jordan reminds the licensees that they have this obligation and that they should follow the tings which are in this.

In other words, as someone, I think Judge Kline, characterized it, "precautionary evacuations" or "precautionary protective actions."

Q Thank you.

Q Gentlemen, let's turn please to page 76 of your 1 testimony regarding Contention 72. Mr. Kowieski, could you please state for me what element of NUREG 0654 and what part 3 of the RAC report are pertinent to this contention? (Witness Kowieski) NUREG element J.10.L, and RAC comment is provided on this particular element on page

Q Now, you will agree with me, won't you, that Contention 72 deals not just with time estimates, but with the full process of evacuating special facilities in the EPZ, correct?

A We paraphrase the contention, and we have several questions. We have a Question 88, 89, and 90, and 91.

Q I am not just -- when I ask you to refer to a NUREG 0654 criterion that was pertinent to this Contention, I wasn't just talking about Question 88. I was talking about all questions and answers, answers pertinent to Contention 72.

A I would have to again go one by one our questions, the way we develop, where we broke down the contention, and then I will provide you proper reference to NUREG 0654.

Q Well, let me ask you then if what I understand is that NUREG 0654 J.10.L is pertinent to Question 88, which NUREG citations are pertinent to 89, 90, and 91?

A 89 deals with NUREG element J.10.G. Means of

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40 of the RAC review.

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relocation.

Just for the record, it is very hard sometimes to relay the contention to one specific NUREG element planning criteria. Sometimes the contention -- even if you break it down encompasses several NUREG planning criteria.

A (Witness McIntire) It is our understanding that the contentions were not formulated to specific NUREG 0654 criteria, is that correct?

Q I believe that the contentions do cite NUREG 0654 provisions.

Let me just state though that what I am asking for is your understanding of which NUREG 0654 criteria are pertinent to the various answers you set forth regarding Contention 72. As I understood what you were saying, Mr. Kowieski, it appears that for each question you had a different NUREG element that was pertinent, or maybe more than one.

A (Witness Kowieski) Is that a question.

Q I think I had a question, and then a statement, and I was hoping for an answer to the question.

A (Witness McIntire) Would you repeat the question?

Q Sure. What I am asking for, Mr. Kowieski, is a statement, just a brief indication to me, of which NUREG elements, and which comments in the RAC report are pertinent to all of the questions and answers in Contention 72.

A I will just have to state that as we were

preparing this testimony we did not go through and mark

specifically which NUREG element the question related to,

so we are going to have to do that now, and it may take just

a few minutes.

A (Witness Keller) I would say, to try to -because I have been looking -- I would say that 72 is involved,
at least in part, with J.9.

A (Witness Kowieski) 72, Question 91 also provides even reference to RAC review at J.10.D.

Q Okay. Let me start with J.10.D. Let's turn to NUREG 0654, element J.10.D, as well as your comments -- the RAC comments on that particular element.

Mr. Kowieski, NUREG element J.10.D requires means for protecting those persons whose mobility may be impaired due to such factors as institutional or other confinement, correct?

A That is correct.

Q Now, you have rated Element J.10.D as adequate, isn't that correct.

A That is correct. With -- there is a caveat. We made this element adequate provided certain information will be included in the future revisions of the Plan.

Q Mr. Kowieski, what was the basis for the adequacy rating for J.10.D?

1	A As stated forth in RAC review comments, that
2	procedures and inventory requirements for protecting mobility
3	impaired persons have been completed, and only one exception.
4	The people that are not confined to the special institutions.
5	The list is being compiled.
6	I paraphrased what was in the RAC review.
7	Q Institutionalized people or confined people would
8	include those in hospitals, or nursing or adult homes,
9	correct?
10	A That is correct.
11	Q Which procedures in the Plan were are you
12	relying on to state that the procedures for protecting
13	institutionalized mobility impaired persons have been
14	completed?
15	A OPIP 3.6.5.
16	Q OPIP 3.6.5 is not does not have any particular
17	procedures for each individual institution, isn't that
18	correct?
19	A You would like me to check in the Plan?
20	Q Well, do you know whether there are procedures
21	in 3.6.5 for each institution?
22	A The inventory requirements is provided in the
23	cited procedure.
24	Q Would you say that the inventory requirements
25	constitute a full procedure for each institution?

1	A (Witness Baldwin) Could you ask your question
2	again?
3	Q Does OPIP 3.6.5 contain evacuation procedures
4	for the individual institutions that are inside the EPZ?
5	A No, it does not. What it sets forth for
6	each institution is, as Mr. Kowieski said, an inventory.
7	That is one of the things that is set forth.
8	Q Now, what is it about this procedure that leads
9	you to believe that it is adequate with respect to the
10	evacuation of special facilities?
11	A On page 5 of 20, Section 5.2, deals with evacuation
12	of health care facilities. It goes on with nursing homes,
13	hospitals. It has provisions for the ambulance coordinator,
14	bus coordinator, and these procedures, they stipulate how
15	the special facilities evacuation coordinator would notify
16	and the coordinate with those special health care facilities,
17	or those special facilities, the arrangements that they may
18	need to carry out an evacuation if that were to be recommended.
19	Q What assurance is provided in the Plan that
20	that coordination would take place?
21	A (Witness McIntire) Again, that is something that
22	would be verified in an exercise.
23	Q Let me just make clear. There is nothing in the
24	Plan that gives you assurance that this coordination would
25	take place, correct? You are waiting for an exercise.

1 A Correct. And the exercise, I take it, will test the 2 level of coordination with each institution involved in the 3 EPZ? Probably not each institution. Probably this is one of them that we would approach on a sampling basis. Q Are you aware of whether any nursing homes or adult homes in the EPZ have developed procedures, or adopted any procedures to evacuate their patients or their 9 residents in accordance with the LILCO Plan? 10 (Witness Kowieski) Not in our knowledge. If 11 you ask us a question of actual procedures presented in the 12 Plan have been actually adopted by these institutions, I 13 don't have any knowledge of it. 14 Q Are there any agreements in the Plan with LILCO 15 or anyone else to conduct evacuation in accordance with the 16 17 LILCO Plan? 18 MR. GLASS: This question has been asked and answered a number of times. 19 20 JUDGE LAURENSON: Overruled. 21 WITNESS KOWIESKI: There are no letters of agreements with special facilities that you cited. However, 23 there is no specific requirement in NUREG 0654 that such

letters will be provided. If -- special facilities do not

have specific role in emergency response.

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You will agree that in the event of an emergency, it is up to the hospital to evacuate the patients if that is what is called for, correct?

A (Witness Keller) In the event of an emergency of any type, including a radiological emergency. The Plan, as we stated earlier, does not call for an evacuation of the hospitals as a specific protective action recommendation, notwithstanding the fact that they could decide to do it.

The three hopsitals that were inside the EPZ as we testified earlier, or near the edge of the EPZ, since the risk is a graded risk with distance from the plant, it is the decision of the Plan to call for sheltering of these nospitals.

hospital, if he so desires, can evacuate. And if the administrator does make this decision, LERO will assist in obtaining transportation resources.

Q Let's go to the adult homes and nursing homes.

Isn't it true that in the event of a radiological emergency,
the hospital staff and the hospital administration are the
ones who are going to have to conduct the evacuation of the
residents and patients in those institutions.

A I am sorry. I thought you went bact to nursing homes, and you have phrased your question with hospital staff

and hospital administrators.

Q I am sorry. The institutional staff and the institutional administration.

A In the event of any emergency in which an evacuation would be a warranted protective action, the administration of any institution, I believe, has a responsibility to the people in that institution to protect them. And it makes no difference if the emergency in question is a radiological emergency, a fire, severe storm, or whatever, and in that regard the responsibility of the administrators is exactly the same.

Q I think we can agree on that, Mr. Keller. Isn't it true that the special facility administrators will protect their patients in accordance with what they perceive to be the best method of protection?

A That calls for an assumption, but I wuld agree that a reasonable individual would assume that the administrator would protect his patients in the best way he could.

Q And isn't it true that his perception of the best method to protect his patients may not be -- may not coincide with LILCO's protective action recommendation.

MS. McCLESKEY: I object -- I beg your pardon
Mr. McMurray. I didn't mean to interrupt you.

MR. McMURRAY: Well, Mr. Keller has already nodded his head yes.

MS. McCLESKEY: Well, he didn't say anything,

and you can note for the record that he nodded his head

yes, but I have an objection to your question, and that

is that the question is premised on the notion that licensees

have to be guarantors that people are going to follow

particular protective actions that are given to the public,

and that is outside the NRC regulations.

End 7. 9 Sue fols.

JUDGE LAURENSON: The objection is overruled.

BY MR. MC MURRAY: (Continuing)

Q Mr. Keller, first of all, I would like an answer. I am entitled to that because the question was directed to him.

A (Witness Keller) Recommendations are indeed recommendations. And that's all they are.

Any individual or administrator or whatever may or may not accept any recommendation.

Q Mr. McIntire, you seemed anxious to add something. Do you have anything more to add?

A (Witness McIntire) Mr. Keller just added it.

MS. MC CLESKEY: Judge Laurenson, I object to Mr. McMurray's characterizing noddings of the witnesses and leanings and that sort of thing on the record as wanting to give answers or having given answers.

JUDGE LAURENSON: I assure you, that doesn't affect our ruling on the objections.

answer by something other than verbal means I don't think there is anything that I know of that precludes counsel from noting that, or observing it, or following up on such facial expressions. They don't come through on the record, of course, since we don't have a videotape of this proceeding. But I don't know of anything improper about that.

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MR. GLASS: My only concern, Your Honor, is if it is during some preliminary discussions that the witnesses may be having, and if they are trying to note a preliminary discussion it would be reflecting that.

JUDGE LAURENSON: But in all instances, the witnesses are then given the opportunity to answer the question verbally or to explain or to challenge any characterization of their animation, I guess, that was noted by Mr. McMurray.

MR. GLASS: As long as that has been clarified to the witnesses.

WITNESS KELLER: Where were we?

BY MR. MC MURRAY: (Continuing)

Q Mr. Kowieski, yesterday you said that there were eight adult homes and nursing homes in the EPZ.

Do you recall that?

A (Witness Kowieski) Well, I have notes in the front of me. That's correct.

Q Isn't it true that there are, in fact, ten such homes in the EPZ?

A Based on my calculations there are -- I came up with a number of eight. It's possible that I missed two.

Q How did you conduct your calculations?

A A simple calculation. I went through the plan

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and I audit them.

- Q Well, why don't we go to Appendix A, 4-175?
- A (The witness is going through a document.)
  Yes.
- Q Mr. Kowieski, isn't it true that there are, in fact, more nursing and adult homes in the EPZ?

A That's correct. We just rechecked and the number is ten.

I am sorry. The reason, okay, for my miscalculation was that I went by zone designation.

Q I don't understand your --

A In the table of OPIP 3.6.5, on Page 17 of 20, 17-A of 20, the special facilities I also assigned to certain zone designation.

Q Have you evaluated, gentlemen, whether or not LILCO has provided for enough ambulances to evacuate the institutions involved here?

A (Witness Keller) I think we have already stated that it is our understanding that LILCO has provided in the plan for none.

At the time we reviewed the plan, all we had were letters of intent. We found that to be deficient.

Q In the plan, does it state a particular number, though, a number of ambulances, on which LILCO relies even though there may not be letters of agreement for them?

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A (Witness McIntire) Are you asking for a total number of ambulances in the plan or just the number of ambulances for special facilities?

Q Special facilities. We are just focusing on this contention.

A (Witness Baldwin) We did try to take a count of those ambulances, and based on the letters of intent I was able to come up with an approximate number of two hundred and twenty-five.

(Witness Kowieski) And based on my calculation, in trying to add out the numbers for nursing and adult homes, transportation requirements identified in the plan is twenty-six buses, a hundred thirteen ambulances, and two hundred three vans.

Q Mr. Baldwin and Mr. Kowieski, did you get your figures by adding up the figures in the inventory on 3.6.5?

A That's what I did.

(Witness Baldwin) I got mine based on the letters of intent.

Q Okay.

A (Witness Kowieski) The distinction should be drawn, the numbers I gave you are -- constitute transportation requirement. What Mr. Baldwin gave you is a number specified in letters of intent.

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Q Which may or may not be the number involved in the scheme for evacuating special facilities, correct?

A (Witness Baldwin) Yes, that's correct.

Q Mr. Kowieski, since your numbers are based on the OPIP 3.6.5, did you do anything to determine whether or not those -- that number of vehicles was, in fact, enough to carry out the evacuation?

A (Witness Kowieski) No. I just -- I have not gone to any great depth analysis. I have not visited those facilities. No. The answer is no.

Q You didn't even perform any rough estimates like you did for the buses?

A I don't have recollection. I have total number of residents, one thousand three zero five in my notes, if you ask me. I don't recall at this point.

(Witness Keller) I would like to add that I think there is a misrepresentation in your last statement. We said earlier that all we did with the buses was to use the numbers that were in the plan. And we came up with the same number that's in the plan, or close to the same number that was in the plan.

We have done no independent verification for the number of buses required or the number of ambulances required or the number of tow trucks that are required. We have done a plan review. And that's all.

(Witness Baldwin) And we -- I think we would agree that what we have is a resource count, an estimated resource count.

(Witness Keller) According to the plan.

(Witness Baldwin) Which is based on the specifications in the plan.

(Witness Kowieski) Only to assist, I guess, the Board, to assist the -- all the parties just in case the question will come up, we don't have to spend time. You know, I put together some notes to help everyone.

Q So, in this particular case, again, you counted the resources -- I'm just trying to get this clear. You counted the resources but have made no estimate as to whether or not those resources are adequate in number; correct, Mr. Baldwin?

A (Witness Baldwin) With respect to --

Q We are talking about ambulances and ambulettes now.

A As Mr. Keller has testified, and I agree, there are no ambulances in the plan, because there are no letters of commitment.

Q Are you telling me we can't talk about ambulances now because there are no letters of agreement?

A (Witness Keller) The plan at the current stage does not commit one ambulance, in my estimation, all right.

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If you would like to assume that LILCO will indeed ultimately, at some point in the future, obtain letters of agreement which do commit ambulances, okay, we are making an assumption, what we have done is look at the numbers that the LILCO plan contains. As we testified, we have not been to Suffolk County; we have done no independent verification.

If the plan had said it needed no ambulances or three thousand ambulances, or whatever it said, that's all we know. If the plan says a particular nursing home needs a van, two ambulances and two buses, that's what the plan says. We don't know whether that is accurate; we don't know whether it's inaccurate.

I think we have testified to that, I thought, a number of times.

(Witness McIntire) While Mr. Keller was answering, I took Mr. Kowieski's notes and did some rough calculations in my head to try to be more specific to your question.

And we show approximately thirteen hundred and five residents in nursing or adult homes. There are twenty-six buses provided for in the plan, but with no letters of agreement; twenty-six times forty is roughly one thousand. Ambulances one thirteen. That brings it up over eleven hundred. Two hundred and three vans, say, four people per van, that's another eighteen hundred, roughly nineteen hundred spaces are provided for by my rough

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calculations.

Q I'm sorry, Mr. Keller.

A (Witness Keller) The point is, all of those numbers which add up are based on what the plan says. And I think your question was, have we verified that those numbers are correct.

We have said over and over again, we have not.

Q Fine. One of the types of vehicles to be used are -- is an ambulette; isn't that correct, Mr. Kowieski?

A (Witness Kowieski) That's correct.

Q What is your understanding of what type of patient can be moved in an ambulette?

A (The witnesses are conferring.)

I don't have detail knowledge, and I would prefer not to really try to get to the details in answering your question. So, the answer is I don't know details.

(Witness McIntire) We are not sure.

Q You don't know then whether or not an ambulette is an appropriate means of transportation for all of the residents of a nursing home?

A That's true. We have just testified we are not sure. There seems to be some difference of opinion of what type of patients are transported in an ambulette.

(Witness Kowieski) But what I can just add to what was said on the subject, that if we go to the exercise,

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and have in the past, what we evaluate, if we simulate evacuation of wheelchair individual, we would look for a proper vehicle that the individual actually get to, a wheelchair individual can actually easily get into the vehicle.

This is being evaluated during the exercise.

Q Is it your understanding that such an exercise would be able to evaluate whether or not all types of persons, or whether it is appropriate to use an ambulette for all types of wheelchair bound people?

MR. GLASS: Wait. They just stated that they don't have specific information on an ambulette, and now you are asking a very specific question about the capabilities of this same vehicle.

MR. MC MURRAY: Mr. Kowieski just said that this might be tested in an exercise. I have the right to go into that answer.

JUDGE LAURENSON: The objection is overruled.

WITNESS MC INTIRE: Could you repeat the question,
please?

MR. MC MURRAY: Yes.

BY MR. MC MURRAY: (Continuing)

Q Mr. Kowieski -- you may confer.

A (The witnesses are conferring.)

Q Okay. Now, Mr. Kowieski, you said that -- and

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you can correct me if my characterization is wrong -- that the appropriateness of ambulettes to evacuate wheelchair bound patients is one item that may be looked at in an exercise, correct?

A (Witness Kowieski) Yes, it's possible. That's right.

Q Would that exercise be able to evaluate whether or not all types of wheelchair bound patients may be evacuated in an ambulette?

MS. MC CLESKEY: I object. I don't understand what all types of wheelchair bound patients means. I think the question is vague.

MR. MC MURRAY: Well, I can't see how it could be vague to counsel for LILCO since we went through this in great detail a few weeks ago.

JUDGE LAURENSON: The objection is overrulad.

WITNESS MC INTIRE: We will stipulate for te record that none of the four of us up here are health experts per se. We have members of the RAC that probably have more knowledge in this area.

But the point Mr. Kowieski was trying to make is that we will do the best evaluation we can on the potential evacuation of all types of personnel from these facilities and the type of vehicles which would be required to remove them.

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BY MR. MC MURRAY: (Continuing)

Q Do the procedures, or what you purport to be the procedures, for evacuation of special facilities in the plan contain any assumptions regarding how long it would take to prepare the patients for evacuation?

Mr. Kowieski?

A (Witness Kowieski) No, they do not.

Q So you have not reviewed that? Because it's not in the plan, you have not reviewed that, correct?

A That's correct.

Q Does --

A (Witness Keller) If you allow me, based on a discussion we had earlier today, this is another place which is not discussed in any of these contentions.

But it's important to take protective action, to make protective action recommendations as early on as possible so that all of these lead times, whatever they may be, will have a greater separation between the time that you make the protective action recommendation and the time that the actual release occurs.

Now we did not reference that, I don't believe, in this portion of our testimony. But it does indeed impact here.

Q Does the -- do the procedures in the plan lay out any sort of system that should be developed for determining

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which patients should go first, should be evacuated first?

A I am not -- from recall, I'm not sure it's in the special facilities that we are talking about now.

But there are some discussions in the plan about the radio-sensitive to children and the pregnant women.

Q We are talking about the -- I'm sorry. We are talking about the institutionalized people now.

A I don't recall whether or not that that particular discussion is involved with the institutionalized people.

But the plan does have, as guidance for decision makers, et cetera, that the radiosensitive should be evacuated first.

Q Okay. We will get to that. With respect to the special facilities, gentlemen, let's focus on the adult homes and nursing homes.

Are you aware of whether or not they provide adequate sheltering for their population?

A I'm sorry. Would you define adequate?

Q Let me ask -- let me break down the question.

Do you know whether they have adequate space to shelter all of their populations?

A There are no specific space requirements for sheltering as it is used in a sheltering protective action recommendation. If the people are in the building prior to protective action recommendation, there is by definition

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space.

So, in your opinion, just any old amount of space is adequate as long as the people are inside?

A In an emergency, that is correct.

Q Even for institutionalized people?

A If the institutionalized people are inside prior to the initiation of the emergency and they remain inside, I don't see how the space requirement changes.

Q Is that true even if the space doesn't have some of the equipment required for the care of these individuals?

A I don't understand. I think that I said that if the people are inside being cared for with the required equipment, and they stay inside when the emergency is initiated, and the emergency does not remove any of their required equipment, I don't see how it impacts space.

end #8 Reb flws

Q So as long as they are inside and getting adequate care, that is okay?

A That's right.

Q But there is nothing in the plan, is there, that let's you determine whether or not these, the populations of the institutions could be sheltered inside and receive adequate care?

A There is noting in our review which leads us or requires us or even requests us to evaluate the adequacy of these institutions prior to the initiation of the emergency. I think that is what you are asking me to do, since we said that the space doesn't change at the inception of an emergency. And if you want me to say, are these adequate now, today, I don't know.

Q Doesn't sheltering require that one moves people aware from rooms with windows?

A It is preferable to close the windows.

It is preferable to move to basements. It is preferable to do lots of things. But in order to apply the least beneficial sheltering factor you just get inside, close the doors, close the windoes.

If you can move to basements, you can apply slightly greater protective factor, et cetera, et cetera.

If you put a masonry shell around a frame

1 building, you can use a greater protection factor. 2 That is not envisioned. You have what you have, 3 the building, the space, the windows, and the factors are commonly applied. Q Mr. Kowieski, are you aware of any provisions to keep the inventory in OPIP 3.6.5 up to date? 7 (Witnesses conferring.) 8 WITNESS KOWIESKI: Inventory that you refer to deals with --10 BY MR. MC MURRAY: 11 Q It is the one you pointed out to me, the 12 inventory of various patients in the nursing homes and 13 institutions. 14 A I believe that, my recollection of the NUREG 15 requirement -- I may verify that -- that has to be updated 16 on annual basis. 17 Q And is there provision in the plan for such an 18 update? 19 (Witness Baldwin) Yes. A 20 A (Witness Kowieski) We would like to verify. 21 0 Please do. 22 (Pause.) 23 A (Witness Keller) I refer you to the RAC review at P.3, page 58 of 60. 25 0 Could you repeat that?

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A I refer you to the RAC review at P.3 on page 58 of 60.

Q On the bottom of page 76, gentlemen, you state that the relocation centers, to which persons in special facilities would be evacuated, have not been arranged at the time of the RAC review of the LILCO transition plan.

Do you see that?

- A That is correct.
- Q That is still true, isn't it?

A To our knowledge. We don't know whether it is true or not, but we have not seen any indication that there has been a change.

Q I take it you would agree that the plan is deficient in that regard then?

- A That needs to be completed, that is correct.
- Q Would there have to be agreements with those relocation centers to take the patients from the special facilities?

A The relocation centers would require letters of agreement, that is correct.

- Q Just to clarify, I am talking about the relocation centers for the --
  - A Special population.
  - Q -- special population. And you wou'd expect that

there would have to be letters of agreement with those

particular relocation centers which were going to receive the special population?

A Yes. The relocation centers, under our definition of a couple days ago, have a response function. Their function is to receive, care for, shelter, feed, et cetera. And in this case, we are talking about special populations. It would require a letter of agreement from that function.

Q Thank you.

On page 77, gentlemen, you state that or at least you cite to a portion of the plan that says evacuation of the hospitals will be, if it is necessary at all, or desired by the administrators, would be made using available resources.

Do you see that?

A That is correct.

Q What resources are we talking about there?

A We assumed busses and/or ambulances and ambulettes.

Q Is there any assurance that there would be adequate available resources to conduct this evacuation in the plan?

A The plan does not assure anything. The plan discusses and, as the citation clearly shows, that they

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will make these resources available to the busses using
available resources. There is no commitment of separate
resources for the evacuation of hospitals because the
LILCO plan has chosen, as a protective action, the

primary one, sheltering.

If the administrator of the hospital chooses to not follow the LERO protective action recommendation, the plan has added a feature saying, look, we will help you on an as-available basis.

Our recommendation is you stay right where you are because you have the health care facilities, you have the life support systems for your patients, et cetera. Additionally, you are near the edge of the ten-mile EPZ, you have masonry construction buildings, you have good ventilation systems in hospitals, as a general rule.

The risk is a graded risk and at near the edge of the EPZ is much lower than the risk near the plant.

And for the combination of these reasons, as a planning basis, the LERO plan, transition plan, says, our recommendation is going to be shelter. Okay?

If you choose not to follow that recommendation and you need to evacuate, we will assist you as we can, basically.

Q Mr. Keller, if I understand what you are saying,

the LTLCO plan is telling the hospitals, if you want to evacuate, we will try to provide whatever resources are available, but the plan is not saying, we will provide all the resources to conduct the evacuation?

A I don't read it that way. They may, indeed, provide all the resources for evacuation.

My reading of the plan is that LILCO will supply resources necessary to the evacuation as they are available. If they were available, I presume, reading the plan, they would supply them all.

- Q And the resources may or may not be available?
- A That is correct.
- Q Depends what happens at the time?

A Because there are in the plan commitments of resources for other functions. And I would interpret that to mean that if the resources that LILCO has, if they get letters of agreement, has commitments for are committed to evacuation, A, schools, B, nursery homes, C, adult homes, et cetera, and they were in the process of evacuating those facilities and the total complement of busses, ambulettes, et cetera, had been previously committed and an administrator of a hospital said, I would like to evacuate counter to your recommendation, I would assume that LILCO would say, At this instance, we have no resources available. We will try to get you some

1 as soon as we can.

Q Let's go to contention 73 that is on page 79 of your testimony.

Gentlemen, you are aware, correct, that LILCO has attempted to identify handicapped individuals residing at home using a mail survey, mail cards method, correct?

- A (Witness Kowieski) Yes, we are.
- Q Have you actually read the card involved?
- A (Witness Keller) Yes, I have read the card.
- Q Did you read it in order to evaluate it for its adequacy?
  - A No, I did not.
- Q Are you aware of any information that would help you to determine the proportion of mobility-impaired persons who have actually returned the card?
- A (Witness Kowieski) We don't have any information to this effect.
- Q You have no way of knowing, just from the review you have conducted, whether or not or what proportion of the handicapped individuals in the EPZ have, in fact, returned the cards, correct?
  - A That is correct.
- Q Does FEMA intend to determine that in the future?

(Witnesses conferring.)

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A (Witness McIntire) We may or we may not.

are not sure at this time.

A (Witness Kowieski) I may add, basically what is being done that at certain point, obviously you asked in this case LILCO, where do you stand as far as the survey is concerned of mobility-impaired individuals. And it has been common practice, at least in our region, that when we go to the exercise, we simulate evacuation of at least one or two mobility-impaired individuals.

So at that time, first of all, one should understand, the list is confidential. The list is confidential. So I cannot simply ask, well, send me a list of mobility-impaired individuals. This is a confidential list.

The list, however, will be available, should be available for review, our review, during the exercise.

We we do, just very limited basis, would select several addresses, and we would ask the ambulance or van to just drive around and be able to locate those individuals, if they need a special requirement.

Q That wouldn't help you to determine whether or not handicapped individuals in the EPZ had returned their postcard, correct? That would help you determine whether or not the ambulance driver could get to the tome of a handicapped individual?

A That is correct.

A (Witness Keller) That is correct.

I think it is important to add that what NUREG 0654 requires is that an attempt be made to compile some methodology of identifying the handicapped and what their needs are. Commonly, this mail-in card is used at many sites. There is no way that anyone can require the public to avail themselves of a, I guess, of a service, if you will. There may be handicapped individuals who get the card and say, I am not going to mail it back in. I refuse to.

That is not a fault on the part of any utility.

Just as I tried to say before, a protective action

recommendation is only a recommendation -- no matter who

gives it. And an individual may say, I am going to

follow the recommendation or I am not going to follow

the recommendation.

Our obligation, I believe, is to see that the cards have been sent out and that those responses that have been sent in are, indeed, not thrown away.

But I don't believe that there is an obligation on our part to go around and knock on every door in Suffolk County and say -- in the ten-mile EPZ -- and say, have you sent in your card if you need to.

This plant has gotten some degree of publicity,

and I don't believe there is a resident living in the tenmile EPZ who is not aware of this controversy. It is

possible, but I don't believe that.

If someone didn't get the card, I'believe he has had a reasonable opportunity to avail himself of this, I guess I will call it, service.

Q You are assuming a couple of things, and I believe -- let me run down and see if you agree with me.

You are assuming, first of all, that the individual reads the card that is contained in the brochure or that is sent to him by LILCO correct?

A Either he reads it or someone in his household reads it to him, yes.

Q You are assuming also that the card is adequate to inform the individual that a service is being offered to him and that he should avail himself of that service, correct?

A Yes.

A (Witness McIntire) If I may supplement that, it has been our experience in all types of emergency response activities that most handicapped people have either someone in their home or have made some other arrangements for all types of emergencies, if they need something or n-ed to be taken some where, that most of them have made individual plans.

Q You haven't made any analysis about the Shoreham EPZ and the people in it in that regard, have you?

A That's right. Nor do I have any reason to believe it is different from other parts of the country.

Q The bottom of page 80, gentlemen, you say that the listing of the needs has been compiled from the pre-registration cards -- I'm sorry.

Let me start that over. "However, until the listing of the needs has been compiled from the pre-registration cards, there is no way of ascertaining how many handicapped individuals will need assistance."

Do you see that?

A (Witness Keller) Yes.

Q Aren't there other methods other than the mail survey which can help to determine how many handicapped individuals will need assistance?

A (Witness Kowieski) Ther could be also -Mr. Glass?

(Laughter.)

I'm sorry. I saw Mr. Glass wanted to interrupt me. I am sorry.

MR. GLASS: I just want some clarification.

In the statement here they are dealing with a situation where we are talking about a listing of needs and then individuals asking for assistance.

1 Mr. Keller and Mr. McIntire have just testifed that there 2 may be other ways that people have taken care of their 3 needs. Therefore, I am a little confused by your 5 particular question. I think you seem to be combining 6 two concepts at this point. MR. MC MURRAY: Just to clear your confusion, 8 Mr. Glass --9 MR. GLASS: That would be appreciated. 10 MR. MC MURRAY: -- the question to Mr. Kowieski 11 -- and I will restate it to you, Mr. Kowieski -- is --12 I will try and make it simpler -- what other methods are 13 there for ascertaining the number of handicapped 14 people who might need assistance? 15 WITNESS MC INTIRE: Do you mean contained in 16 the plan or how many are there in the universe? 17 BY MR. MC MURRAY: 18 Let's say how many methods are there that 19 reasonable emergency planners might consider? 20 I am not talking about just in the LILCO plan. 21 (Witness Kowieski) Any method could be 22 supplemented by others and one way, with respect to 23 compiling of list of mobility-impaired individuals, 24 one could also use social organizations, community

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leaders, religious leaders.

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There are many ways that could supplement a survey card. No specific requirement, as far as I know.

1	Q Do you know whether the LILCO Plan provides
2	for such supplemental means of ascertaining the needs of
3	handicapped people?
4	A You are referring to additional methods?
5	Q Yes.
6	A I am not aware of it.
7	Q Let me just put it to you simply. Other than
8	the survey method, does the LILCO Plan provide for any
9	other method to ascertain the needs of handicapped people
10	in the EPZ?
11	A The answer is, no.
12	Q Let's go to Contention 22, on page 11. Contenti
13	22 deals with the configuration of the EPZ, correct?
14	A That is correct.
15	Q Is there any particular part of the RAC review
16	that corresponds to this contention?
17	A If you will allow us to
18	Ω Let me clarify my question so you are absolutely
19	sure what I am asking.
20	A Right.
21	Q Is there a RAC finding that the EPZ as configure
22	meets any requirements you are aware of?
23	A Allow us one minute.
24	(Witnesses confer)
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A (Witness Keller) In J.8 there is the citation that the licensees plan should -- it discusses the plume exposure EPZ, and in other sections of 0654, the plume exposure EPZ is discussed as, quote, a ten mile EPZ.

And within that regard, that kind of goes to this contention. We are not aware of a specific NUREG 0654 criterion that addresses this.

Q The RAC Committee really did not review the adequacy of the EPZ, correct?

A (Witness Kowieski) First of all, it is a given.

NUREG 0654 document is based, at least the planning zones,

10 and 15 mile zones, emergency planning zones, are based

on the EPA-NRC document NUREG 0396, which establishes

criteria with regard to the size of the planning zones.

Mr. Kowieski, did the RAC Committee review the configuration of the EPZ to determine whether or not it met NFC guidelines with respect to its size and configuration?

A Well, again we look at the maps. Designation of the boundaries but if you ask me if we identify and spell out the 10 mile EPZ as shown in the Plan is acceptable, there is not any specific planning criteria element that would require this.

Q This is not anything that the RAC Committee specifically discussed?

A (Witness Baldwin) I call your attention to

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criteria element J.10.B, which requires maps showing population distribution in and around the nuclear facility. This shall be by evacuation areas, and we have found -- the 3 RAC found element J.10.B to be inadequate because the sub-5 areas of these emergency planning areas defined in the Plan which have been broken down in a table for areas F and 7 K, are not shown on a map in the Plan. (Witness Keller) In addition, there was some discussion, which turned out later to be in error, about 9 the fifty mile EPZ -- so called 50 mile ingestion pathway 10 11 EPZ -- and the lack of maps in the Plan, and whether or not 12 it included Rhode Island, or should include Rhode Island, 13 since a previous version had included Rhode Island. 14

We have since ascertained that Rhode Island does not belong in the 50 mile EPZ, so there was that discussion in regard to size of EPZs, and configurations of EPZs.

Let me refer you gentlemen to 10 CFR 5047, C-2.

Do you have a copy, please? A

(Judge Kline provides copy to witnesses)

Thank you, Judge Kline. C-2.

A (Witness McIntire) The page, please?

427. Now, do you have that in front of you? The regulation states that the exact size and configuration of the EPZ shall be determined in relation to local response

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1	emergency response needs and capabilities as they are
2	affected by such conditions as demography, topography,
3	land characteristics, access routes, and jurisdictional
4	boundaries, correct?
5	A (Witness Keller) That is correct.
6	Q Let me ask you this. Have you reviewed the
7	EPZ to determine how it is affected by lets take this
8	criterion by criterion. Jurisdictional boundaries?
9	A We refer you to our testimony to our testimony
10	on Contention 22, page 11 of our written testimony.
11	Q And I am not exactly quits sure what you are
12	saying.
13	A I believe we have testified in the written
14	testimony that the plume exposure, or ten mile EPZ, divides
15	the following villages: Port Jefferson, Zone Q would
16	you like me to continue reading our testimony or
17	Q Is it your opinion that the EPZ as drawn has
18	taken into account jurisdictional boundaries?
19	A Yes.

(Witness'Baldwin) It is taken into consideration the distribution of the population, yes.

Q I am talking about jurisdictional boundaries.

(Witness Keller) It is considered. It is my opinion it has considered them.

(Witness Baldwin) They have considered it in A

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defining those boundaries, yes.

A (Witness McIntire) And we have testified to

that in our prefiled testimony.

Q How have jurisdictional boundaries been considered. What you are stating to me, Mr. Keller, is that you agree that various villages or population centers have been split.

Now, I am asking you how that constitutes consideration of jurisdictional boundaries.

MR. GLASS: I object. I have a grave concern about the form of your question. Concern. Concern by who? By the RAC? By the people who drafted it?

Is that what we are talking about. Or are we talking about what is actually written in the Plan, what is stated therein.

JUDGE LAURENSON: That was a compound question, so the objection will be sustained as to the form.

BY MR. McMURRAY: (Continuing)

Q How have jurisdictional boundaries been considered in the Plan, Mr. Keller?

A (Witness Kowieski) Jurisdictional boundaries were considered among other factors, and again, I refer you to NUREG 0396. On page 17, on NUREG 0396, in Table 1, there is a guidance on size of emergency planning zone. It states: Plume explosure pathway, whole body, about ten mile radius.

And there is a note. Judgement should be used in adopting this distance based upon consideration of local conditions such as demography, topography, land characteristics, access routes, and local jurisdictional boundaries.

So this not limited to jurisdictional boundaries.

It is one of the conditions, one of the considerations.

Q Thank you, Mr. Kowieski. I don't think that was responsive to my question. I am asking you how jurisdictional boundaries were considered in defining the EPZ?

MR. GLASS: I object to the question. You are asking how they were considered in drawing or defining the EPZ? That would be speculation on the part of these witnesses as to what was done by the person who drafted the particular document, and that is where my objection as to the form goes, Your Honor.

JUDGE LAURENSON: Are you asking as to whether based upon the FEMA review they can ascertain this?

MR. McMURRAY: Yes, sir. Based on their knowledge.

JUDGE LAURENSON: Can you answer that question?

WITNESS KELLER: We cannot ascertain how the

Plan preparer considered jurisdictional boundaries.

BY MR. McMURRAY: (Continuing)

Q I take it -- just to do this quickly then, you don't know how the Plan preparer considered demography,

1	topography, land characteristics, or access routes either,
2	right, Mr. Keller?
3	A (Witness Keller) That is correct.
4	Q Now, you have said that the EPZ boundary follow
5	recognizable landmarks, and therefore conforms to NUREG
6	0654 criteria, correct?
7	A (Witness Kowieski) That is correct.
8	Q Those recognizable landmarks include roads,
9	highways, railroads, et cetera, correct?
10	A That is correct.
11	Q What railroads does the EPZ follow?
12	A (Witness Baldwin) It says: e.g., which stands
13	for example.
14	Q Well, I take it that there are some railroads,
15	then, that you believe that the landmarks that the EPZ
16	follows.
17	A (Witness Keller) Regonizable boundaries, such
18	as, as an example of a recognizable boundary, a road would
19	be a recognizable boundary, a highway would be a recognizable
20	boundary, a railroad would be a recognizable boundary.
21	If you interpret that to mean that we said the
22	EPZ follows a railroad, then we have worded it sloppily,
23	I am sorry. I don't think we meant to imply that.
24	What we meant to imply is that a railroad would
25	be an easily recognizable boundary.

1	Q And in your opinion, Mr. Keller, would any road
2	be a recognizable boundary?
3	A It is the, 'any' that I have a problem with.
4	I would say any road, no. Any road would not be a recogniz
5	boundary.
6	Q What criteria would you use to determine whethe
7	or not a road constituted adequate EPZ boundary line?
8	A A road of one, a public road would certainly
9	help. There are roads which are not public, particulary
10	in my country.
11	(Laughter)
12	A (Witness Baldwin) We have said in our testimon
13	too, this additional information that is provided here, the
14	landmarks should be narratively described in the text of
15	the public education materials.
16	Again, for example, such as brochures, wall
17	calendars with maps, telephone book inserts
18	Q Wait a second. We are talking about roads. Mr.
19	Keller, what criteria do you have to determine whether or
20	not roads form adequate EPZ boundary lines?
21	A Most people in a mechanized society recognize
22	a road when they see one.
23	Q So you are saying that any public road forms
24	an adequate EFZ boundary line.
25	A Again, I would not characterize it as, 'any.'

I would think roads of -- depending on local conditions. 1 Some roads are very seldom traveled, some roads have heavier 3 traffic. I would think that roads, reasonably well traveled public roads that are marked would constitute a recognizable boundary which would be adequate for the definition of an EPZ. 7 Q Are any of you experienced with planning principles for drawing jurusdictional boundaries such as zoning boundaries, or land use boundaries, or anything like that? 10 A (Witness Kowieski) Years ago, when I was in the 11 private sector, I used to be involved in work of this nature. 12 Q Wouldn't you agree, Mr. Kowieski, that in drawing 13 a recognizable boundary, it is advantageous to have different 14 land use characteristics on either side of that boundary? 15 A I don't understand your question. 16 (Witness McIntire) Yeah. What do you mean 17 18 by land use characteristics? Q For instance, industrial on one side and residentia 19 20 on the other? A (Witness Kowieski) What happens if there is 21 22 no industry. 23 (Multiple speakers)

JUDGE LAURENSON: We are going to have to go back

to one person talking at a time, though. I think you were

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talking at the same time he was answering.

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BY MR. McMURRAY: Are you aware of any planning principles, Mr. Kowieski, which define --help define the

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adequacy of boundary lines?

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As a matter of fact, we have suggestion from

Mr. McIntire. I have been involved also in another program,

a national flood insurance program, where you develop the

flood inundation maps to simplify.

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So, what you do, you designate the area that

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would be subject to inundation, potential inundation by a hundred year flood. In this case, obviously you deal with a river or ocen, and let's take a river. You develop a cross section. You -- after you develop you draft the cross

section, put it on a computer, and you predict, using the hydrology, the amount of water that is flowing down stream, you develop and you predict the water heights, and based on the water heights and available cross sectional data,

you will determine how far water will flow, and you will draw the boundary, the outlines of the flood. Let's say

hundred year flood, five hundred year floods.

(Witness McIntire) Let me supplement that with a little background information. This mapping program is the largest mapping program in the world. My office has these local maps, and they have done community by community

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here in New York State, for virtually all flood prone communities in the State, and I think almost all on Long Island.

After each map is produced, it is sent to the community, and then members of my staff go out to the communities and explain to the local officials and the general public, the maps, what is shown on the maps, what is indicated on the maps, what the maps indicate.

So, I think that we have a fair amount of experience in mapping.

MR. McMURRAY: Judge Laurenson, I would like to move to strike Mr. McIntire's response. I understand Mr. Kowiesni's was at least marginally responsive, but Mr. McIntire's was far beyond the scope of my question.

MR. GLASS: He had inquired into the background or experience that these witnesses have with mapping and with familiarity with topographical features, and I think that that was certainly responsive to that.

JUDGE LAURENSON: Motion is denied.

Q Mr. Kowieski, is it your opinion that land use characteristics are not relevant in determining the -- how an EPZ should be defined?

A (Witness Kowieski) Land use characteristic?

It could be helpful but is not an only requirement.

Q Let me ask you this, how do you believe demography has been taken into account in defining the EPZ?

A Again, as Mr. Keller already testified, we don't know how it was defined and taken into consideration.

Q Well, I'm asking how do you think that the EPZ meets the criteria set out in 50.47.C?

A (Witness McIntire) We are here to testify on the plan review, not on the drawing of the EPZ, is my understanding.

Q Well, you submitted testimony on the drawing of the EPZ, correct?

A We described the EPZ.

Q And you also say it conforms to NUREG 0654 criteria, correct?

A That was our judgment during the planning review.

Q I'm asking you how it conforms -- are you saying that those criteria as set out in the 0654 are different from 50.47.C.2?

A (Witness Kowieski) Give us a minute.

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(The witnesses are conferring.)

Mr. Baldwin will answer your question.

(Witness Baldwin) What question?

(Laughter.)

(Witness Keller) For the record, the 0654 requirements on EPZ and the reference 50.47 are the same.

That was the last question I think.

Q Thank you, Mr. Keller. Now, in conducting your review did you attempt to determine whether or not the EPZ met these particular criteria? And I don't have to read them through again.

Mr. Keller? You are pointing to somebody else.

A (Witness Keller) Mr. Baldwin is going to address this.

(Witness Baldwin) I think. Yes. We considered in the RAC review this ten mile stipulation.

Q Well, I'm not talking about the ten mile stipulation. I'm talking about the other factors to be considered such as demography, topography, land characteristics, access routes and jurisdictional boundaries.

Were those particular local conditions considered in reviewing the adequacy of the EPZ?

A Yes. And I considered them.

Now, please tell me how you considered demography and how that was taken into account in defining the EPZ?

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A Well, in doing the plan review, since that is what we are talking about right now, I specifically looked at the table with the population distributions in it. I was very interested in the map which showed those planning areas.

And in my particular review, I raised this issue that with respect to areas F and K I believe it is, that the table broke them down and that the map did not, to show which is required by NUREG. That was a particular concern, because if in the course of making a protective action recommendation that could involve evacuation and LERO made the recommendation to affect only part of F or part of K, the decision makers would be unable to determine how many people that affected without a map. They would have to go to a particular table.

Those are the considerations that were involved in the plan review.

Q Mr. Baldwin, when the regulation says that a condition such as demography must be considered in defining the EPZ, what is meant by that? How must -- how should demography be taken into account? What sort of things is the planner looking for?

Mr. Baldwin?

A Well, I, as a --

(The witnesses are conferring.)

Q Excuse me, Mr. Keller. I have directed a question to Mr. Baldwin. You are certainly free to supplement his response.

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A (Witness Baldwin) Could I have you reask the question?

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Q With respect to the requirement of 5047.C.2 that one of the local conditions that must be looked at is demography, what does that mean? In other words, what demographic factors should be taken into account in defining an EPZ?

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A Population size, distribution and characteristics.

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Q Okay. And then once those are known, how does one draw the line?

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A One uses their best judgment to conform to the requirement for a ten mile EPZ.

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Q What is it about population size that helps one define the EPZ?

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A The population that would be affected by a protective action recommendation.

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Q Talking about -- in talking about drawing the roughly ten mile EPZ, what is it about the population size that helps you draw that boundary line?

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A Well, you don't want to affect more people than

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it would be necessary; with particular reference to an evacuation recommendation it's better to have that recommendation affect only those people at risk.

Q At risk, meaning within roughly ten miles?

A Yes, using the criteria as specified in 0396 and 0654 which have been developed by EPA and NRC.

Q Well, let's take an example. Let's say that there is a population center that is a little over ten miles from the EPZ, are you saying -- how are you saying that's treated?

A (Witness Keller) It's basically a judgment.

In some plans, population centers at, for example, ten point one miles are included in the "ten mile EPZ." In other plans, the population centers at nine point five miles have been excluded from the "ten mile EPZ."

It is a judgment that is made on a case by case basis, which is the recommendation I believe of the regulation.

Q So, I think what you are saying, Mr. Keller, then is that the EPZ boundary line tries to incorporate whole population centers and not divide them, correct? And it does so by going in and out.

A Not necessarily. The critical thing about an emergency planning zone is that the population within the zone recognize that they are within the zone or outside of

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the zone. As we have said, the risk is a graded risk. It does not come to some point and fall off to zero.

If the risk on one side of the street has a given value, the risk on the other side of the street is almost the same value. Okay.

The critical issue is to draw the line, as you said, at some point at which the people at risk, the residents at risk, can recognize. I think it is reasonable to assume that no matter where you drew the line, at whatever distance from the site you drew the line, if a protective action recommendation were to be made, to take a protective action up to that line, people on the other side of the street would voluntarily take the same protective action.

(Witness Baldwin) If I could follow that up.

That is why we have stated in our written testimony that
these land marks should be narratively described in the text
of the public education brochures and public information
so that one can determine where they reside with respect to
the boundaries of that EPZ.

(Witness McIntire) And I would like to make a further comment on Mr. Keller's comment about reasonableness.

For example, at the Indian Point EPZ, a conscious decision was made by the State not to include the Ossinging Correctional Institution. That's about nine point six miles if I remember correctly from Indian Point.

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But because of the type of facility it is, the decision was made again to go to sheltering rather than to evacuation.

MR. MILLER: Judge Laurenson, I assume that our morning time period is just about up; is that correct?

I am asking because I have a couple of wrap-up matters from the documents that were talked about yesterday, including -- I would like to introduce some of the documents into the record.

JUDGE LAURENSON: Okay. This is the time that we ordinarily take our luncheon recess, so please proceed.

MR. MILLER: First, Judge Laurenson, I have a very limited number of questions regarding the documents that were provided by Mr. Glass yesterday when I had concluded my questions. And I do not plan to introduce these into the record. I just want some clarifying questions.

### CROSS EXAMINATION

BY MR. MILLER:

Q Mr. McIntire, I will direct these to you.

A (Witness McIntire) Excuse me. I don't have a copy of them. Could I borrow someone's?

Q I'm talking about the July 9, July 11 and July 12, 1984 letters.

A That's what I'm talking about.

(Mr. Glass furnished the witness with letters.)

I have them.

Q Okay. Mr. McIntire, in the July 12, 1984 letter #11-8-SueT 1 from Mr. Speck to Mr. Petrone, there is a statement in the middle of the letter which says, "On June 10, 1984, FEMA received a request from NRC to conduct a full RAC 5 review of Revision 4 of the LILCO plan." 6 Do you see that? 7 Yes, I do. Was the request made of FEMA on June 10, 1984 9 to review Revision 4 of the LILCO plan? 10 No. That's incorrect. That should have been A 11 July. 12 July 10, 1934? 13 It's my understanding it is supposed to be 14 July 10. 15 Q To your knowledge, Mr. McIntire, FEMA had not 16 received a Revision 4 to the LILCO plan prior to -- well, 17 why don't you tell me? 18 To your knowledge, when did FEMA receive Revision 19 4 to the LILCO plan? (The witnesses are conferring.) 21 (Witness Kowieski) I don't remember exactly. 22 It was a week, a week and a half ago. Roughly around July 4th? 24

(Witness McIntire) Yes.

The only other question I wanted to ask about

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these three letters, Mr. McIntire, I take it from my reading of the July 11, 1984 letter from Mr. Krimm to Mr. Jordan of the NRC that it is FEMA's position that a full RAC review of Revision 4 could not be completed and provided to the NRC prior to November 15, 1984; is that correct?

A Yes. The letter states for these reasons we believe that we cannot furnish a finding on Revision 4 of the LILCO Transition Plan earlier than November 15, 1984.

Q And you were involved in that decision, sir?

A I was involved in discussions leading up to the drafting of this letter.

Q You were involved in deciding that it would take until November 15, 1984 to provide a RAC review of Revision 4; isn't that correct?

A I provided information about the workload and other priorities within the Region, and I made recommendations regarding the time frame for the completion of the review.

MR. MILLER: Thank you. Judge Laurenson, at this time the County would like to offer certain of the documents from yesterday into evidence.

Let me just give the numbers. We would like to move into evidence SC-EP-79, 81, 82, 83, 87 and 90.

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JUDGE LAURENSON: And just to clarify the record, the County is not offering in evidence Suffolk County Exhibit EP-76 through 78, 80, 84 through 86, or 88 and 89; is that correct?

MR. MILLER: That's correct.

JUDGE LAURENSON: Is there any objection to the documents that the County is offering in evidence being received?

MR. GLASS: If we could have just one minute, Your Honor.

(Mr. Glass is going through documents.)

The only concern I have is with Document 87, because there seems to be no foundation. The witnesses were not aware of who had drafted this particular document nor did they seem to have much input into it. And there were some questions asked about certain portions, and those are already in the record.

But as to the remaining portion of the document,

I just don't know where there is a foundation. And I have

not an opportunity to look to see whether they are accurate,

the rest of the statements, nor has there been any testimony
whether this material is accurate or not.

MS. MC CLESKEY: LILCO also objects to the admission of EP-87 basically for the same reasons Mr. Glass just stated. Mr. McIntire stated that he had seen it during

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preparation of the FOI request responses, but no one on the panel who had even prepared the chronology, and there was no indication that any of these people have relied on it in any way in preparing either the RAC report or their testimony.

MR. MILLER: Judge Laurenson, with respect to this document I offer it into the record because I think it sets in context very well the involvement of FEMA in the case. In addition, although it's true that Mr. McIntire seemed to be the only person on the panel familiar with the document, I believe I established that no one on the panel had any reason to disagree with the chronology that is set forth in this document.

JUDGE LAURENSON: What does it prove, though?

MR. MILLER: I think it sets forth FEMA's involvement with the Shoreham plant. Certain particular issues
go to the RAC review process in this document. It sets in context the involvement of FEMA as an agency of the government involved in the review of the LILCO plan and with the Shoreham plant.

JUDGE LAURENSON: But it has to be relevant to some decisional aspect of the case to be received in evidence. And I don't see, on the face of it, what the relevance is to any particular contention that the County has offered.

#11-12-SueT1

MR. MILLER: There are portions of the document that go to the RAC review process. I didn't try to go through and glean out particular portions. I will be glad to point those out if that makes a difference to the Board's ruling.

Basically, I left the document intact without pulling it apart and offering Pages 3 or something like that. Page 3 has discussion about the review of Revision 0 of the plan. There is discussion also on Page 3 as to FEMA's position regarding that review, the earlier review of the LILCO plan.

There is discussion on Page 7 regarding the RAC review of the LILCO plan. I simply didn't try to go through and just pull apart the pages.

JUDGE LAURENSON: Are there any objection to any of the other exhibits that have been offered?

MR. GLASS: As to 79, 81, 82, 83 and 90, no, there are not.

MS. MC CLESKEY: LILCO has no objection other than to 87.

JUDGE LAURENSON: Does the State have any objections?

MR. ZAHNLEUTER: No objection to any of the exhibits.

(The Board members are conferring.)

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JUDGE LAURENSON: The objection to Suffolk County Exhibit EP-87 is sustained. All other exhibits are received in evidence.

For the record, we will receive into evidence Suffolk County Exhibits EP-79, 81, 82, 83 and 90.

(The documents previously marked for identification as Suffolk County Exhibits EP-79, 81, 82, 83 and 90 were received in evidence.)

Federal Emergency Management Agency

Region II

26 Federal Plaza

New York, New York 10278

23 NOV 1983

MEMORANDUM FOR: Frank P. Petrone, Regional Director

Philip McIntire, Chief

Natural and Technological Hazards Division Roger B. Kowieski, Chairman

FROM:

Regional Assistance Committee

SUBJECT:

Review of the LILCO Plan for the Shoreham

Nuclear Power Station

On September 28, 1983, the Federal Emergency Management Agency published in the Federal Register the proposed rule, 44 CFR 350 entitled "Review and Approval of State and Local Radiological Emergency Plans and Preparedness". This rule became effective as of October 28, 1983.

This rule establishes policy and procedures for review and approval by the Federal Emergency Management Agency (FEMA) of State and local emergency plans and preparedness for coping with the offsite effects of radiological emergencies which may occur at commercial nuclear power facilities.

Specifically, this rule under 350.1, Purpose, states:

"The purpose of the regulation in this part is to establish policy and procedures for review and approval by the Federal Emergency Management Agency (FEMA) of State and local emergency plans and preparedness for the offsite effects of a radiological emergency which may occur at a commercial nuclear power facility. Review and approval of these plans and preparedness involves preparation of findings and determinations of the adequacy of the plans and capabilities of State and local governments to effectively implement the plans."

Furthermore, 350.5, Criteria for Review and Approval of State and local Radiological Emergency Plans and Preparedness states:

> "(a) Section 50.47 of NRC's Emergency Planning Rule [10 CFR Parts 50 (Appendix E) and 70 as amended] and the joint FEMA-NRC Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (NUREG-0654/FEMA-REP-1, Rev. 1, November 1980) which apply insofar as FEMA is concerned to State and local governments, are to be used in reviewing, evaluating and approving

State and local radiological emergency plans and preparedness and in making any findings and determinations with respect to the adequacy of the plans and the capabilities of State and local governments to implement them. Both the planning and preparedness standards and related criteria contained in NUREG-0654/FEMA-REP-1, Rev. 1 are to be used by FEMA and the NRC in reviewing and evaluating State and local government radiological emergency plans and preparedness. For brevity, only the planning standards contained in NUREG-0654/FEMA-REP-1, Rev. 1."

Since 44 CFR 350 as well as NUREG-0654, FEMA-REP-1, Rev. 1 provides only guidence on review and approval of the plans developed by the State and local governments it was necessary for us to make certain assumptions in reveiwing the Shoreham plan developed by the utility (LILCo).

According to this plan, LILCo intends to deploy an organization (Local Emergency Response Organization, LERO) comprised of its employees to perform duties normally performed by the local authorities.

Emergency Response rian for the Shoreham Reclear Power Station the following assumptions have been made:

- LILCo will be given the appropriate legal authority to assume menogeneous and deplementation of an offsite emergency response plan.
- All LERO personnel identified in the plan will substitute for response by the state of the shoreham nutlear lower station at this time.
- This LERO plan does not reference the New York State Radiological Emergency Preparedness Plan (July, 1981) and it has been submitted without a State Site Specific Plan. Hence, there are no provisions stated or implied for participation by New York State.

These assumptions are necessitated by the following:

- By resolution 1196-83, adopted on February 17, 1983, the Suffolk County Legislature determined that the County of Suffolk would not participate in offsite emergency Planning for SNPS.
- Governor Mario Cuomo's position that "a preparedness plan which relies solely and entirely upon private utility workers cannot (emphasis added) provide the degree of security necessary to conclude that the public health and safety of the region's residents are adequately protected." See Governor Cuomo's letter to NRC Chairman Palladino of October 4, 1983 (attachment 1).

• Section 1.4 "Legal Authority; Establishment of a Local Emergency Response Organization" from the LILCo Transition Plan (attachment 2).

I intend so use the above assumptions while consolidating the comments from the comments and then deliberating them at a meeting of the Regional Assistance Committee.

If you find I need to modify or change the assumptions to have a better representation of the agency's policy, please advise me at your earliest convenience.



## Federal Emergency Management Agency

Region II 26 Federal Plaza

New York, New York 10278 JAN 2 4 1984

MEMORANDUM POFI:

Somel W. Speck, Associate Director State and Local Programs and Support

FROM:

SUBJECT:

Shoreham Plan Review

I appreciated the opportunity to meet with you on Jaunary 19 to discuss the implications of the recent events on the RAC review of the LILCO Transition Plan for Snoreham. As you know, Region II is utilizing a substantial amount of staff time reviewing Revision 2 and 3 of this plan.

On Tuesday, January 17, 1984, Governor Mario M. Cuomo's Special Counsel appeared before the ASL3 in the Shoreham Nuclear Plant proceedings and on January 23, 1984 I received a letter from Mr. Palomino, copy attached.

The State of New York stated its opposition to the approval of LILCO's Transition Plan for off-site emergency preparedness for Shoreham. The State raised three issues in this filing with the Board.

- (1) It is the position of the State of New York that LILCO lacks the legal authority to implement its Transition Plan.
- (2) The State of New York further stated that the ASLB does not have jurisdiction to rule on contentions 1 through 10 (legal issues) presently before the Board. It is the position of the State of New York that any ruling by the ASLB on this issue would violate the rights reserved to the State under the tenth amendment of the U.S. Consitution, and any challenge to the State's interpretation of the contentions related to LILAD's legal authority must be heard in a State Court.
- (3) The last point made by the Governor is that the State has concluded that the LILCO Transition Plan is inadequate and not capable of implementation. Therefore, the Governor has stated that the Plan cannot assure the reasonable protection of the public in the event of a nuclear accident.

These three points have important ramifications that should be considered before the completion of the RAC review of the LILCO Transition Plan. It is counsel's opinion that FEMA should not take any position selection to the forum in which challenges to the State's position may be heard.

As you know I, and the agency, have consistently raised the point that there is a need to resolve the issue of IIID's legal authority; and that the State was the appropriate organization to resolve this question. The State has now made its position known on this matter. FEMA, I believe, should also give careful consideration to the Governor's statement that the Pian cannot reasonably assure the protection of the public.

The issue of most direct concern to this office relates to the legal issues as stated in the contentions, and as referenced by the Governor's representative in the prepared remarks and the bar in our present review of the LILOU has prepared remarks and the bar in our present the utility has the legal mutinority to carry out the Plan as presented. This assumption was made in order anthority to carry out the Plan as presented. This assumption was made in order to allow the RAC members to proceed with the technical review of the Plan until to allow the RAC members to proceed with the technical review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved. If we continue our review, in light of such issues were addressed and resolved the Plan and to finalize the review based on the lack of legal authority.

In light of these recent developments and, after consultation with the RAC Cheirman, Regional Counsel and Chief, Natural and Technological Hazards Cheirman, Regional Counsel and Chief, Natural and Technological Hazards Division, we believe this RAC review of the LHCO Transition Plan for Shoreham may be counter productive to all particular and response will be greatly whether the review should continue. Your early response will be greatly appreciated.



# NUCLEAR REGULATORY COMMISSION WASHINGTON, D. G. 20065

January 26, 1984

Mr. Samuel W. Speck
Associate Director
State and Local Programs and
Support
Federal Emergency Management Agency
Washington, DC 20472

Dear Mr. Speck:

This is in response to your letter of January 25, 1984, inquiring as to whether FEMA should continue, modify or terminate its review of the LILCO eff-site emergency plan for the Shoreham facility. In that FEMA's review will be an essential ingredient in the Licensing Board's ultimate determination on the adequacy and implementability of LILCO's proposed emergency plan, I would request that FEMA implementability of LILCO's proposed emergency plan, I would request that FEMA continue its review of the plan. In addition, because of the schedule previously set by the Licensing Board in the ongoing Shoreham proceeding, I would appreciate every effort you could make to insure that FEMA's review of the LILCO plan is completed by the previously agreed-upon date of February 1, 1984.

Thank you for your assistance in this matter.

Sincerely,

Executive Director for Operations



## Federal Emergency Management Agency

Washington, D.C. 20472

FEB 0 3 1984

MEMORANDUM FOR: Frank P. Petrone

Regional Director Region II (Naw York)

FROM:

Programs

SUBJECT:

Shoreham Plan Review

This is in response to your memorandum of January 24, 1984, which questioned whether the Regional Assistance Committee (RAC) review of the Long Island Lighting Company (LILCO) Transition Plan for Shoreham should continue.

On January 25, 1984, we asked the Nuclear Regulatory Commission (NRC) whether in light of Governor Cuomo's interpretation on the legal authority issue, the Federal Emergency Management Agency (FEMA) should continue, modify, or terminate the NRCrequested review of the LILCO Plan. On January 26, 1984, NRC responded by requesting us to continue the review. A copy of their response is attached.

Should you have any questions about this, please feel free to call.

Attachment As Stated

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Joyce Peldman (Official Reviewer)	5%	Smalth Physicist	08-12	Paul A. Giardina (Official SAC member) Regional Radiation Representative GH-14		5
Roger B. Kowieski (Official RAC mem- ber)		Chairman, Begional Aeristance Commit- tee	<b>9</b> +14	Philip McIntire Chief, Natural and Technological Sazardo Division	2	6

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JUDGE LAURENSON: Is there anything else on behalf of the County at this time?

MR. MILLER: Judge Laurenson, are we being given time to continue with our cross-examination, because we certainly would welcome that opportunity?

JUDGE LAURENSON: I think under the scheduling that we have set, after we take our lunch break we are going to come back and hear the cross-examination of the State and of LILCO. We will allow FEMA to conduct redirect examination.

And to the extent that there is still time remaining today we will continue with the questioning of the FEMA panel. We will specifically indicate that we will not hear the LILCO testimony on Contention 92 today. But we will take whatever time is available this afternoon to question the FEMA witnesses.

To the extent that the County may not have been able to inquire into certain areas or contentions on the time that has been given, we will not hold to a strict rule on recross examination on that.

1 MR. GLASS: It is my understanding that once 2 FEMA would complete its redirect, we would then go 3 back to the county starting its recross? JUDGE LAURENSON: Yes. 5 MR. GLASS: Would there be any objection to 6 my just reserving my redirect until, if I can give the 7 Board a fair estimation and then proceeding in that manner? 9 JUDGE LAURENSON: Unless there is an 10 objection, that is acceptable to us. 11 MR. MILLER: We have no objection. 12 JUDGE LAURENSON: Let's proceed on that basis. 13 MR. MILLER: Judge Laurenson, I assume what 14 you are saying is that once there has been an opportunity by New York State and LILCO, then, to ask questions of the 16 panel, then we will go back to the county, and we will 17 be able to inquire into areas that we have not been 18 able to inquire into yet with these witnesses. 19 Is that correct? 20 JUDGE LAURENSON: That is " lat I said. 21 MR. MILLER: Thank you. 22 JUDGE LAURENSON: Is there an objection to 23 that? MS. MC CLESKEY: I have a question, Judge 25 Laurenson. Do you anticipate that the other parties will

go around again this afternoon following the county's resumptioning of questioning; if they ask about issues that they haven't asked about previously, I have a concern that we may have additional questions.

JUDGE LAURENSON: I am sure that is true, but on the basis of the representations made to us by the county so far, my understanding is that there isn't going to be any time for anyone else to conduct any questioning this afternoon.

However, since all of these witnesses will be back in August, I think we will just have to work that into the schedule at that time.

MR. GLASS: I would have an objection to that, Your Honor. You have encouraged the parties throughout to negotiate their own agreements.

FEMA, in good faith, entered into an agreement, and there is such a letter of agreement, I think, on file with the Board that particular issues were going to be addressed at this time and that the other issues, remaining issues, were going to be addressed at the next appearance, and that it was not an open-ended forum.

I would be very hesitant to enter into any more agreements such as this if I am to find at the last minute I am going to be -- the agreements are going to

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be mooted.

JUDGE LAURENSON: The problem is, you made an agreement, but that didn't have anything to do with the availability of time. You may have set a schecule, but if, in fact, it took more than one week to complete the questioning of the witnesses on this testimony and you are not going to make them available at any time until August 14, then we have to continue with what we have before us now.

MR. GLASS: Based on your Honor's previous rulings -- and I am not looking to hold the county to strict limits -- but based on the Board's previous rulings and what I feel is the Board's intention to bend over backwards to have accommodated the county recently, we have limited our objections in a lot of areas where the county has been quite repetitive.

The county has repeatedly asked questions of the witnesses after they have responded and asked it three or four times because they wanted to use a particular word.

I think in some cases they have just worn the witnesses down where the witnesses could not answer a yes or no, gave their explanation three or four times on the record, and then finally just to be rid of the question, finally said yes or no, whatever it was.

I think this is not helping the Board. It is not helping the parties. I feel quite sorry for the parties who have to write findings in this particular matter.

JUDGE LAURENSON: How about the Board?

Let me just clarify what I thought I had said before.

That is, that under the schedule that we have talked about for this afternoon, that following the rights to New York, to LILCO, and to FEMA, if they wish to exercise them, to question this panel of witnesses, we would turn the questioning back to Suffolk County for the rest of today. I haven't said anything beyond today.

And then I have indicated, in response to

Ms. McCleskey's question, that she wanted to be able

to follow up on any questions that may be asked by

the county on this recross, if that would be permissible,

and I indicated that we would build that into the schedule.

I have not indicated at any time that the county would be given any right to question these witnesses about this testimony after today. And that is all we have said up to this point.

If the county wishes to request additional time, that is another matter that I think we have to hear under

the procedures that we set forth on Tuesday morning.

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MR. GLASS: My only concern is that the issues that were designated for this week would be closed at the end of this week. That is my concern.

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JUDGE LAURENSON: It would be nice if we can do that. I don't know that we can make any such guarantee at this time. We will have to see where we are by the end of today.

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With that, we will take our luncheon recess and we will reconvene at 2:00 p.m., begin the

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questioning by Mr. Zahnleuter.

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> (Whereupon, at 12:45 p.m., the hearing was recessed, to reconvene at 2:00 p.m., this same day.)

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#### AFTERNOON SESSION

(2:03 p.m.)

JUDGE LAURENSON: We are back on the record now.

Before we begin the cross-examination of the panel by Mr. Zahnleuter for the State of New York, I had just one question of clarification for the record.

That is, that Mr. Kowieski has made a point during this testimony of the fact that the FEMA RAC committee did not review or compare the prior Argonne evaluation of Rev 0 in conjunction with the RAC review of Rev 3, and yet on the RAC committee and on this panel of witnesses, Dr. Baldwin, who is employed by Argonne, which did the review of Rev 0 back in June, I believe, of last year -- I thought that perhaps we should have an explanation as to the role played by Dr. Baldwin in this RAC review and his contact with Argonne National Laboratory and whether or not there is any similarity or whether he had any consultation or what the precise procedural arrangement is in conjunction with Argonne's position on this RAC committee.

WITNESS BALDWIN: Judge Laurenson, to give
you a little background, I am employed by Argonne
National Laboratory, and I am located here in New York.

And last summer, I believe it was in June of last year that they did this review for -- we have a contract. Argonne National Laboratory has a contract with FEMA headquarters to do radiological emergency preparedness support work with FEMA for all regions of the country.

And I, in this location, have worked with Region II out of New York and Region I in Boston.

I was not in Illinois last year when they did the other RAC review, except for a short visit out there on another matter.

MR. GLASS: Dr. Baldwin, did you misspeak?

It was not a RAC review.

WITNESS BALDWIN: That is true. I misspoke.

The review that was done by Argonne for FEMA was done for headquarters on revision 0.

JUDGE LAURENSON: Do you mean headquarters of Argonne or headquarters of FEMA?

WITNESS BALDWIN: Headquarters of FEMA.

JUDGE LAURENSON: By the main office of Argonne which is in Illinois?

WITNESS BALDWIN: That's right. That's right.

By a group of people in Illinois that reviewed revision 0.

And as I say, I was not involved at all in that

technical review.

Later, when Region II was requested by FEMA

in that process.

headquarters to review the -- to do a RAC review,

Mr. Kowieski and Mr. McIntire asked me to be involved

I did not ever review -- they asked me not to review the other Argonne comments so that I wouldn't be influenced by what was contained in those comments, and I then conferred with my superior in Illinois, Mr. Terry Sorrels (phonetic), Dr. Terry Sorrels, and advised him of this, and he said, yes, that is absolutely right, we want no conflict between the two.

And as a result, I have never reviewed -- I have never read those comments. I have them -- I have seen them, but I have never read them.

JUDGE LAURENSON: Let me just follow up by asking Mr. Kowieski why the RAC committee wouldn't review those comments at some point during its deliberations?

WITNESS KOWIESKI: The RAC committee, as a group of experts coming from federal agencies, we have expertise to review the plan, all aspects of the plan.

We felt, in Region II, that to provide for a full independent review, the RAC should not go back to Argonne comments and read them or compare them so they won't be in any way influenced by initial review performed by Argonne.

At a later date, we felt it was irrelevant.

And the reason I am saying it was irrelevant to go back to Argonne review, because it was already three reiterations of the plan. What Argonne did reviewed revision 0.

Since that time three changes took place, three revisions took place.

So in our opinion, it was very little benefit for us to go back and see and look for comments on revision 0 since already three reiterations, three revisions took place since that time.

JUDGE LAURENSON: Thank you.

At this point we will turn the questioning over to Mr. Zahnleuter for the State of New York.

## CROSS-EXAMINATION

#### BY MR. ZAHNLEUTER:

Q Dr. Baldwin, in your resume you describe yourself as a demographer/economist.

Could you describe what kind of occupation that is?

A (Witness Baldwin) I have done economic and demographic studies for engineering projects. I have worked for Argonne National Laboratory since 1972, from 1972 to 1979, doing demographic and sociological work as it relates to environmental and energy issues.

After leaving the laboratory I moved east and worked with two engineering consulting firms doing

demographic and economic feasibility projects, analyses for civil works projects. And that work entails analyses of population impacts and growth changes as it relates to employment developments, job developments, and changes in local economies.

Q Under the heading of professional experience, you state that your present position is environmental systems engineer.

Do you hold any educational degrees or do you have any experience in the field of engineering?

A No, with the exception of the experience that I have had working with two engineering firms and the association I have had with a number of engineers at Argonne National Laboratory.

The clarification on that title is that that is my job classification title at the laboratory.

Q Mr. Keller, I note that the RAC report contains a rating, which I will call adequate provided that or as called "provisionally adequate" sometimes.

Do you understand the rating I mean?

- A (Witness Keller) Yes.
- Q Were any of these provisionally adequate ratings decided upon at the January 20th RAC meeting?

A My recollection is that there were -- I don't -- some of them were decided upon at the January 20 meeting.

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1 I believe some were added later. 2 Do you have an idea of the proportion which 3 were added later? I do not, no. 5 Would it be more than half? I would think less than half. 7 Do you know how the adequate provisional ratings came to be included in the final RAC report? A As I have already testified, after the 10 January 20 meeting, I was not directly involved. That 11 involvement was primarily Mr. Baldwin with the help of 12 Mr. Acerno and Mr. Kowieski. 13 My understanding is -- and it would only 14 be from hearsay, and if you would like, I will continue, 15 but I would think that question would be better 16 addressed to either Mr. Baldwin or Mr. Kowieski. 17 Mr. Kowieski, would you like to supplement that? 18 A (Witness Kowieski) As Mr. Keller stated, at 19 RAC meeting on January 20, we discussed adequate and

We also identified what needs to be corrected in the plan, in cases there was a need for such a correction when adequate rating was given.

inadequate ratings. We discussed our RAC comments and

we agreed on the final ratings.

After January the 20 meeting, when I sit down

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with Mr. Baldwin and Mr. Acerno, we tried to develop a definition, tailor language on our cover page, like a legend, how to describe what would constitute the best description, the best description of adequate, inadequate, adequate with legal concerns.

So when we finished with our legend, we went through the RAC comments again, as a whole, 60 pages, to make certain there is a consistency, when we gave adequate rating, that we did not miss anything, whatever was discussed during the January the 20 meeting.

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So, to answer your question, if you asked me: Well, did RAC actually for each element rated adequate, did RAC actually use the term, 'provisional,' I cannot testify to this for each single element rated adequate with provisional. If we used the term, 'provisional.'

What I can assure you that we agreed on modifications that are needed to the Plan, even if the element was rated adequate. However, the language itself, the term, 'provisional,' 'provided that,' I would not -- I wouldn't be able to testify for this for every element identified in the Plan by the RAC review, and we have a total of 17.

If 17 elements rated adequate with provisional, with caveat, if this was discussed at the January 20th meeting. I don't know if I answered your question.

Q Would you be able to tell me if you believe that the RAC members when they left the Jaquary 20th meeting had an idea of which elements were going to be rated, 'adequate, provided that?'

A They had a pretty good idea, yes. As a matter of fact, on May the 10th, the RAC Committee met again, before we met with LILCO on May 11th. There was not even one single issue raised about adequate ratings with caveat, 'provisional.'

Q Well, Mr. Keller, is it your understanding that when the RAC members left the January 20th meeting, they

also knew which criteria elements would be rated, 'adequate, provided that?'

A (Witness Keller) No, it is not, and I think Mr. Kowieski addressed this. I think he said that they had not decided on the word, 'provided that,' 'adequate, provided that,' until later.

What my recollection is that on those elements which ultimately ended up adequate, provisionally, or however, the RAC left the meeting with the understanding it was going to give an A as opposed to an I, which it did, and within the body of the discussion there was going to be wording which suggested strongly that a Plan revision would be needed.

In my understanding of what Mr. Kowieski just said, is that in their formulation of the exact words which had finally been approved, and in order to provide some consistency, they adopted this, 'adequate, provided that' the following changes are made.

These -- the substance, the requirements for change were discussed at the RAC meeting, and the RAC members when they left knew or understood that these requirements for change would be in the report.

And, Mr. Kowieski, you were the one who then identified those items for subsequent change, and you put them into the RAC report as 'adequate, provided that.'

A (Witness Kowieski) Again, it is my responsibility

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to assure consistency.

And it was my responsibility to review, go through the entire report, to assure there is a consistency, and in certain cases I felt that this should be somehow underscored, and I accomplished this by inserting the language, 'provided.'

But again, I want to make it clear, that it is possible that at the January 20th meeting, some of this language was already in.

So, you know, I don't want to exclude that some of the language which provided that certain modifications to the Plan would be made did not appear in the workable document, the draft document, which was distributed at the January 20th meeting. I hope you understand this.

I hope that we have an understanding. At least, I am trying to accomplish this. That the language itself, as Mr. Keller stated, the agreements, what modifications have to be made to the Plan, agreements and consensus was reached at the January the 20th meeting. Is it clear?

Q I would like to refer you to page 10 of your testimony, which deals with Contention 21. In the last paragraph, it states that the effectiveness of the public education program would be evaluated at an exercise of emergency response preparedness at Shoreham.

My question is: How would FEMA evaluate the

effectiveness of a public education brochure?

A I will be glad to answer your question. What we have done in the past during the exercises, we would sample at random population within the ten mile EPZ.

I would assign each observer that after they finished their regular task they would sample, lets say each one of them five or ten residents, that some of them would go to various public building facilities, the restaurants, real estate offices, golf courses, every possible place that would be involved, or would have to follow the recommendation made by decision-maker.

And we would ask those individuals, interview individuals the questions of this nature: Are you aware that your facility, that you are located within the ten mile EPZ. We would ask them if they understand what kind of warning, how the warning came about, the sirens, or route alerting, and how they should respond. If they inderstand what is necessary. What would be the next step?

And obviously, we would expect they understand there is an emergency broadcast system, that they are supposed to turn on the radio to EBS and listen for instructions.

So, basically the effectiveness is if people understand what they are supposed to do in case of an emergency. This would be evaluated during the exercise.

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Q With respect to single single language minority groups, how would the effectiveness of the public education program be evaluated at an exercise?

A We have not attempted, at least in our Region II, to evaluate effectiveness of the public education program for single minority language group. However, I want to make it clear that according to the Guidance Memorandum No. 20, that was issued by FEMA Headquarters Office that deals with the foreign language translation of public education brochures and safety messages, this requirement applies only if the single minority -- single language minority group exceeds five percent of the total population.

We had an instance -- an example in Rockland County, that is within the ten mile EPZ of Indian Point, there were issues raised about single minority language group. The study was conducted by the utility and revealed it was the single minority group constituted less than five percent.

So, we didn't feel it was an issue, so we never attempted really to go any further. We rely on the information provided by the State and the County that special efforts will be made by religious leaders, community leaders, to educate those individuals on emergency action plans.

A (Witness Keller) I would like to clarify something. I believe, while listening to Mr. Kowieski's

oral testimony he said that Guidance Memorandum 20 requires
other translations -- other languages -- I think he said
five percent of the total population. Our written testimony
says five percent of the citizens of voting age, and I believe
that to be the correct characterization. I believe he
misspoke in his oral.

A (Witness Kowieski) That is correct.

Q Mr. Kowieski, I may have misunderstood your answer, because I thought that your answer pertained to Indian Point, but can you tell me with respect to Shoreham, do you know if five percent of the citizens of voting age in Suffolk County are members of a single language minority?

A We also use census data based on 1980 population estimates, and if I recall, there is no more than four point eight of the total population of Spanish origin.

A (Witness McIntire) And to clarify that further, that four point eight percent is of Spanish surname. And I believe the correct title is that does not necessarily mean that all the Spanish surname people out here do not speak English. We think the percentage is much lower, the number that are really single language persons.

Q Couldn't that also mean that someone who did not have a Spanish surname might speak a foreign language?

A It might, but the wording in Guidance Memorandum

20 is single language minority, so we are not totalling all

2	Each single minority must constitute five percent
3	of the population of voting age people.
4	Q Was the Spanish language your only concern when
5	you reviewed the census data?
6	A (Witness Kowieski) No, but this is the largest
7	group that was singled out in the census data.
8	Q Did the census data break down the information
9	by citizens of voting age?
10	A (Witness Baldwin) No, it didn't.
11	Q Do you think that persons of non-voting age
12	who are members of a single language minority group, for
13	example, persons under 18, would benefit from translation
14	of a public education program during a nuclear emergency?
15	A They could, if it was warranted and required.
16	And I think as Mr. Kowieski has testified, a determination
17	of that number that meets the criteria set forth in
18	Guidance Memo 20, has not been made at this time.
19	There is a list in Guidance Memo 20 of those
20	counties and locations which are affected by this guideline,
21	and that list is for operating plants. Shoreham and Suffolk
22	County are not included on that list because, as we know,
23	Shoreham is not an operating plant.
24	A (Witness McIntire) And to add further to your
25	question, one of the basic presumptions that is made is

of the minority speaking population to reach the five percent.

that people below voting age, which is 18, would probably, in most cases, be living with parents or other relatives, or certainly an older person.

Q Well, Mr. McIntire, isn't it true that if the person who is under 18 spoke a single language, that the parents would also speak a single foreign language?

A My presumption is it would probably be the other way around. That the general pattern of this country over the years has been that the parents tend more to speak single language, while the children who grow up in this country tend more to be bilingual.

That was the case in my Mother's home, I know that.

## (Laughter)

Q Mr. Baldwin, I would like to clarify something that you just told me. Did you say that there has not been a determination that has been made yet about the five percent figure in GM 20?

A (Witness Baldwin) My understanding is that is correct with regard to Suffolk County, that is right, as it pertains to this particular guidance that if five percent of the citizens of voting age in a political subdivision are members of a single language minority, then translation is warranted. And that determination has not been made at this time.

We have made a deter -- well, we have looked at the census data for 1980, and ascertained that four point eight percent of the total population of Suffolk County is shown to be there as Spanish origin, and that is all we can say at this point.

Q If that data showed that it was five point two percent, would that satisfy you? Would that meet the five percent cutoff?

A (Witness McIntire) It would be pure speculation at this point in time. If we saw something like that, we would certainly inquire further into the exact population distribution out here in conformance to Guidance Memorandum 20.

Q I am sorry. I asked that question in a poor manner. What I meant was, you said that four point eight percent of the people had Spanish surnames, and I think now, Mr. McIntire, you are telling me that if five point two percent had Spanish surnames, then you would look further to see if, indeed, they were a single language minority group?

A Probably. That -- as I said, that is speculation, but I am convinced that we would make further local inquiries if the percentage did reach five percent or more.

Q Now, let's assume for the time being that the percentage is below five percent. Are you aware of the

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in that event?

5	be specific, I have to refer to Guidance Memorandum No. 20.
6	Q I have a copy in front of me, but it is marked.
7	Do you all have a copy?
8	A Yes, sir. Yes, sir, I am ready.
9	Q Mr. Kowieski, can you tell me if the LILCO Plan
10	that you reviewed contains any of these provisions that
11	are recommended in Guidance Memorandum 20?
12	MR. GLASS: Objection. What is the relevancy
13	at this point, if there has already been indicated there
14	is no need, it doesn't meet the criteria of the standards
15	set out in Guidance Memorandum 20.
16	MR. ZAHNLEUTER: The standard says: If minority
17	language individuals in the EPZ do not exceed five percent
18	of the population, then other efforts should be made to
19	afford those people protection.
20	And I am inquiring about what those other
21	efforts are, and whether they are in the Plan.
22	JUDGE LAURENSON: Objection is overruled.
23	WITNESS KOWIESKI : To the best of my recollection
24	the Plan does not make any special provisions for any single
25	minority language population. However, it should be noted

portion of Guidance Memorandum 20 that deals with the

recommendations for certain actions that should be taken

A (Witness Kowieski) Yes, I do. However, to

there is no specific requirement, as far as I know, in NUREG 0654.

Q Is it your testimony that if NUREG 0654 is silent, and the Guidance Memorandum is not silent on an issue, then the Guidance Memorandum should not be followed?

A (Witness McIntire) I think, perhaps, an assumption is being implied that is not true in fact. And that the assumption is that because four point eight percent of the population in Suffolk County are of Spanish surnames, that they are all of Spanish or single language personnel.

We know for a fact that is not the case, and we are not sure there are that many people out here that are single language minority. If information to the contrary is brought to our attention, we will contemplate going further with Guidance Memorandum 20.

Q Again, Mr. Kowieski, I think that we had a situation where the single language minority does not exceed five percent?

A (Witness Kowieski) I am sorry. I think I missed the essence of your question.

Q Okay. On page 2 of Guidance Memorandum 20, there is a section there which is entitled: Recommendations.

A I see that.

3 underneath it, and they consist of separate items, and the

preface to those items states that if minority language

individuals in the plume exposure pathway EPZ do not exceed

And isn't it true that there are five bullets

five percent of the population, and there are not foreign

language materials provided, other efforts should be made

to afford them protection.

A I see that, sir.

End 13. 10 Sue fols.

Q So to clarify that we have the same understanding, in your review of the LILCO plan did you find any of
these items addressed?

A (The witnesses are conferring.)

(Witness Kowieski) No. To the best of my recollection, what is contained in plan and procedures I haven't seen any material that would deal with five bullets shown on Page 2 of Guidance Memorandum Number 20.

Q Akay. Thank you.

And I would like to refer you now to Page 12 of your testimony which deals with Contention 24. I would like to ask you about the signature page reference that you make in your testimony. You state that a signature page format is appropriate in lieu of separate letters of agreement for organizations where response functions are covered by laws, regulations or Executive Orders.

Could you explain to me what is meant by the terms "laws, regulations or Executive Orders?"

A (Witness Keller) I think the words are relatively self-explanatory. I think what is involved here and should be added to this first paragraph is basically a quote out of the NUREG.

There were no of these such signature pages in the plan as we reviewed it. They presumably, this format or a signature page, not the whole agreement, would be

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sufficient, would be between and would be applicable in the "normal circumstance" where you had a utility and the offsite local governmental or state agencies.

In this particular case, as we all know, the County and the State have chosen not to participate. So, this signature page format would not be appropriate, since there are no letters of agreement with the County or with the State. This first paragraph is basically a quote out of the regulations or out of the NUREG.

Q Would a signature page format be appropriate for a letter of agreement with the Red Cross?

A I don't believe so.

Q Okay. I would like to jump up to Page 16 now.

A 16?

Q 16. In your answer to Question 25, you state:

An assessment of whether the number of ambulances identified in the plan, paren -- and then I will leave that out -- are actually avai'able would be determined during an exercise.

Now, if an ambulance company that were relied upon by LILCO were prohibited by law from extending its service into the EPZ, would you consider that to be an inadequacy?

A (Witness McIntire) I believe I have testified previously, if it were brought to our attention that some of the ambulances relied on were prohibited for some legal

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reason from providing service in the EPZ, that would certainly be a matter for us to be concerned about and investigate further.

Would that be a matter of concern for you at this stage of the plan review or at the stage of the exercise?

More towards the exercise. But it is no one place where, you know, everything fits in nice and logically.

But you are quite correct in pointing out that our testimony is on the plan review only.

(Witness Kowieski) Also, I would like to add that the NUREG 0654 requires letters of agraement with ambulance and bus companies. If letter of agreement is provided, if latter of agreement is signed by ambulance company, I would personally expect the individual, the manager, the individual in charge, is aware of the laws and the regulations before he signs the letter. That's what I do.

(Laughter.)

And I take it, Mr. Kowieski, that you would hold that assumption unless you were shown something that proved otherwise, correct?

If it would be proven to me otherwise, as Mr. McIntire already testified, we definitely would investigate further this matter.

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Q I would like to skip to Page 20. I will address this question to you, Mr. Keller.

Does the Red Cross' usual emergency response functions, which is the term that you used, include the process of decontamination and monitoring?

- A (Witness Keller) It does not.
- Q In addition then to having a letter of agreement with the Red Cross, would it be necessary for a utility to have a letter of agreement with a relocation content to cover the activities of decontamination and monitoring?
  - A I personally have never considered that aspect.
  - Q Does anyone have an opinion?
  - A (The witnesses are conferring.)

Let me try anyway. In review of the plan, and in the discussion with LILCO to discuss our RAC review comments, at which the County was represented by counsel, we discussed this point. One of our problems was that there is an interface in the emergency response plan, LILCO emergency response plan, at the relocation centers, which is not a usual thing.

We all accept the fact I hope, or I do anyway, that the Red Cross can set up relocation centers and can care for people in an emergency. There is some degree of uniqueness in this particular case, since representatives of LILCO will be involved with monitoring of arriving

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evacuees and potential -- I'm sorry, decontamination of arriving evacuees. We were concerned that the procedures and other material in the plan, which could be considered letters of agreement, were not specific enough in outlining and detailing this interface which is not usual, which is a little unique.

We have addressed this as a matter of concern at this point. I think the representatives of LILCO at the May 11th meeting said they understood our concern and would attempt to resolve it whenever they make the next revision.

- Can you categorize your concern as an inadequacy?
- A Unless something is done to -- yes.
- Q Mr. McIntire, yesterday you referred to a communications system which was called, NAWAS. Could you please describe what that acronym stands for and what function NAWAS serves?

A (Witness McIntire) I can't off the top of my head describe what the initials stand for. The pronunciation that we use around our office is NAWAS. Yours may be as well or better than ours.

But basically it's, to my understanding and I submit I am not a communications technical expert, but there is an instrument in our communications center which is voice activated. It can be actived between two single points or it can be activated so the entire network, which

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I'm not sure how many it is, it's probably somewhere in the range of fifteen to twenty-five individual stations. I believe it goes as far south as the State of Virginia and as far north as Maine.

And basically it's a secure communications network of the federal government.

Q Is there a connection between NAWAS and Shoreham?

A It is my understanding that the connection is still in place. Yes.

Q When I asked before what function the NAWAS would serve, I guess I would ask what function does NAWAS serve with respect to FEMA and a power plant?

A Originally, it's my understanding, that the NAWAS was a system of national defense. And I think it goes way back, at least until the 50s or at least the early 60s when technology was much less advanced than it is today. And it was a way, again, so there would be very rapid communication among, in this case, basically state governments and principal federal agencies involved in the defense effort.

What seems to have happened now, because the system is in place in New York State -- and it's speculation on my part, that apparently it was used because, it's my understanding, that any legitimate user, and I think that means does not have to be a governmental organization, any

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legitimate user can have a NAWAS drop put in and pay for the rental of it, and it can be used in any type of emergency preparedness, because the federal government over the years has expanded its definition of emergency preparedness from the defense related effort being primary to an all-hazards approach which we are using nowadays.

Q Do you know if it's a requirement that a NAWAS -- how did you say that, NAWAS?

A NAWAS.

Q Do you know if it's a requirement that a NAWAS line be installed between the federal government and the state government and a power plant?

A The power plant, I'm sure it's not.

Q You are sure it's not a requirement?

A Yes.

MR. GLASS: Mr. Zahnleuter, I assume you are only asking as to the requirements on the offsite. Mr. McIntire would not be necessarily familiar with those issues that may involve onsite requirements of the NRC.

MR. ZAHNLEUTER: Yes. I'm only concerned about offsite matters.

MR. GLASS: Thank you.

BY MR. ZAHNLEUTER: (Continuing)

Q I would like to move to a slightly different matter. In the RAC report, there is a reference to Figure

#14-8-SueT 1 2.2.1 of the plan. 2 MR. GLASS: To assist the panel, could you tell them where that reference is contained? 3 WITNESS KOWIESKI: The page number in RAC report? 5 MR. ZAHNLEUTER: Yes. 6 BY MR. ZAHNLEUTER: (Continuing) It's Page 3. Isn't it true that Figure 2.2.1 8 assumes that New York State will communicate with LERO? 10 MS. MC CLESKEY: I object to the question. I don't know what the relevance to any of the contentions or to the testimony filed by these witnesses are. The LILCO 12 13 plan does not rely upon New York State for response. 14 MR. ZAHNLEUTER: The testimony incorporates the RAC report, and I am inquiring about the RAC report. 15 JUDGE LAURENSON: What page of the RAC report 16 17 did you say? 18 WITNESS KOWIESKI: Page 3 of RAC report. MR. ZAHNLEUTER: It's NUREG Element A.1.C that 19 20 is addressed by this portion of the RAC report. WITNESS KELLER: I believe our testimony --21 JUDGE LAURENSON: The objection is overruled. 23 WITNESS KELLER: Excuse me. BY MR. ZAHNLEUTER: (Continuing)

Okay, Mr. Keller, you may answer the question.

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A (Witness Keller) I believe our testimony says that the block diagram assumes that there will be communication between LERO and both New York State and Suffolk County. The RAC did not assume that; the plan certainly shows that to be the case.

Q Okay. Thank you. Then, I refer you to --

A (Witness Baldwin) I would like to also add to that, that that is one of the reasons that Element A.1.C has been found inadequate. And also we have criticized that chart as being -- yes. Enough. That's it.

Q Okay. I also would like to refer you to Figure 3.4.1 of the plan.

(Witnesses are conferring.)

A (Witness Baldwin) Mr. Kowieski has just pointed out to me that that is not the reason that we have graded that as inadequate. That's right. It is not the reason that that has been rated inadequate.

Q Well, could you look at Figure 3.4.1? Isn't it true that that Figure indicates that the RECS line links

New York State with the Shoreham control room?

A (Witness Keller) That is correct.

Q What do you think is the value of the RECS line as a communications link between the government and Shoreham control room?

A (Witness Kowieski) Well, the value of any RECS

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line, as far I know, in nuclear power plant that when there is a problem, a nuclear power plant, the control room operator, someone in control room, can pick up the phone and phone rings wherever it is connected to. If the phone is connected to the warning point, the state, the county, it rings simultaneously in all those locations.

(Witness McIntire) Basically, it's speedy, direct communications.

I note on Page 1 of the RAC report in the third paragraph of the comments, the RAC states that the plan does not address what support New York State will provide in a radiological emergency. And then it goes on to say:

If New York State is likely to respond provision for interface with LERO should be included.

If the RECS line between the State and Shoreham were to be inoperable, would you have any concerns?

A (Witness McIntire) Would you be a little more specific on concerns and what type of specific concerns?

Q What type of concerns did you have in mind when you endorsed the review comment that I just read?

A (Witness Kowieski) Well, our concern was simply that the plan make a provision -- made a provision that if New York State is likely to respond, if New York State will desire to respor, they will be welcome; however, there was no provision in the plan, detailed provision, how New

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York State will interact with LERO organization.

Q Is it the RAC's recommendation that such a provision should be in the plan?

A (Witness Keller) If it is likely, as we have stated on the page, if it is likely that New York State will respond, yes, it ought to be included in the plan. Based on coversation and what we read in the media at the present time, I personally don't think it is likely.

A (Witness McIntire) Again, I don't think that we in FEMA have ever had a clear indication of what New York State's policy is regarding to respond. We are very clear on what it is regarding to planning.

Q Could you take a look at page 52 of this RAC report; this pertains to NUREG element N.2.A dealing with testing of communications systems.

Do you know what provisions of the plan deal with testing of communications systems?

A (Witness Kowieski) I believe the procedure OPIP 3.4.1. If you want, we will verify this in procedure.

Q It states here in the RAC report that the plan adequately addresses the testing of communications systems with the following, and the third bullet identifies the state and local (LERO) EOCs annually.

Are you aware of page 341 of the plan?

A (Witness Keller) I am aware that the plan has a page 341.

Q Do you know if the RECS line between the state and Shoreham control room has been tested monthly?

(Witnesses conferring.)

JUDGE LAURENSON: Excuse me for interrupting, but I am curious why we are spending this amount of time inquiring into this, when I think you indicated previously or the witnesses indicated previously that this line has been terminated.

Is there some reason that this is important for the state's case?

MR. ZAHNLEUTER: I don't believe that the witnesses ever indicated that this line was terminated.

They were speaking of NAWAS, which is different than RECS.

(Pause.)

JUDGE LAURENSON: I don't mean to jump ahead of what you are going into, but there does seem to be some indication that, in fact, the telephone link that you are talking about has been terminated.

My question still stands, and that is, whether this is a useful expenditure of everyone's time here to inquire into the testing of it prior to such time?

MR. "AHNLEUTER: Well, I am attempting to lay a foundation for the exhibit which I think you have already looked at, and part of the foundation rests with the RAC review where communication links between the state

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1 and Shoreham are identified and are stated to have been tested. 3 WITNESS KELLER: I -- I'm sorry. I thought there was a question. 5 JUDGE LAURENSON: What difference does it make? That is my point. MR. ZAHNLEUTER: I think I am trying to point 8 out that the RAC report is not accurate in that it 9 states that there is a communications link between the 10 state and between Shoreham which is tested and the 11 provisions for testing it are adequate. And I will 12 eventually lead up to the point, I will show that the RAC 13 report could not be correct because the link has been 14 deactivated.

MR. GLASS: I just have a little concern.

Inaccurate, I think there are a number of evernts that are overtaking the RAC report at this time.

JUDGE LAURENSON: You claim that you are going to establish that the RAC report was inaccurate when it was issued based on the information you are developing, or that some event subsequent to the issuance of this report have changed it?

MR. ZAHNLEUTER: That is correct.

JUDGE LAURENSON: Well, let's get to that then. Let's move right along and get to the bottom line of what

you are trying to establish instead of going through all this time we are now spending over something that is totally irrelevant to the bottom line that you are getting to.

## BY MR. ZAHNLEUTER:

Q Are any of you aware of any testing that has been conducted up to this point between the state and the Shoreham control room via the RECS line?

A (Witness Keller) We are not. I would like to add, hopefully clarify, which I thought we had been trying to do, what we have in the RAC report, what we have testified on is a plan review.

What the RAC report says is that the plan says. We have not independently verified any of these things in any little area you want to go into -- busses, schools, telephones, anything you want.

We have reviewed the plan. We say what the plan says. We have compared and evaluated what the plan says against the requirements of 0654.

Based on that evaluation and that evaluation alone, the RAC review was done. If you would like, we would stipulate we don't know whether the phone is there. We don't know whether the phone was ever there.

What we will say is that the plan says that it was there.

1 JUDGE KLINE: I just wondered if we couldn't 2 adopt a code word, "plan review," and assume, every time 3 we hear it from now on, that that explanation goes with it. 5 (Laughter.) 6 MR. GLASS: FEMA heartily endorses that. (Pause.) BY MR. ZAHNLEUTER: I think I will move on at this time to page 10 53 of your testimony which deals with the directory of 11 noninstitutionalized mobility-impaired individuals, 12 and you have an adequate provided rating explained there 13 on page 53. 14 That's the RAC review. 15 Q Mr. Keller, I am on page 53 of your testimony. 16 A Thank you. 17 Q Could you tell me at the time of your review 18 what was incomplete about the directory of the 19 noninstitutionalized mobility-impaired individuals? 20 The directory. 21 Q What about the directory was incomplete? 22 To our knowledge, the directory did not exist at the time we did the plan review. 24 (Witness Kowieski) I would like to 25 add that I think already that I testified to this

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effect, that some understanding that directory is being compiled based on the survey cards.

Q How would FEMA determine then, Mr. Kowieski, when the directory would be complete?

(Witness McIntire) Probably when it was presented to us in the completed form.

(Witness Kowieski) Again, as I testified, during the exercise we test, on limited basis, evacuation of mobility-impaired individuals. And what we do, we basically ask for a list, complete list of mobility-impaired individuals, and we select at random several addresses, and we introduce during the course of the exercise to decision maker and will test his ability, first of all, to direct and deploy resources, and then individual, the driver, his or her knowledge of the area as well as requirements, what is needed to move disabled individuals.

Q I would like to move on to page 56 where there is a discussion of selective sheltering.

Mr. Keller, do you know if the LILCO plan identifies the criteria that would be used to determine when the LERO officials would order a protective action of selective sheltering?

A (Witness Keller) As the testimony shows, a quote from the plan. Would you like me to read it?

Q No. In your opinion, then this passage that you

have quoted constitutes criteria to determine when the protective action would be used?

A It clearly states that the protective action may be ordered at projected doses below the accepted PAGs. That is a criteria. The PAGs are in the plan.

Doses below those PAGs then are criteria.

As I stated in my deposition, I also don't think that this option, based on the information that we read in the press and in discussions, is one that could ever come to pass under the current situation because the plan also states, and if LILCO follows its plan, that this option strategy would only be used if approved by the New York State Commissioner of Health. And it is my understanding that the New York State Commissioner of Health is not going to participate.

Therefore, I presume if he doesn't participate, he can't approve it and they can't use the option, if they follow their plan.

Q Mr. Keller, if you turn to page 61, there is another passage which deals with selective evacuation.

Is your testimony that you just gave to me the same for this passage?

A If we would substitute the word "evacuation" for "shelter," everything else is exactly the same.

Q With respect to each of the passages, there is a

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reference to pregnant women and children under 12 years.

Do you know if there are any other types of radio-sensitive people that should be of concern?

A In terms of large numbers and large groups, I would say that these are the two of primary concern.

I would suspect that there are other groups of people who would have a low tolerance to radiation exposure.

People who are on medical treatment which entailed large radiation exposures would, as a preferable thing, like to aboid additional radiation exposure.

So that could put them into a, if you will, low tolerance group. But I think the pregnant women and children under 12 would be the primary large groups of this type of individual.

Q People under medication would consist of many people in hospitals and nursing homes, too, wouldn't it?

A I said under radiation treatment, not just medication. In today's society, there are many people who are taking, either for therapy or for diagnostics, rather large doses of radiation for medical reasons, much higher than the PAG doses in many cases, much, much higher. And good practice would say that you should not add to these doses in any incremental way, if you can avoid it.

Q Now, if you will flip the page over to contention 64, which is on page 62, I am referring to the first paragraph of your answer there.

Is it your testimony that the forecasted meteorological conditions would include a forecast of the wind shifts that would occur at the time of an emergency?

A A wind shift is a meteorological condition, yes.

Q And is it your testimony that inherent in that, there is the ability to forecast the wind shifts?

A With some degree of accuracy, yes.

Q Could you approximate that degree of accuracy roughly?

A No.

A (Witness McIntire) I don't think anybody has any meteorological training on this panel.

A (Witness Keller) That is not quite true, but go ahead.

I think the public perception, to a great degree valid, is that the meteorological projections are not highly accurate, although they are much more accurate in this country compared to where they would be in mountainous terrain where I live.

There is an inherent uncertainty in meteorological projections, and this uncertainty is generally covered and is discussed in the protective action recommendations

discussed in 0654 in what we sometimes call a keyhole approach.

To allow for uncertainties, if you break the compass sector up into 16 segments, if the wind is right down the middle of a given segment, if protective action recommendations are to be considered, you normally consider it for both sectors on either side of the wind center line. So that is three sectors.

So you have broadened your area of consideration just because of the uncertainty.

Q In the last sentence of your testimony on that page you talk about an exercise that would evaluate the effectiveness of the procedure.

Isn't it true that an exercise could only measure the wind shifts that were in existence at the time of that exercise?

A That is correct. And in general, as a matter of fact, I won't say exclusively, but in the majority of the cases, exercises which are held do not use real time meteorology for many operational reasons, primarily ones involved with field teams, et cetera.

Since there is no radiation present in an exercise, you have to be able to feed artificial data in to the field team people. That has to be calculated ahead of time. So you calculate it for different

radial distances and different directions.

If you used real time meteorology, you would have to have the capability, each of the controllers in the field would have to have the capability and the expertise to be able to instantly recalculate all the data. And while that is not impossible, it is highly unlikely.

So in the vast majory of the exercises we used canned meteorology, and we can put in as many wind shifts as we want or as few.

And the important point here, I think, is to understand that people doing these projections and making these decisions consider the forecast, consider the fact that a projected wind shift is coming, the potential for a wind shift is coming. And in many cases -- I have just discussed this keyhole effect where you would almost automatically implement your protective actions for the two adjacent sectors. In many cases, if a wind shift is projected, the decision maker will go ahead and recommend a protective action for other sectors, based on the anticipatory nature of a wind shift coming.

What we are talking about here is when the wind shift really comes down, actually the event occurs, and in the case of an exercise, the controller puts a message, your med power just changed, how fast, with what

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degree of alacrity and precision do the responsible people make the new calculations, evaluate the impact of the new calculations, inform the decision maker and then the decision maker make his decision.

Q Mr. Kowieski, if I mischaracterize the following, would you please tell me? Am I correct in stating that' you believe that there is a state law that requires schools

near nuclear power plants to have radiological response plans?

MR. GLASS: This has been asked and answered a number of times.

MR. ZAHNLEUTER: Well, I would refute that, because I have checked the transcript, and this information has not been asked and answered, and this is the first question. I am trying to confirm if I have the right understanding.

JUDGE LAURENSON: Overruled.

WITNESS KOWIESKI: First of all, for the record,

I want to make certain we understand in New York State we
had three other sites. We have Ginna, Nine Mile Point, and
Indian Point.

The New York State dealing of this site has overall responsibility. Coordination and deailings with the local county government. In connection with Indian Point hearing, it is my recollection the State of New York testified —— and again it is my recollection —— the individual responsible for offsite emergency planning in New York State testified there is a state law which requires the schools had emergency response plan in place in case of any emergency.

Not radiological. I am saying in case of any 1 emergency, as to who should be contacted in case there 2 is an emergency. If a child wouldn't feel good, if it 3 should be sent home. 5 That is how I learned about the state law, and also later on I have been advised on other occasions 6 that this is the case. Do you recall if the state law is applicable to proposed unlicensed nuclear power plants? 10 I am not --(Witness McIntire) Could I have a clarification 11 on this? We were talking about a law dealing with schools, 12 not power plants, is my understanding. 13 Q That is correct. We are talking about a state 14 law that supposedly dealt with emergency plans. 15 16 A For schools? 17 Correct. 18 A Okay. Q Is it your understanding that the state law 19 you are talking about is applicable to emergency planning for 20 unlicensed proposed power plants? 21 A (Witness Kowieski) Again, I can only --23 MR. GLASS: Objection. You are causing some confusion with the panel, it is obvious. The state law

as they have stated, deals with the schools, and their

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response to all types of emergencies.

So, are you postulating something that deals with emergencies, or deals with the school. I am not trying to harrass you in any way. I am trying to assist you so that the witnesses can understand your question.

I have no problem even asking one of the witnesses to help you with your question at this point.

MR. ZAHNLEUTER: I am trying to find out what is exactly inside the term, 'all types of emergencies,' and I am specifically interested in the case which is applicable to Shoreham, which is a proposed unlicensed nuclear power plant.

WITNESS KELLER: Insofar as an emergency could arise from, as you characterize it an unlicensed nuclear power plant, that would effect the schools. It is our understanding that this law would be effective.

WITNESS McINTIRE: And it is my understanding the law is for all schools in New York State, no matter whether there are nuclear power plants nearby or not, operating or not.

## BY MR. ZAHNLEUTER: (Continuing)

A And your testimony is based on recollection of prior testimony at Indian Point?

- A (Witness Kowieski) That is correct.
- Q And the testimony that was given at Indian Point,

was that testimony provided by someone who was speaking on behalf of the Commissioner of Education of the State of New York?

A No. It was provided by someone who spoke on behalf of New York State with regard to Indian Point wuclear power station, who I think he is authorized -- was authorized to represent the State of New York with regard to nuclear power plant.

A (Witness McIntire) It is my understanding the individual also works for the Commissioner of the Disaster Preparedness Commission.

I thought that we were focusing on the school aspect of it, and not the power plant aspect of it, but I would ask if you knew that this person was an employee of the New York State Education Department?

A (Witness Kowieski) Not to my knowledge.

Q Okay. I would like to return for a moment to the matter we were discussing before with the RECS line. Is it your understanding that there is an operational RECS line between the State of New York and --

A I think we already testified we -- that is not our understanding, if one is operational or not. It is our understanding what is in the Plan, and the Plan specifies that the RECS line connection beween the utility and the State of New York.

	1	A (Witness McIntire) Based on the copy of the
	2	letter from Dr. Axelrod that you just passed out after
	3	lunch, it is my personal understanding now that there are
	4	no RECS lines operating between the Shoreham nuclear power
	5	plant and New York State.
	6	Q I think you are referring to a document which
	7	we have not identified, but it should be marked as State
	8	Exhibit 11, is that correct, Judge Laurenson?
	9	JUDGE LAURENSON: It will be so marked.
xxxxx	10	(Above referred to document
	11	is marked State Exhibit No. 11,
	12	for identification.)
	13	MR. ZAHNLEUTER: I have no other questions,
	14	but I would move that State Exhibit No. 11 be admitted
	15	into evidence.
	16	JUDGE LAURENSON: Is there any objection
	17	to that?
	18	MR. GLASS: I don't know if I have an objection,
	19	but I just do not see any foundation laid through this panel.
	20	They handed it out, the panel read it, and they said: That
	21	is what I read.
	22	But we could do that with any piece of paper.
	23	MS. McCLESKEY: I have an objection. I think
	24	it hasn't been shown that this letter is relevant to anything
	25	in the testimony or in the RAC review.
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It is dated July 10th, three days ago, and it is from a state representative to someone at LILCO who has not yet received it, and none of these witnesses, except for Mr. McIntire who was clever enough to pick it up off of his table in front of him when it was passed out, had ever seen it prior to about ten minutes ago.

MR. MILLER: The County has no objection to the State's offering of this exhibit.

JUDGE LAURENSON: Did you say that LILCO, Mr. Daverio of LILCO has not received this letter?

MS. McCLESKEY: No, sir; we have not.

MR. ZAHNLEUTER: Judge Laurenson, I don't really see how that should be determinative, because I recall when we were dealing with the evacuation plans for special facilities, LILCO offered into evidence, and the document was admitted into evidence, and the document that I am talking about was a letter that was dated one day before the date that all of the Motions into evidence and rulings were made.

JUDGE LAURENSON: Well, ordinarily when there is an objection to the foundation to a document, we usually require that one side or the other to the letter be here to supply that foundation.

I went back and looked over some of the prior rulings that we had made on exhibits, and we had, in fact,

exhibits previously where there was no foundation, and they had to come back in and supply the foundation before the exhibits were subsequently admitted.

I don't think anybody is questioning the authenticity of Dr. Axelrod's signature or anything else, but the question is where is the foundation for it, and perhaps the best thing to do on this one is to at least hold it in abeyance until the letter is received and reviewed by Mr. Daverio, to whom it is sent.

Or to whom it is addressed, anyway.

MR. ZAHNLEUTER: That is fine.

JUDGE LAURENSON: I think in light of that we will just withhold the ruling on the admissibility of this.

Are you still questioning the relevance of this to any of the admitted contentions?

MS. McCLESKEY: Yes. I question the relevance of it to the admitted contentions, to these witnesses testimony, and to the RAC review .

He has shown no connection between the statement and anything that these gentlemen have said, or decided, or may decide in the future regarding the adequacy of the LILCO Plan.

JUDGE LAURENSON: Maybe you should make that showing for the record then, Mr. Zahnleuter, as to the

purpose for which you are offering this letter.

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MR. ZAHNLEUTER: The purpose is to show that

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the LILCO Plan states, on page 341 that there is a RECS

line between the Shoreham control room and the State, and

in several places that I mentioned before, the RAC review

takes note that there is a relationship between the State

For example, there is one provision where it

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and the Shoreham control room.

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states that there are adequate procedures for testing the

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communications line between the State and the Shoreham

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control room. The purpose of the letter would be to show

that such a communications link would not exist, and would

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not be operational.

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JUDGE LAURENSON: But we really aren't -- we are not litigating the LILCO Plan. We are not litigating the RAC review. We are litigating the contentions that were admitted to this proceeding.

Is there some contention that you can point to to which this exhibit is relevant?

MR. MILLER: And could the County respond while Mr. Zahnleuter is looking, because I think there is relevancy to the contentions, and I would point that out to the Board.

JUDGE LAURENSON: Either that, or I was going to suggest that this might be an appropriate time, if Mr. Zahnleuter wants to look through the contentions, to take

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our first recess, and give him an opportunity to present 1 his argument on this. 2 MR. ZAHNLEUTER: I was just looking through 3 the five communications contentions, but I would like to take a break. 5 JUDGE LAURENSON: Well, let's take a ten minute 6 recess at this point, then. 8 (Short recess taken.) 9 JUDGE LAURENSON: Mr. Zahnleuter? 10 11 12

MR. ZAHNLEUTER: Yes, sir. The letter is relevant to Contention 26.A.2, which questions the capability of LERO to make certain notifications to the public in a timely manner.

The subject of the RECS lines is discussed on page 31 of the County's testimony on Contention 26, page 30 of LILCO's testimony on Contention 26, and Dr. Cordaro testified about the RECS line between the State and Shoreham at page 4,390 of the transcript.

JUDGE LAURENSON: Okay. As we indicated, we are going to withhold a ruling on this in light of LILCO's assertion that the letter has not been received by Mr. Daverio at this point, and I will leave it up to you, Mr. Zahnleuter to make sure you bring it back to our attention so that we realize that this is a pending request to admit a piece of evidence that we haven't ruled on.

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MS. McCLESKEY: Judge Laurenson, if I may, I would like to respond to Mr. Zahnleuter's statements of a moment ago.

I don't understand why 26.A.2 makes this piece of information relevant to the issues that we are discussing.

The LILCO Flan -- notification to the public is not predicated on a RECS telephone line to New York State, and the letter says that the New York State telephone line has been deactivated. LILCO does not rely upon New York State in the LILCO Transition Plan as Mr. Zahnleuter has established with many witnesses over the months.

In addition, I don't understand -- I have no telecopied this letter to Mr. Daverio, and I suspect he has read it, and I am not sure how that will help to make the letter relevant, or have a foundation.

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We have the letter. We have received it. understand the one sentence in it. These witnesses have never seen it. And it's not involving any party from FEMA.

And I also think at this point that the information that is stated in the letter, which is dated July 10th, was apparently available to the State as of May 25th. Now I would like the opportunity, and I will be glad to go back and check when Dr. Cordaro and other LILCO witnesses were here to testify on communications issues. But I would like to raise the question why this information wasn't discussed with them at that time.

MR. MILLER: I recall the LILCO witnesses testified, I believe, in March on the communications issues regarding Contention 26. And it would appear to me from the letter that has been offered by the State that the RECS telephone systems in the State facilities were removed following the testimony offered by the LILCO witnesses.

MS. MC CLESKEY: Well, I will accept that representation. I wasn't involved in the communications issues. But I do not understand why either Mr. Daverio's receipt of the letter by telecopy five minutes ago, or the introduction of the letter today, is relevant or has a foundation.

JUDGE LAURENSON: I just don't think it is going

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to be a very productive use of our time right now while the FEMA witnesses are sitting here waiting to testify to try to dig out the County's or the LILCO testimony to determine the relevancy factor. That's why, in light of your objection, I postponed the ruling on this and deferred it.

JUDGE SHON: I would like Mr. Zahnleuter to answer one question.

Is it your position that the absence of a RECS line which communicates solely with New York, the lack of that RECS line, will in some way impact the workability of the LILCO plan? I believe we have been told by LILCO that they did not really need to communicate with the State, since the State was not being relied upon to offer any assistance.

Is that not factual? Will this interfere with their plan in some way, in your opinion?

MR. ZAHNLEUTER: It certainly wouldn't interfere with it. The difficulty that I have in answering your question is that the LILCO plan and Dr. Cordaro have made references to the existence of the RECS line. And, so it is necessary to refute those statements.

I don't know why LILCO does make those references, but they do.

MS. MC CLESKEY: I don't mean to be wasting time or taking up witness time. And I just have one thing

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to add, and that is if what I understand Mr. Zahnleuter to be saying is that he wants to rebut Dr. Cordaro's testimony of March, then he should file rebuttal testimony and a motion for leave to file it.

This is a totally inappropriate way to get these letters in. And this isn't the first time that we have seen New York State gen up a letter dated two days before it shows up with it at the hearings and have information on It that it then claims is plain on its face, and the parties have to go scurrying around afterwards and find out what the story in

MR. MILLER: That sounds like an approach LILCO has taken in this proceeding.

JUDGE LAURENSON: Let's move on with the testimony. Are there any further questions, Mr. Zahnleuter?

MR. ZAHNLEUTER: No questions, Your Honor.

JUDGE LAURENSON: Ms. McCleskey?

CROSS EXAMINATION

BY MS. MC CLESKEY:

Q Mr. Kowieski, Mr. Miller asked you whether you had had meetings regarding the Shoreham plan other than the January 20th, May 10th and May 11th meetings among RAC members. And you identify two meetings, one with Suffolk County officials and one with LILCO to the review of the Revision 3 changes. And for the record, I would just like

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to state that the questions and answers that I have just referred to are at Transcript 12,288 through 89.

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Now, the meeting you mentioned, Mr. Kowieski, with LILCO took place in Hicksville in December of 1983; isn't that right?

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A (Witness Kowieski) December? What date again?

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I beg your pardon. In January.

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A January.

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Of 1983. I beg your pardon.

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A '84.

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Q '84.

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A That's correct.

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Q Right. And representatives of Suffolk County were invited and attended that meeting; isn't that right?

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A That's correct.

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Q Now, the meeting with Suffolk County took place on January 13th, 1984; isn't that correct?

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A That's also correct.

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Q And Suffolk County officials invited FEMA to meet with them at that time so that Suffolk County could explain its views on offsite planning for Shoreham; is

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that right?

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A That's my understanding why that meeting was arranged.

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Q Now, it was Mr. Petrone and Mr. Glass and you who

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attended from FEMA; is that correct?

- A That's correct.
- Q And from the County there were Messrs. Brown, Lanpher and Jones, right?
- A To the best of my recollection, three individuals representing Suffolk County.
- Q LILCO was not represented at that meeting; is that correct?
  - A That's correct.
- Q Regard. T Contention 26, Mr. Kowieski, Mr. Miller asked you whether NUREC 0654 required --
- A One minute.
- Q Certainly.
- A What page?
  - Q I'm at Page 23 of your testimony; is that right?
- A Right.
  - Q Mr. Miller asked you whether NUREG 0654 required notification to key personnel of LERO within fifteen minutes of the declaration of an amergency.
  - And you answered that the population must be alerted within fifteen minutes. and for the record, the question and answer I am referring to is at Transcript 12,485.
  - Now, the notification to the public under NUREG 0654 is within fifteen minutes of a protective action

recommendation; isn't that correct?

2 A That's correct.

Q It's not fifteen minutes from the declaration of an emergency at the plant?

A That's also correct.

Q Gentlemen, over the course of the last four days you have referred to your professional judgment, and your prior experience in supporting the conclusions that you have stated in your testimony and in the RAC report.

Would each of you please list the nuclear plants for which you have reviewed emergency plans or graded an exercise?

MR. MILLER: Judge Laurenson, the County would object to the question. The question is irrelevant. We are here to deal with the LILCO Transition Plan, the Shoreham plant and not other plants.

JUDGE LAURENSON: It goes to the background and experience of these witnesses.

Overruled.

WITNESS BALDWIN: This might be -- I might be a bit slow in doing this but I will do it as quickly as I can.

Connecticut Yankee, which is in Connecticut.

Maine Yankee, Vermont Yankee, Ginna, Indian Point, Nine

Mile Point, Fitzpatrick, Salem, Oyster Creek. What am I

missing? I know there is one more missing in New England.

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Millstone. Thank you.

(Witness Kowieski) Since I became RAC Chairman in November 1981, I was responsible for review of the plans, preparation for, and execution of exercises in the State of New York, New Jersey. This involves the following sites: State of New York, Ginna, Nine Mile Point site, Indian Point; New Jersey, Oyster Creek and Salem.

(Witness McIntire) In my case, the involvement of myself is basically the same as Mr. Kowieski. I would point out that each of the sites mentioned have had at least two and in some cases three full scale FEMA-evaluated exercises since 1981.

(Witness Keller) I'm going to miss some, I know. Ginna, Indian Point, Nine Mile Point, Salem, Oyster Creek, Catawba, Zimmer, Zion, Diablo Canyon, Trojan, Palo Verde, Duane Arnold, Fort Calhoun. And I think about four more in the years past. St. Lucie.

And am I correct, gentlemen, that some of you have also been involved in reviewing the generic radiological emergency plan for New York State as well as site specific plans?

- A (Witness Kowieski) That's correct.
- Q And who among you are those?

MR. MILLER: I object, Judge Laurenson, on the grounds of irrelevancy.

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3 down of the plan reviews and the exercises?

BY MS. MC CLESKEY: (Continuing)

Q No, sir. I want to know, Mr. Baldwin, whether you have reviewed the New York State Radiological Emergency Response Plan as well as the site specific plans and exercises that you have previously listed?

- A (Witness Baldwin) Yes.
- Q And, Mr. Kowieski?

A (Witness Kowieski) Basically, my primary function was to supervise the review and the consolidation of the comments, RAC comments.

- Q Have you read the plan?
- A Yes, major portion of it.
- Q Mr. McIntire?

MR. MILLER: Judge Laurenson, this -- excuse me,
Mr. McIntire. I object again. The content of the New
York State Plan is not before this Board. The contents
do not concern Shoreham.

JUDGE LAURENSON: This is a continuation of the answer to which your objection was previously overruled.

BY MS. MC CLESKEY: (Continuing)

Q Mr. McIntire, have you read -- have you been involved in a review of the New York State Radiological

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Emergency Response Plan?

A (Witness McIntire) Yes. My basic responsibility is to overseeing the review process.

Q And, Mr. Keller?

A (Witness Keller) Yes, I have reviewed the State generic plan.

MS. MC CLESKEY: Thank you very much, gentlemen. Those are all the questions I have.

JUDGE LAURENSON: Mr. Glass, do you wish to conduct any redirect examination now?

MR. GLASS: No. I think the agreement was that the County can proceed.

I would like to -- and we would reserve our opportunity until later.

What I would like, though, is some direction from the Board as to the rest of our schedule today, because I know there are some matters that we had to discuss at the end of the day, including the scheduling that is to take place for FEMA's reappearance.

JUDGE LAURENSON: Let's go off the record for a moment.

(An off-the-record discussion ensues.)

JUDGE LAURENSON: All right. Let's go back on the record. After some extensive negotiations, the parties have arrived at two agreements which I will ask them

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its decision on the LILCO motions to admit revised and supplemental testimony on Contentions 85 and 88. Thereafter, we will turn the questioning of the FEMA panel of witnesses back to the County until 5:15 this afternoon at which point we will permit New York, LILCO -- New York and LILCO to do recross examination, and we will permit Mr. Glass to conduct redirect examination.

And that will then terminate the testimony of this panel for this week. So, at this point I will ask whoever wants to be the spokesman to read into the record the agreements concerning FEMA's testimony and depositions concerning their testimony which will be heard in August, along with another request for an extension of time concerning the brochure testimony.

MR. MC MURRAY: Judge Laurenson, I will be happy to read the agreement into the record.

The first matter deals with the deposition of FEMA's witnesses on training issues. It's the County's understanding that FEMA's testimony will be submitted to all the parties by close of business August 6th. It is also the County's understanding that cross-examination of this panel on all the remaining issues is going to commence on August 14th.

Now, while the County can't make any determination

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that this amount of time will be adequate to conduct meaningful cross-examination and review the testimony and then
conduct meaningful cross-examination, the following agreement
has been reached. On August 9th, the County will depose
FEMA's witnesses on the training issues and on their
testimony. Also, on August 7th, the day following the
receipt of the testimony, the County will inform the parties
as to whether or not the deposition will be taken individually or as a panel. The County will endeavor to try to
take the deposition as a panel.

With respect to the motion for an extension of time, the County moves the Board for an extension of time in which to file testimony on Contention 16.E. This deals with the public education brochure and specifically the issue of its description of the health effects of radiation.

The reason for this is as follows: When the Board set its schedule for the filing of testimony and other matters regarding that testimony, one of the County's chief witnesses was out of the country. It was our understanding that she would be back two days ago, that is Wednesday, and that that would give us enough time to prepare her testimony which is, under the present schedule, set to be filed I believe on Monday. Apparently, our witness has not returned from abroad and has extended her

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vacation.

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Therefore, we need to have an extension of time in which to prepare her testimony. LILCO has agreed to this extension. And also the parties have agreed that motions to strike will be done orally; no particular time has been set. Also, they have agreed that a day before the oral argument on the motions to strike, the parties will exchange a brief one-page typewritten statement briefly setting out those portions that each wishes to strike and a one-word description for the grounds for the motion to strike.

JUDGE LAURENSON: I am sure the parties have also agreed that they will supply the Board with a copy of that?

MR. MC MURRAY: That's right, Judge Laurenson.

I will ask the parties whether I have left
anything out?

MS. MC CLESKEY: Well, in light of the statements that you have made about the possible inadequacy of the FEMA filing schedule and the juxtaposition of depositions and testimony and all of that, I just want to state that it is our understanding that the county has agreed that it is not going to contest the adequacy of the August 6 filing, followed by a deposition on August 9, followed by cross-examination beginning August 14, and that that was part of the agreement that led LILCO to agree to a two-week extension of filing on 16.E.

In other words, the day after the deposition, we are not going to see any motions regarding its inadequacy from the county?

MR. MC MURRAY: We are not saying we are going to file any motions. The only thing that we said was that we are not conceding or agreeing that between the receipt of the testimony and the time that testimony is to begin, that there is adequate time to review that material and prepare cross-examination.

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We are not saying that there isn't enough time. We are just saying, we haven't seen the testimony.

The fact is that a lot of this agreement has been made in a vacuum. We understand that. We are going forward with the depositions on the 9th. We are going to receive the testimony on the 6th. We are going to go forward with cross-examination on the 14th.

MS. MC CLESKEY: And Mr. McMurray, you are waiving your right to file contesting motions later on?

MR. MC MURRAY: We are being presented with circumstances beyond our control and we are going forward and have no intentions of filing any motions.

JUDGE LAURENSON: Is the state, the staff and FEMA in agreement with all of these proposals?

MR. ZAHNLEUTER: The state has no problem with these proposals, but the state would request copies of all the estimony and correspondence in a timely manner.

MR. GLASS: Certainly, FEMA agrees.

MR. BORDENICK: Same for the staff. We have no problem with the proposals presented. We would also request copies of anything that is exchanged between the county and LILCO.

JUDGE LAURENSON: The Board will accept these agreements. We will extend the time for filing testimony on the brochure, contention 16.E, from July 16, until

July 30. And we will further accept the suggestion that motions to strike be done orally on that testimony.

One other matter, while we were having our discussion off the record, Mr. Bordenick indicated that the staff now has a date on which it will file its testimony on contention 11.

MR. BORDENICK: Yes, we do. Judge Laurenson, that date is July 25, 1984, and as I indicated off the record, I will discuss with the parties a time for the staff to present that testimony. In my own mind I am thinking of the second week of the three-week session scheduled in August, but I will pursue it with the parties and we will get back to the Board.

JUDGE LAURENSON: At this time Judge Shon will present the Board's ruling on LILCO's motion to admit supplemental and revised testimony on contentions 85 and 88.

JUDGE SHON: In filings, dated July 3, 1984,
LILCO moved for the admission of supplemental testimony
on contention 85, recovery and reentry, and revised
testimony on contention 88, dose criteria and cost
benefit analysis for reentry.

The testimony was in each case attached.

Both of these proposed pieces of testimony reflect changes which occurred in the LILCO transition plan in revision 4. Fundamentally, these changes were

made in response to comments made by the regional assistance committee of FEMA in its report, dated February 10, 1984.

The material on contention 85 also answers in part certain criticisms leveled by Suffolk County witness Gregory Minor in his testimony filed March 21, 1984, and the change in the testimony addressing contention 88 accommodates, at least in part, a concern expressed by Suffolk County in contention 88.

Specifically, both FEMA/RAC and Mr. Minor criticized the plan for failure to calculate total population dose prior to reentry. The supplemental testimony on contention £5 describes the calculation scheme added to OPIP 3.10.1 to fill this gap.

The revised testimony on contention 88 reflects changes made in recovery and reentry provisions which, one, change the radiological reentry criteria from criteria founded on disintegrations per second to criteria founded on population dose; and two, change the criteria for temporary reentry from criteria founded upon cost benefit ratios to criteria founded on EPZ Protective Action Guides.

The changes are an attempt to meet a concern expressed by FEMA/RAC. They also answer concerns expressed by Suffolk County in contention 88.

We have set forth four tests which must be met

for the admission of rebuttal or supplemental testimony.

One, the testimony must be relevant to an important

point in the original testimony. Two, it must be relevant
to some decisional aspect of the case.

Three, it must not be cumulative. Four, movement must show that the material could not have been filed earlier.

LILCO, in its motions, does not address these four points precisely. It does, however, note that the proffered material on contention 85 is limited to an addition to the plan which was made in response to the FEMA/RAC report and which also responds to the concerns in Mr. Minor's testimony.

As regards timing per se, LILCO notes only that efficienty also commends filing this supplemental testimony now, rather than as rebuttal testimony after questioning Mr. Minor. That is, LILCO would deem it inefficient to file even later than that.

Presumably, the material was not filed earlier because revision 4 was only recently released.

In the motion regarding the revised testimony on contention 18, LILCO argues only that, "LILCO's prefiled testimony on contention 88 no longer is an accurate representation of the recovery and reentry provisions of the LILCO transition plan. In order for LILCO

to make its testimony accurate as of the date of the hearing, it is necessary to file revised testimony on contention 88 at this time."

This morning we heard argument from the other parties with regard to the proposel material. Suffolk County notes that both pieces of testimony are founded upon revision 4, a revision which Suffolk County has had no chance to review.

With regard to the material on contention 85, Suffolk County argues that, one, it does not relate to LILCO's original testimony but addresses matters never mentioned therein. And two, it is untimely.

Suffolk County argues that the FEMA/RAC report has been available since March. The Minor testimony since March. Even LILCO's reply to FEMA/RAC is two months old. In Suffolk County's view, this testimony could have been filed earlier, since LILCO surely knew of the modifications before revision 4 was circulated.

Suffolk County would urge that if this material is admitted, Suffolk County be allowed time to reply.

As for the revised testimony on contention 88, the county deems it also untimely and for the same reasons. Curiously, Suffolk County would characterize both matters as rebuttal to Mr. Minor, thus suggesting that they

might be more timely had then been filed later.

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The State of New York supports Suffolk County.

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The state points out that LILCO has presumably taken

April, May, and June to prepare this material, knowing

all the while that the changes would be made. Thus,

the county and the state should not be forced to respond

in a matter of days.

Staff has no objections to admitting the

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proffered testimony.

We have carefully considered the positions of the parties. At the outset, we note that we can hardly exclude material which presents the plan as it is, rather than as it was. To litigate the adequacy of planning features which no longer exist would be to follow Alice right through the looking glass.

Clearly, however, this material could have been offered earlier. How much earlier, we have no way of knowing. Clearly, also, the county and the state must, in fairness, be given some chance to review it and to prepare a reply.

The material is neither lengthy nor complex. We believe that the parties can readily come to some accommodation on the matter of scheduling the testimony and any responding testimony without the Board's setting fixed dates at this time.

The motion to admit supplemental and revised testimony on contentions 85 and 88 is granted. We will expect the parties involved to report on next Tuesday, July 17, regarding the arrangements that they have made to schedule this testimony and any testimony in reply.

JUDGE LAURENSON: Thank you, Judge Shon.

I think there was one statement there about contention 18 that should have been 88. Just so -- I think I heard 18 at one point. Just to make sure, we are only talking about 85 and 88. I think that should be clear.

Pursuant to the Board's earlier decision concerning allocation of time this afternoon, we will turn the questioning back to the county at this point.

MR. MILLER: Thank you, Judge Laurenson. I am just going to pursue a few follow-up questions, based upon the questions of Mr. Zahnleuter and Ms. McCleskey, and then Mr. McMurray will continue with his questions.

## CROSS-EXAMINATION

BY MR. MILLER: (Resuming)

Q Gentlemen, you were all asked by Ms. McCleskey to list for her the plants that you have -- the plants, I should say, the off-site emergency plans that you have reviewed for particular nuclear power plants.

Do you recall those questions?

1	A (Witness Baldwin) Yes.
2	Q I would like to ask you
3	A (Witness Keller) I think that your statement
4	is a mischaracterization of what I thought Ms. McCleskey
5	asked us. Maybe I was wrong in what I thought she
6	asked.
7	I believe her questica was, what sites have
8	you reviewed plans for, or participated in exercises for.
9	And I think your statement, your question was,
10	what sites have we reviewed plans for.
11	At least as far as my case is concerned, I
12	lumped both of those together, as I thought I characterized
13	her question.
14	Q Thank you, Mr. Keller.
15	Is that the case for the rest of the panel?
16	A (Witness Baldwin) Yes, it is for me.
17	Q Lat me ask, did any of the plans and nuclear
18	plants that you listed for Ms. McCleskey involve a
19	utility off-site emergency response plan?
20	A No.
21	A (Witness Kowieski) I can let me explain
22	the situation that we had a situation around Indian
23	Point. Rockland County, which is one of the four
24	counties located, at least portion of Rockland County is

located within ten-mile EPZ, at one point decided to

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withdraw from the four-county planning process, as
well as not to cooperate with the state, especially
federal government.

In response, the state of New York -- actually, the governor directed the lieutenant governor to develop compensating plan for Rockland County. Such a plan was developed, and the concept of the plan was to substitute for Rockland County resources. And the substitute came from the state and both utilities, PASNE as well as Con Ed.

Q Mr. Kowieski, excuse me. Time is short.

I think the panel, the parties, and the judges are aware of the Indian Point situation.

Is it fair to say that Indian Point was never an emergency response plan sponsored solely by the utility?

A That is correct.

Q And in Shoreham, it is the case that it is a utility who is sponsoring this plan, solely a utility, correct?

A That is also correct.

Q And there is no governmental involvement by either local or state government with the LILCO plan, correct?

A There is involvement of Brookhaven National Labs.

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1 Q Local or state government, I said. 2 Do you consider Brookhaven to be a local 3 government agency? 4 A I understood your question, other governments. 5 I referred to the federal government. The federal 6 government, in this case DOE, agreed to assist LILCO in case of radiological emergency. Q You would agree with me, Mr. Kowieski, that there is no local or state government involvement 10 with Shoreham; isn't that correct? 11 (Witness Keller) It is my understanding that 12 Connecticut, which is a state government, says that it 13 will implement protective measures, if required, within the 50-mile EPZ, as it appears to Connecticut. 15 Mr. Keller, I would love to explore your 16 understanding further. I think there is an agreement 17 that contention 24.R would come up in August, and I will 18 abide by that agreement. We will discuss it in August. 19

Mr. Kowieski, let me ask you, Ms. McCleskey also asked for some clarification, I suppose, from a question I had asked you earlier in the week.

I think what you have told Ms. McCleskey is that the declaration of a protective action recommendation must be made within 15 minutes to the public; is that correct?

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(Witnesses conferring.)

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A (Witness Kowieski) Fifteen minutes after notification, yes.

A (Witness Keller) Time is short, but if you

would let me try. There are two 15 minutes involved.

One is a requirement which is basically an on-site

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requirement which requires the utility to notify the

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off-site people that an emergency is in progress, once

they have made a determination of what the level of

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emergency is. That is one 15-minute requirement.

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Okay?

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And in this case, that would involve LILCO talking to local LERO.

Q Could I interrupt you, Mr. Keller. That first requirement that you have just mentioned, isn't it the case that that first requirement for 15 minutes begins with the declaration of the emergency at the plant?

A Once they have established that they truly have an emergency, that is correct.

Q Fifteen minutes to notify off-site response, correct?

A That is correct.

Q And in this case, that is LERO, is that correct?

A That is correct, but that is primarily an on-site requirement, and we really don't get involved with that

except insofar as our review of off-site capability is concerned, that somebody is there to receive that.

And whether or not the initiation of that message is within the required time is really an on-site function which is strictly in the province of NRC.

Q Would it be fair to say, Mr. Keller, that notification to LERO with respect to this first 15 minutes you have talked about would be notification to key emergency response personnel --

A No.

Q -- of LERO?

A No, that is not correct.

Q Who do you say notification --

A The notification of the Hicksville customer service office constitutes adequate provision for receiving this initial notification off site.

Q And that is your opinion, sir.

A That is the opinion of the RAC, I believe, and the members of the panel.

A (Witness Kowieski) That is correct. That is opinion of RAC.

Q The opinion of RAC is that notification from the plant to customer service office must take place within 15 minutes and that such notification would satisfy the requirements of 15-minute notifications to

1	off-site response; is that correct?
2	A (Witness Keller) That is correct.
3	Q Can you tell me the basis for the RAC's
4	opinion in that regard?
5	A NUREG 0654.
6	Q Where in NUREG 0654?
7	A Well, as I said, this really is an
8	on-site issue and should be approached with NRC.
9	The off-site portion of this issue is concerned
10	solely with the fact, or the lack thereof, that there is
11	an ability to receive this initial notification. Okay?
12	And we have testified that according to the
13	plan, the customer service office at Hicksville is manned
14	24 hours a day.
15	We judge that that would be adequate.
16	Q Yes, sir.
17	I am asking the basis for that judgment. If it
18	is your personal opinion, that's fine.
19	A Plan review.
20	Q And you are saying that the RAC committee addressed
21	this issue?
22	A This issue is addressed in every plan review
23	because we have to look at whether or not they have
24	the ability to receive the initial notification.

Could you point me in the RAC report to where it

END 18 

is stated that this capability of notification within 15 minutes to off-s'te response is satisfied by the LILCO plan?

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basically under criteria element E, specifically E.1. 3 Mr. Keller, criteria E.l says that each organization, and in this case that will be LILCO, correct? 4 5 That is correct. Shall establish procedured which describe mutually agreeable basis for notification of response 7 8 organizations. Are you telling me that you consider a customer service operator in the Hicksville office to be 9 10 a response organization? 11 A Yes, I do. 12 That is an interesting conclusion , Mr. Keller, and that is why I am asking you to give me the basis for 13 14 that conclusion. 15 A The customer service center in Hicksville has a response role. That role is the first -- in its initial --16 is to receive the initial notification from the control 17 room. And actually, I guess for symantic purposes, or 18 19 whatever, prior to that initial notification, Hicksville is a LILCO function. 20 21 After the initial notification, Hicksville 22 be omes LERO, or a portion of LERO. 23 Yes, sir. And when customer service office receives notification from the plant, customer service office is supposed to, under the context of an emergency at the plant, 25

(Witness Keller) Give me a moment. It is

immediately provide notification to emergency response 1 personnel, specifically key emergency response personnel, 2 isn't that correct? 3 That is correct. That is the second part of 4 5 their emergency response function. Q But you exclude this notification of key 6 emergency response personnel from the fifteen minute require-7 ment? 8 That is correct, and this is on the basis that this is what is done in every other emergency plan that we 10 11 have seen. 12 Well, you have never seen an emergency plan where there has been notification given to an operator in a customer 13 service office, have you? 14 15 That is correct. We have seen it where they have been given to firemen, to policemen, to other officials. 16 The fifteen minute initial notification is from 17 the onsite people to the offsite people, and since in this 18 case it is the same entity, however, our assumption is that 19 as soon as that initial call comes in, the previous LILCO 20 people now become LERO people, but it is, according to the 21 concept of this Plan, the offsite response organization is 22 called LERO. 23 Now, they are made up of LILCO employees and 24

a few volunteers, et cetera, but it is primarily LILCO

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employees.

Q And is it fair to say, Mr. Keller, that what you are telling me is that a single operator in the customer service office in Hicksville, once notification is received, would constitute LERO?

At that instant, that is correct.

Q I would love to talk to you further about it, Mr. Keller, but I am going to have to move on.

Mr. Kowieski, you were asked -- let me go back to where I think we started with this. In terms of declaration of the emergency at the plant, and in terms of providing notification to emergency response personnel and providing notification to the public -- okay, two separate things, correct, do you agree?

A (Witness Kowieski) I do. I am sorry, interconnected but, you know, it is two separate issues. Notification of emergency response personnel, and notification of the public; two separate issues, yes.

Q And isn't it correct, Mr. Kowieski, that under certain situations notification to emergency response organizations, LERO in this case, and notification to the public could be required to be performed at essentially the same time?

A Again, as we already testified, in a likely event when the plant status will reach general emergency,

obviously the LERO local response director would be basically notified by Hicksville customer service office about the emergency, and he, in turn, would direct Hicksville office to activate alert notification system.

Q I am not sure that you understand my question,
Mr. Kowieski. Let me try to make it a more particular
question. If you have, for example, a site area emergency,
and the decision is made to activate the sirens at that
level, which is possible under the LILCO Plan, would you
agree?

A (Witness Keller) That is a possibility, yes.

Q Now, isn't it possible that the decision to activate the sirens, thereby notifying the public, and the decision to notify LERO would begin at essentially the same time.

A No.

Q That is not possible.

A Because you have a fifteen minutes when decision—maker -- when message is received, there is a general emergency at the plant, or site emergency, and in the opinion of the decision-maker there is a need to activate the alert notification system, there is a provision in NUREG 0654 that there is fifteen minutes -- that alert notification system, as well as the message itself, the EBS message, should be issued in fifteen minutes.

A (Witness Keller) I think maybe this will clarify, and maybe not. I will try.

The second fifteen -- I think we cleared up

the first fifteen minutes. That is our opinion of it,

but you don't agree, apparently, but at least cur opinion

the first fifteen minute requirement. The second fifteen

minute requirement is a requirement of fifteen minutes

after the decision-maker, whoever he may be, makes a decision

that a protective action is warranted, the public must be

notified within fifteen minutes of that decision.

Q Mr. Keller, would you agree with me that -- here is my scenario, and hopefully we can move on. An emergency happens at the Shoreham plant requiring notification to the public. Within three minutes, the director of local response is notified, and immediately decides we must notify the public.

Would you agree with the notification to the public under this scenario, must be made within eighteen minutes from the time the emergency was declared at the plant?

A Under your scenario, as I understand it, that is correct.

Q Mr. Zahnleuter asked some questions regarding the NAWAS, whatever -- the N-A-W-A-S communications system.

I just want to ask a question, having reviewed these letters.

1 Is it fair to say that the NAWAS communications drop, or system, at the Shoreha plant is required to be 2 3 in ace prior to fuel load? 4 (Witness McIntire) There is no requirement 5 for a NAWAS drop at Shoreham. An offsite requirement. 6 Q Is there an onsite requirement? Is that what you are saying. We don't know. 9 (Witness Keller) Fuel loading is an onsite 10 situation. 11 Q Have you seen this March 1, 1984 letter, Mr. 12 McIntire, or anyone on the panel? The letter from Mr. 13 Mandell to FEMA -- Mr. Mandell is with LILCO. 14 MR. GLASS: Mr. Miller, just to clarify, do you 15 want to identify these as exhibits? 16 MR. MILLER: Not really. I just really want 17 to ask the question, this letter seems to state, and in 18 fact, let me just read the sentence, It says: --19 MS. McCLESKEY: I object to Mr. Miller reading 20 parts of documents into the record, if he is not going to 21 try to enter them into the record as an entire document. 22 MR. MILLER: I am trying just to get a clarification 23 on a point, Judge Laurenson. 24 JUDGE LAURENSON: Are you objecting to him 25 referring to the document?

MS. McCLESKEY: My understanding was he was

load.

1 preparing to read portions of it into the record. 2 MR. MILLER: I want to read a portion of a 3 sentiece and ask Mr. McIntire if he can tell me what it means, yes. 5 JUDGE LAURENSON: Do you have copies of that 6 document? MS. McCLESKEY: Yes, sir. I believe we were 8 all provided copies by FEMA. 9 JUDGE LAURENSON: The Board doesn't have any. 10 The witnesses don't, either. 11 MR. GLASS: They were provided yesterday. They 12 were given out. 13 MR. MILLER: Judge Laurenson, I am referring to the March 1, 1984 letter, and I want to ask one question. 14 15 JUDGE LAURENSON: You didn't give us these. 16 MR. GLASS: I have the letter. 17 MR. MILLER: Judge Laurenson, I would like to 18 ask my question, and then I think Ms. McCleskey if she 19 has an objection, can make the objection. There is no 20 question pending right now. 21 My question, Mr. McIntire, if you have the March 1 letter in front of you, there is a statement from 23 Mr. Mandell, of LILCO, to FEMA, which says: We have been 24 under the ression that completion -- and he is talking 25 about completion of an NAWAS -- is required prior to fuel

Do you see that statement?

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MS. McCLESKEY: I object to the question, because

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if it is an onsite matter as these witnesses have testified,

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it is irrelevant to any of the contentions in this proceeding.

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MR. MILLER: These witnesses brought up the

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issue of this communications system yesterday or the day

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before, and I think there is confusion on the record, and

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I am trying to clarify it.

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MS. McCLESKEY: Well, my recollection is that

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they brought it up because they were asked about it,

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but in any event --

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MR. MILLER: If is not because they were

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asked about it, Ms. McCleskey, because I had never heard

portions of letters that you are not attempting to get

into the record, and asking the witnesses about onsite

MS. McCLESKEY: I am not sure how reading

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of the system before I asked the question.

matters is going to clarify the record.

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MR. MILLER: I am trying to determine whether this is an onsite matter.

JUDGE LAURENSON: The FEMA witnesses have already answered the question that they are unaware of any such requirement as an offsite matter, and I don't know that a letter from someone at LILCO addressed to FEMA clarifies that matter at all, since it doesn't address the

specific question.

MR. MILLER: My question is: Is this system, if it is -- whether it be an onsite or offsite system -- required to be in place prior to fuel load?

JUDGE LAURENSON: Well, we can't go into that if it is onsite. Our limitation on jurisdiction is only to hear offsite emergency planning matters, and they have indicated their answer to the extent of our jurisdiction to inquire into the matter.

MR. MILLER: Let me try another question, Judge Laurenson. I withdraw my last question, I suppose.

Well, I don't withdraw the question. Is the Board ruling that the objection to the question is sustained?

JUDGE LAURENSON: Yes, it is sustained.

BY MR. MILLER: (Continuing)

Q Mr. McIntire, do you know whether this NAWAS communications system has any offsite consequences?

A (Witness McIntire) It is our understanding it is not referenced in the Plan, and it is not part of a formal offsite requirement.

Q Mr. Keller, you were asked by Mr. Zahnleuter about the signature page format which is referenced on page 12 of your testimony. Is it fair to say, Mr. Keller, that under the LILCO Plan, because there is no involvement by the local or state government, that there is no instance

where a signature page format would be adequate in lieu of formal letter of agreement?

A (Witness Keller) That is what I thought I testified when I was asked the first time, and I would say so again.

Q I was just trying to clarify. I thought that is what you said, also.

A I will say it again.

Q Mr. Kowieski, there was some discussion with Mr. Zahnleuter about this language, 'adequate, provided that ..' and when that language was added or placed into the formal RAC report that was released to the NRC.

Let me ask you sir, I take it that it is fair to say there is some line drawing that has to be done between determing whether a NUREG element is inadequate, or whether it could be rated radequate provided that something would be done in the Plan. Is that a fair statement?

A (Witness Kowieski) Yes.

Q And I take it that you used professional judgment in making that determination, is that correct?

A NUREG. What was contained in the Plan, and professional judgment, sure.

Q And as Mr. Keller has pointed out, some of the elements rated, 'adequate provided that ..' the language

was added following the January 20th meeting, and not reviewed 1 by anyone on the RAC Committee other than yourself and Mr. 2 3 Raldwin, is that correct? Just the term, 'provided that ..', yes, that is correct. 5 MR. MILLER: Judge Laurenson, I am going to turn the microphone over to Mr. McMurray. 7 8 CROSS EXAMINATION BY MR. McMURRAY: 10 Mr. Keller, I just want to clarify something I thought you might have implied earlier in response to some 11 questioning. I believe it was by Mr. Zahnleuter and some 12 follow up questioning by Judge Kline. 13 14 I understand, and I think we have established that the RAC does not go out and try to verify things in 15 the Plan, okay? Isn't that correct? 16 (Witness Keller) That is correct. 17 Thank you. Now, I understand you don't actively 18 go out and try to verify something, but let's say that 19 information is presented to the RAC. For some reason, 20 information falls in your lap. Let's take a hypothetical. 21 22 For instance, you hear that a RECS line which is mentioned in the Plan does not actually exist. Now, 23 under normal circumstances, do you then try to verify 24

whether the RECS line exists, or not?

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End 19. 23 Sue fols.

A First, if information comes to our attention, falls in our lap, appears on our table, we would consider it. And the major thing in what we would do after looking at this information, would be -- specific about this RECS line -- if the Plan involved the use of this RECS line in a substantive way to protect the people, or to -- yes, to protect the people, right?

That would be quite a concern, and I am sure we would follow that up.

In the case of the RECS line and the present Plan, the RECS line is basically a courtesy notification system, since the State has diavowed any interest or any desire to do anything. The fact the RECS line between the LILCO control room and the State warning point is no longer there, if it ever was there, is of little consequence, and would probably not require a follow up.

O Focusing not necessarily on my hypothetical, but on the principle, you are saying, though, that if you do receive information, even though you have not actively tried to receive it, you can't avoid it -- it just falls on your desk, you then will review that information to see how it affects the adequacy of the Plan, correct?

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(Witness Keller) That is correct. And if it A affects the plan in some substantial way, I would presume we would follow up.

(Witness McIntire) Although we usually prefer receipt of such information through some sort of formal submission with the name of a contact or something like that that we can, you know, contact.

Mr. Keller, let me refer you to Page 56 of your testimony regarding selective sheltering. On Page 56, you refer to Table 3.6.1 of the plan; is that correct?

(Witness Keller) That is correct.

On Table 3.6.1 -- Table 3.6.1 does not specifically mention selective sheltering as a protective action recommendation, correct?

I haven't found it yet, but my recollection is that that is correct.

However, I think the reason we reference that is because, as we quote from the plan, the selective sheltering option is considerable only if the projected dose, with the sheltering factors, are below the PAG values which are tabulated in Table 3.6.1.

Q Doesn't the EPA PAG Guide, which is Table 3.6.1, set out protective action recommendations for doses below the PAG Guide limits, that is one rem whole body and five rems thyroid?

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A My reading of this table shows in the first block, in the center of the table, no planned protective actions. LERO may issue an advisory to seek shelter and to await further instructions.

Q So, it does mention what could be done below those limits, and one of those considerations is not selective sheltering, correct?

A That is correct. But what is -- my interpretation of what is listed in this center block states: Issue advisory to seek shelter and await further instructions.

That advisory would be for the total population, not for the radiosensitive population, i.e. the pregnant women and children. The selective sheltering option would be lower than this, at projected doses lower than this, unspecified.

- Q So, Table 3.6.1 just doesn't address this?
- A No, but it does address the PAGs --
- Q Right.
- A -- which are listed, and in the selective sheltering discussion it says you only consider selective sheltering when doses are below the PAGs. This table includes the PAGs; therefore, the two are linked.
- Q In your opinion, the fact that selective sheltering is not mentioned in Table 3.6.1 offers adequate guidance for recommendation of selective sheltering?

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The fact that it's not in the table doesn't upset me any, no.

I'm saying, you seem to use that as -- the fact that it doesn't exist as supportive of your testimony.

A Is that a question?

Is that correct?

A I don't understand your question.

You have stated that 3.6.1 does not mention 0 selective sheltering as a protective action, correct?

That's correct.

So, Table 3.6.1 does not offer guidance or guidelines regarding the implementation of selective sheltering, correct?

That is correct.

In your opinion, does the LILCO plan contain 0 adequate guidelines for determining when selective sheltering will be recommended?

A Yes.

And is that based solely on the printed portion of the plan appearing in your testimony on Page 56?

That, and recognizing that you have to be able to identify what the PAG dose values are, yes.

In addition, as we have already testified, under the current situation this is an option which in my opinion can never be exercised for the following reasons.

Q I think you stated those reasons.

Let me finish, if you will. If the State decides to actively participate at some later date, for whatever reason, then I would assume that this plan would be completely disposed of and we would have a normal sequence plan.

Let's go to your testimony on loss of offsite power, gentlemen.

A Where are you referring, please?

Page 96 of your testimony, Contention 95.

A Thank you.

It's true, is it not, that the LILCO Transition Plan does not have a source of backup power; isn't that correct, Mr. Keller? You can answer yes or no.

The LILCO plan has no backup power, that's correct.

The LILCO plan doesn't indicate whether the siren system has a source of backup power, correct?

That is correct.

And you don't know other -- so, you have no reason to believe it has a source of backup power, correct?

That it does not have, that is correct.

Are you aware of a storm this Spring which caused loss of power to at least ten of the sirens in the EPZ around Shoreham?

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A I am unaware of the loss of power to any number of sirens. I am aware there was a serious storm on Long Island. I am aware that power was out for extended periods in various areas of Long Island. I know nothing about whether any number of sirens, one, ten or eighty-nine were affected.

Q Well, were you or any member of the panel or FEMA informed by anyone that sirens lost their source of offsite power during that storm?

A (Witness Kowieski) To the best of my knowledge, nobody in FEMA was informed that one or all the sirens lost their power during the storm.

Q Does that cause you any concern about the LILCO siren system?

A There is no requirement that LILCO should notify FEMA about siren failure at this point.

(Witness Keller) Particularly for a non-licensed site.

Q There is no requirement? You are saying that there is no requirement that they inform you as to whether or not the siren system works?

A (Witness Kowieski) At this point in time.

(Witness McIntire) Excuse me. I don't think that was your original question. Your original question had to do with notification of loss of power for a certain

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number of sirens. Now, you changed it I believe to the system doesn't work.

Q Work properly, and Mr. Kowieski says not at this time.

A (Witness Kowieski) Well, again, if I -- I'm sorry. I answered -- it was my follow-up answer to your first question.

Q You don't think this is a matter that should be of any concern to FEMA, correct?

A (Witness McIntire) There is a difference, as

Mr. Keller tried to point out, between requirements and

concerns of ours between non-operating and operating plants.

Q Do you think that LILCO's -- that the loss of offsite power to LILCO's siren system should be a source of concern to FEMA?

MR. GLASS: Your Honor, this has been asked and answered at least three times.

MR. MC MURRAY: It has not been. The answer keeps shifting.

MR. GLASS: If you are changing a word, but you are still getting the same response.

JUDGE LAURENSON: The question is whether the loss of offsite power should be a concern to FEMA? Is that your question?

MR. MC MURRAY: Yes.

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JUDGE LAURENSON: The objection is overruled. And after the answer to this question, that will complete the questioning by the County of this panel.

WITNESS KOWIESKI: At this time, this does not concern to FEMA. However, I would like to qualify. If this would be operating site, this would be a real concern to FEMA.

JUDGE LAURENSON: Mr. Zahnleuter?

MR. ZAHNLEUTER: No questions.

JUDGE LAURENSON: Ms. McCleskey?

MS. MC CLESKEY: No questions.

JUDGE LAURENSON: Mr. Glass?

MR. GLASS: No redirect.

MR. MC MURRAY: Judge Laurenson --

(Laughter.)

MR. MC MURRAY: Before I go on, let me confer with Mr. Miller, please.

(Mr. Miller and Mr. McMurray are conferring.)

MR. MC MURRAY: Judge Laurenson, the County still has questions regarding the FEMA testimony, and I'm asking the Board whether we are barred from asking any further questions.

JUDGE LAURENSON: We gave you a choice of procedures to follow when we started into this on Tuesday. Have you determined where you plan to make your election?

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MR. MILLER: Judge Laurenson, based on the options given to the County on Tuesday, which I'm looking at now in the Transcript Page 12,146, the County would elect of those two choices to file the written offer of proof. And the way I read your ruling, that offer of proof would include, if the County decides it is necessary, a motion for reconsideration asking the Board to provide more time to the County to pursue questions during the week of August 14th with FEMA witnesses.

JUDGE LAURENSON: Let me ask the question this way. If you had an extra half an hour or so, would that eliminate the need of the County to file this request?

MR. MILLER: No, sir.

JUDGE LAURENSON: I'm sorry. Your answer is?
MR. MILLER: No, sir.

JUDGE LAURENSON: I think then perhaps to make the record clear as to what our intention is that the County should go forward and file its written request, and all parties will be heard on that.

But insofar as this hearing is then concerned, the Board is presently determining that the testimony from the FEMA witnesses concerning the thirty-three contentions identified in the letter that I believe was captioned "Ground Rules for FEMA Witnesses" or something to that effect, that area of testimony will be closed unless the

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County is able to persuade us that the matter should be reopened.

MR. MILLER: Judge Laurenson, let me just make a quick statement. And I think the Board understands the County's position.

The County never intended, nor did it ever agree, as Mr. Glass has intimated to the Board off the record I believe, that we felt questioning of this FEMA panel on all the issues listed in that letter could be concluded within this one week. It's clear from the time estimates in our cross-examination plan of four to five days that we never would have made such an agreement.

And we do intend to pursue the second option offered by the Board. But I want to make clear a couple of things. First of all, what we intend to do at this time is to review the transcripts from this week, make a determination as to whether we would feel it would be prudent and advisable to put into the record an offer of proof in this matter, including the emergency reconsideration.

We have further questions to pursue but we are going to look at the transcripts and try to make a decision which would be a fair decision, in our opinion.

In addition, Judge Laurenson, we would request that the Board's timing of this written offer be reconsidered.

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As I understand it, the Board is saying seven days from today the written offer of proof must be filed. Judge Laurenson, frankly we have gone through this problem before. In light of the fact that Mr. McMurray and I are in hearings, and in light of the fact that we are the attorneys responsible, we simply cannot commit to meeting a deadline seven days from today to file any written offer of proof and motion for reconsideration.

obviously going to be many other matters requiring our attention and our time. I would suggest, Judge Laurenson, that our written offer of proof, if we indeed file one, would be required to be filed on Wednesday, August the lst. I suggest that date because that is three business days after the end of the July hearing schedule. It would permit the parties to still respond within seven days; that is, by August the 8th. And it would still permit the Board almost a week to rule before the FEMA witnesses came back.

And I think in that way the County would not be prejudiced by having to try to prepare such an offer of proof and continue with the hearings at the same time.

JUDGE LAURENSON: You are taking eighteen days for yourself but you are limiting them to seven days, then.

MR. MILLER: Well, Judge Laurenson, in all fairness I think the preparation of the offer of proof and

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the motion for reconsideration certainly would require more time and effort than a response.

And, secondly, I can assure you that it's not that we are going to use eighteen days. What I'm saying to the Board is that in light of the workload facing the County and the lawyers for the County right now, we will prepare that offer of proof, if the Board would accept my proposal, probably beginning July 28th which is the day the hearings end during this three week schedule.

So, it would give us the week-end and two full business days before we would have to file.

MR. GLASS: I have some concern about our ability to be able to respond, since we are the main party that is being affected in this matter.

We -- I am already committed to be in Washington that particular week, the week of the 1st. I realize the County will probably accommodate me and provide copies to me down in Washington. But I am there in another meeting. We are brining -- our witnesses are down there on other meetings and matters and are trying to work on their testimony. They are bringing people in to try to work on their testimony.

We are filing our testimony on the 6th, and I do want to have an opportunity to at least confer or review what my witnesses are doing. And that does not leave me any

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time to really respond.

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We have depositions. It just is not giving me an adequate time at all.

MS. MC CLESKEY: Without belaboring the point,

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LILCO would oppose an extension from the schedule set out by the Board. We are all busy, and I don't think the other

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parties should have to compensate to allow the County to

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allocate resources. You know, they have other people that

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can be working on these issues.

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MR. MILLER: I have made a statement in that

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regard before, Judge Laurenson. We do not have other

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people to work on these issues.

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(The Board members are conferring.)

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JUDGE LAURENSON: We have considered the request for an extension of time. And frankly, we feel that since the County has already spent two and a half to three days this week questioning this panel of witnesses there really can't be that much left that is going to take a lot of time to make up an offer of proof. But in order to give the County a few extra days we will, instead of requiring this to be filed in seven days we will extend it to ten days.

The County's response will then be due on Monday, July 23rd. All other parties will also be given the same period of ten days to respond. Their responses will be due on Thursday, August the 2nd.

That will then give us an opportunity to decide this motion and to notify all parties before we restart the hearing in August on the 14th.

MR. MILLER: Thank you, Judge Laurenson. We will endeavor to meet that date of July 23.

JUDGE LAURENSON: Anything else before we close the record for the day?

(No response.)

The hearing is adjourned. We will reconvene here at 10:00 a.m. with the county's panel on training witnesses next Tuesday.

(Thereupon, at 5:25 p.m., the hearing was adjourned, to reconvene at 10:00 a.m., Tuesday, July 17, 1984.)

## CERTIFICATE OF PROCERDINGS

This is to certify that the attached proceedings before the

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MRC COMMISSION In the matter of: LONG ISLAND LIGHTING COMPANY Date of Proceeding: Friday, July 13, 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. 10 Garrett J. Walsh, Jr. 11 Official Reporter - Typed 12 13 Signat Officiad Reporter Myrtle H. Traylor 15 Official Reporter - Typed 16 Official Reporter - Signagure Rebecca E. Eyster 18 Official Reporter - Typed 19 Official Reporter - Signature 20 21 22 23