

ORIGINAL

OFFICIAL TRANSCRIPT PROCEEDINGS BEFORE

NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DKT/CASE NO. 50-322-OL
TITLE LONG ISLAND LIGHTING COMPANY
(Shoreham Nuclear Power Station)
PLACE Bethesda, Maryland
DATE November 19, 1982
PAGES 14,590 - 14,712

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

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In the Matter of :
LONG ISLAND LIGHTING COMPANY : Docket No. 50-322-QL
(Shoreham Nuclear Power Station) :

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Bethesda, Maryland
Friday, November 19, 1982

The hearing in the above-entitled matter
reconvened, pursuant to recess, at 9:00 a.m.

BEFORE:

- LAWRENCE BRENNER, Chairman
Administrative Judge
- JAMES CARPENTER, Member
Administrative Judge
- PETER A. MORRIS, Member
Administrative Judge

1 APPEARANCES:

2 On behalf of Applicant:

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C O N T E N T S

<u>WITNESSES:</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>	<u>BOARD</u>
Edward J. Youngling, Arthur R. Muller and Joseph M. Kelly (Resumed)					
By Mr. Dynner		14,624			
By Mr. Ellis				14,673	

E X H I B I T S

<u>NUMBER</u>	<u>IDENTIFIED</u>	<u>RECEIVED</u>	<u>BOUND IN TRANSCRIPT</u>
Suffolk County 83	14,626		14,627
Suffolk County 84	14,626		14,627
Suffolk County 85	14,626		14,627
Suffolk County 86	14,626		14,627
LILCO 38	14,680		14,681

RECESSES:

Morning - 14,634
14,672

P R O C E E D I N G S

(9:00 a.m.)

JUDGE BRENNER: Good morning.

Let's talk about emergency planning for a moment. First of all, I recited yesterday the conversations my secretary had with Mr. Shapiro, and we received word through the County that a representative of SOC will be at the conference on Tuesday at 10:30. I would appreciate it if the County could contact Mr. Shapiro by telephone today and inform him that the conference has definitely been set for 10:30 on Tuesday.

He stated that he would not attend, regardless. As I stated yesterday, however, at the time of those conversations, my secretary explained to him that the time and place had not been definitely reconfirmed or reestablished. And since we did that subsequent to it, just in case he has a change of mind, I would like very much for him to know where we are going to be and when. We still have received no filing from Mr. Shapiro, and as it is a day late past the deadline, we are going ahead without it.

In that regard, we have determined that we do have the authority to require the prehearing examinations along the lines we previously suggested. We will have a written ruling issued on or before

1 Tuesday explaining the detail once again, and there
2 should be no surprises in there but it will set it out
3 so that everyone can understand what it is we are
4 ordering.

5 As we also explained, we will encourage
6 discussion as to the procedural implementation of the
7 process on Tuesday, so there is some flexibility on that
8 notwithstanding what might be in the order, but there is
9 no flexibility on the requirement to go ahead with the
10 prehearing examinations.

11 In light of that, we would like to ask the
12 County if it is still their position that they are going
13 to default without regard to whether we have the
14 authority or not, now that we have concluded that we do
15 indeed have the authority.

16 MR. LANPHER: Judge Brenner, "default" is your
17 word.

18 JUDGE BRENNER: Not participate at all.

19 MR. LANPHER: That is the County's position.

20 JUDGE BRENNER: All right. As explained in
21 the order, if that is your position you will be in
22 default. Whether or not we go ahead and rule on the
23 other motions on Tuesday, we will consider the matter.
24 We are not precluding the fact that we might rule in any
25 event to establish a record. I don't have to get into

1 the fact -- you can get into it before some other body
2 someday if you wish -- that the County has ample
3 appellate procedures and avenues before us other than a
4 default, and I will term it a default -- you can term it
5 what you like -- including a request to us to certify
6 the matter while proceeding with it and so as to still
7 preserve your rights to get a quick ruling and then
8 participate in a hearing before us.

9 If you had been successful in overturning our
10 ruling, all that would have been lost would have been
11 some days of depositions which would have served a good
12 discovery purpose, in any event. But the County is
13 obviously not proceeding that way, and it is our view
14 that, given the County's posture, even if we are wrong
15 on the authority question in the end, which we don't
16 believe we are, the County is in default in any event
17 because it is proceeding incorrectly in advancing its
18 view on our authority through the proper appellate
19 channels.

20 What I am telling you is that we would have
21 been willing to seriously consider a request to get a
22 quick appellate ruling, if that is what the County
23 wished, while at the same time proceeding with the
24 process. That is up to the County.

25 In light of the County's position, we will

1 held the conference in any event, the minimum important
2 reason being to make sure that we are communicating, and
3 the County will have the benefit of the written order
4 and any dialogue it wishes to engage in with us or
5 before us so that we can be very sure we do not have a
6 failure in communication before the County is declared
7 in default.

8 In addition, we want to ascertain SCC's
9 position. If the other parties wish the Staff and LILCO
10 to orally set forth its position on how we should
11 proceed given the County's position, we would be willing
12 to consider that. Whether it affects our judgment or
13 not is another thing. It might be a very short
14 conference. Then again, as Judge Morris points out, it
15 might make for a longer conference.

16 All right. We have no other preliminary
17 matters. Do you want to talk about time estimates or
18 anything?

19 MR. ELLIS: Yes, sir. Would you like to do
20 that on the record?

21 JUDGE BRENNER: Yes.

22 MR. ELLIS: Judge Brenner, yesterday I had
23 suggested at the conclusion that perhaps we could
24 consider next week to complete the OQA, which it now
25 appears likely, if not certain, that will not be

1 completed today, and Mr. Dynner indicated that he would
2 check to see whether he could do it. We appreciated
3 that. It now appears that there are some final
4 activities going on for the plant involving these
5 individuals that had been long planned for next week,
6 and therefore, though I suggested it, we cannot do it.
7 We will simply have to come back and finish the next
8 week here in Bethesda.

9 JUDGE BRENNER: Okay.

10 MR. BORDENICK: Judge Brenner, I had a
11 preliminary matter on the QA/QC contentions. This is
12 with respect to --

13 JUDGE BRENNER: Torrey Pines?

14 MR. BORDENICK: No. I owe you something on
15 Torrey Pines. This is not in that regard.

16 JUDGE BRENNER: I was going to ask you for
17 that next, if that is all right.

18 MR. BORDENICK: That is fine.

19 This has to do with the Staff panel and the
20 prefiled testimony. It has become apparent to me in the
21 last several days that there is at least a potential for
22 some misunderstandings at the time that the Staff panel
23 takes the witness stand. The way that now appears, it
24 is certainly going to be on or after December 1st,
25 probably well after the 1st.

1 In any event, I think there may be some
2 confusion in people's minds or there may be a potential
3 for confusion in people's minds as to just what the
4 Staff's review on OQA has entailed. I don't know
5 whether the Board and the parties have a copy of the
6 Staff's prefiled testimony. If you don't, it is really
7 not necessary. I can more or less summarize the
8 situation.

9 JUDGE BRENNER: I always carry it close by.

10 MR. BORDENICK: Pages 29 through 31 and
11 beyond. The Staff address Contention 13. When we talk
12 about Staff review, as I think is apparent to everyone
13 in the room, we are talking about two arms of the
14 Staff. One is NRR, one is I&E or the Region. If you
15 look at the testimony, you will see that as far as the
16 NRR review is concerned, that is and was completed at
17 the time of filing of the testimony. If you look at
18 page 31 where the witness from the Region speaks, he
19 stated, "As stated in the response to Question 23" --
20 and that is a typographical error, it should be Question
21 24 -- "QA program description forms a foundation from
22 which a manual and implementing procedures are developed
23 which describe in detail how to carry out program
24 commitments.

25 "The NRC Region 1 Office reviews and evaluates

1 both the QA manual and QA implementing procedures for
2 acceptability and for conformance with both 10 CFR 50,
3 Appendix B and FSAR commitments. This review will be
4 completed prior to fuel load."

5 I thought it might be well, since, among other
6 things, he was in town, for Mr. Richard W. Starostecki,
7 who is the Director, Division of Project and Resident
8 Programs in Region 1, to briefly explain to the Board
9 and parties what the Staff -- again, in this instance
10 being the Region -- has and hasn't done by way of a
11 review of the LILCO OQA manual and procedures.

12 With the Board's indulgence, I would like to
13 have Mr. Starostecki briefly address the Board in that
14 regard.

15 JUDGE BRENNER: I don't have any objection if
16 the parties don't. It is not testimony under oath and
17 we won't cite it for any findings. It is just an
18 explanation of the scope of things.

19 MR. BORDENICK: That is right. I am really
20 trying to obviate some potential misunderstandings that
21 might crop up at the time that the panel takes the
22 witness stand, and I think it would be well for the
23 Board and parties to know just what it is that the Staff
24 has or hasn't done.

25 JUDGE BRENNER: Well, we will certainly be

1 happy to hear from Mr. Starostecki in a second. I don't
2 want to engage in a dialogue now, but as counsel, you
3 should know and I am sure you do know that regardless of
4 what schedule I&E might have preferred in terms of its
5 normal administrative duties and its responsibilities as
6 it defines them for itself, there is ample case law on
7 the question of deferring beyond the litigation, beyond
8 our decision, material matters bearing on issues in
9 controversy.

10 So if it is going to be the Staff's position
11 that there are things they are not going to get to until
12 after the litigation, we will have to take a look, and
13 we will seek the Staff's own analysis and advice as to
14 the extent to which it affects matters in controversy.
15 And you know what is in controversy as to the QA manual
16 and the QA implementing procedures. It is squarely in
17 the contention preliminarily, in my view.

18 MR. BORDENICK: Judge Brenner, I am not
19 suggesting that it is not within the contention and I'm
20 not suggesting that the case obtains as you have just
21 described it. The Staff is suggesting that we defer
22 anything until after the completion of litigation. That
23 is not, at least as I understand it, what Mr.
24 Starostecki is going to explain.

25 JUDGE BRENNER: Well, let's let him explain,

1 then.

2 MR. STAROSTECKI: Thank you.

3 JUDGE BRENNER: Welcome back to Bethesda.

4 MR. STAROSTECKI: Thank you. I sometimes
5 wonder if it is worthwhile to come back. I volunteered
6 for various tasks.

7 One of the issues that has been coming up
8 lately is the issue of schedules, and I talked to
9 counsel with a view of being responsive to the Board.
10 So what I would like to do is just very briefly indicate
11 the relative roles of the people in the Region and the
12 time frame we are talking about for completing the
13 review of the operational QA procedures.

14 In numerous instances up until this point in
15 time, we have had inspectors, and particularly the
16 senior resident inspector, reviewing pre-operational
17 test programs, reviewing things like maintenance of
18 equipment and storage to which QA program and procedures
19 apply. So we have had a snapshot, if you will, of some
20 of the procedures so that people can be knowledgeable at
21 least of a small aspect of the program.

22 However, irrespective of any hearings, we
23 still are required to look at all administrative
24 procedures, including operational QA, and to do that, we
25 establish a team of about five or six people. In fact,

1 we are collecting information next week from the site.
2 We will do an in-office review and then we culminate
3 with two weeks on the site.

4 This team visit, which includes a senior
5 resident, is scheduled to be held December 6th through
6 the 17th. That presumes all members of the team, and I
7 am particularly interested in the resident inspector
8 being available for at least a week of that. After the
9 December 17th, we obviously at least will be able to
10 speak to some of the issues, but the report will not be
11 put together in final fashion until, I think, early in
12 1983.

13 The extent to which people will be able to
14 address operational QA before then, I have to say, is
15 limited to individuals who have to work with those
16 procedures and does not represent what I would consider
17 team review. Then the operational QA, again, is a part
18 of a bigger process to look at administrative controls
19 and administrative procedures used at the Shoreham
20 station.

21 As a point of reference we also in the Region
22 are meeting with the licensee on Monday to discuss
23 various other issues affecting fuel load and will advise
24 counsel of any additional problems we may have, but it
25 is the scheduling problem that I see is difficult to

1 explain in that we schedule these team reviews and these
2 inspections on a quarterly basis, and we have come up
3 with the Shoreham schedule at this time because it is,
4 in my view, at least, several months in advance of fuel
5 load, and it is, in our view, trying to be responsive to
6 the Board's need for information without jeopardizing
7 our inspections at the other facilities.

8 So we do have a need to juggle our resources.
9 We do have priorities. Shoreham is one of the higher
10 priority plants we have in the Region, but for me at
11 this time to say, to accelerate any kind of review I
12 think would maybe generate additional information in the
13 short term but may delay the process because of the
14 inability to get that overall perspective.

15 I hope that provides some additional
16 information on the schedules and the ability of
17 individuals to testify on the matter.

18 MR. BORDENICK: Judge Brenner, could I in
19 effect sum up what the Staff is saying? We are
20 certainly prepared to go ahead as scheduled. I think
21 any potential conflicts regarding Mr. Higgens can be
22 worked out amongst the parties. We are essentially
23 prepared to go ahead with our panel as scheduled when
24 the appropriate time arises, but as regards at least
25 what I anticipate would be some of the types of

1 questions that might be posed to the panel regarding,
2 well, similar type questions that were posed, for
3 example, to the LILCO panel which is before us today, I
4 think the witnesses will be able to respond to these
5 questions; but I am afraid it is not going to be what
6 one might term the final Region response.

7 JUDGE BRENNER: They are going to be in big
8 trouble if they don't know the procedures. That is
9 clear. Big trouble in the sense that their answers will
10 be "I don't know," "I don't know," and "I don't know,
11 give me a moment."

12 MR. BORDENICK: Well, I am not so sure that
13 will be the case, Judge Brenner. I think certainly the
14 resident is already familiar with some of these
15 procedures. It might be the case in some instances, but
16 I don't think it is going to be the case in all
17 instances. But then again, it is the type of process
18 where the scheduled inspection which Mr. Starostecki has
19 described may uncover some new information which may or
20 may not affect whatever it is these witnesses respond to
21 at the hearing by way of questions from the County or
22 the Applicant.

23 JUDGE BRENNER: Well, it is possible that the
24 Staff, given its knowledge of other procedures it has
25 looked at at other plants and its own ideas of

1 procedures developed over the years, may have
2 significant recommendations or even directions in its
3 view to LILCO for rewriting some of those procedures,
4 for all I know.

5 MR. BORDENICK: I think that may well be the
6 case.

7 MR. STAROSTECKI: I agree, and that is why we
8 prefer to have a team of people from the Region to
9 supplement the resident. It is the other inspectors
10 that go see those procedures. As a matter of point, we
11 just recently finished the Susquehanna facility, and we
12 had to expend an awful lot of resources in support of
13 that case also.

14 JUDGE BRENNER: No one has any quarrel with
15 what you want to do. What I am surprised at is the
16 schedule. This issue has been scheduled, and in fact,
17 we were here long after the time we thought we would
18 still be litigating it. I don't understand why the
19 Staff didn't proceed with this in August or September.
20 You don't have to tell me, but that is what I don't
21 understand.

22 MR. STAROSTECKI: In August and September we
23 were pursuing an issue with the Susquehanna facility.
24 We have limited resources. I just cannot apply
25 resources to other facilities where there is great

1 interest in completing a phase of the plant review.

2 JUDGE BRENNER: We were not advised and there
3 were things that could have been done, including
4 emergency planning issues moved up and deferring this
5 issue. Every time one little thing shifts in this
6 proceeding, it is as if this case is a Rube Goldberg
7 machine. You move one thing and then everything touches
8 another. I suppose if I was kinder, I would call it the
9 Domino Theory of Litigation. And all the parties know
10 that. And for us to be told at the end of November as
11 to what still is undone is just too late for us to adapt
12 and be as flexible as we would like to try to be in
13 taking due cognizance of the Staff's responsibilities
14 and also due process to the Utility, due process to the
15 County and other intervenors.

16 Is this as surprising to everyone else as it
17 is to me, this schedule of what is going on, LILCO and
18 the County?

19 MR. ELLIS: Yes, it was a surprise to me
20 personally when we first learned about it. I think,
21 though, to put a little bit different perspective on it,
22 one of the reasons, well, one of the things that I think
23 is important to point out, and I think Mr. Starostecki
24 referred to it, he says that the knowledge of the
25 procedures in the manual, he called it limited to

1 individuals who have worked with these procedures, and
2 we are aware that these individuals have been to the
3 site and they are aware of these procedures and they
4 have worked with them, and that is information I have
5 gotten from our people.

6 So we have naturally assumed that they were
7 deeply involved. Indeed, I am told that the resident
8 has his own manual and uses it, and I think we can
9 assume that they are knowledgeable about these
10 procedures and the manual. Mr. Starostecki referred to
11 the team review. I confess I wasn't familiar with the
12 team review concept, but it seems to me that they are
13 certainly knowledgeable about it, and I would be very
14 surprised if the string of "I don't know's" came as a
15 result of questions.

16 JUDGE BRENNER: Well, I exaggerated, and Mr.
17 Starostecki put it as I would expect him to put it. But
18 what he is trying to tell you is that while he has
19 people who know their procedures, including the resident
20 inspector, he doesn't have the kind of multi-thorough
21 review that he intends to complete so that the Staff can
22 take a step back and see in the total complex what kind
23 of improvements they want to recommend, which
24 improvements, or maybe they will have none, but the
25 result of which review could change what is before us,

1 that is, the procedures and the manual chapters.

2 So he is not saying that he doesn't have
3 witnesses who know. I may be exaggerating, but I think
4 his message is quite clear. I can interpret his words
5 very well.

6 County, I don't know if you have anything to
7 say.

8 MR. LANPHER: Judge Brenner, we were aware of
9 the testimony. We didn't know the schedule, however, as
10 to when it would be done. I don't think we have
11 anything to add.

12 JUDGE BRENNER: I was aware of the testimony
13 too, but it was filed back in June; and given the
14 schedule we were proceeding on, and not having heard
15 anything different, I assumed that there would be
16 completion of what the Staff was going to do before us
17 on the schedule, especially given the length of the
18 schedule and the fact that we are litigating these
19 matters now rather than a month or more ago.

20 MR. LANPHER: I guess, Judge Brenner, the one
21 thing that I would add, one thing, frankly, that we were
22 going to pursue at the appropriate time is, given the
23 fact that I&E hasn't reviewed what we think are very
24 important elements of the QA program, key elements, why
25 this wasn't listed as an SER open item.

1 JUDGE BRENNER: When were you going to bring
2 this up, in your own good time also?

3 MR. LANPHER: It is in Mr. Hubbard's
4 testimony, so I guess we have brought it up, and we were
5 going to ask them on cross-examination about their
6 review process.

7 [Board conferring.]

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1 JUDGE BRENNER: I don't want to get into
2 interpretations of contentions in great detail, but
3 anyone who knows anything about the QA plans of this and
4 other utilities and the staff's prior reviews,
5 understands that when an intervenor is coming in and
6 contending that the program is not laid out sufficiently
7 in the FSAR then an important part of the case is going
8 to be the implementation of the FSAR which is through
9 the manual and the procedures. And anybody who couldn't
10 predict that the witnesses for LILCO at least were going
11 to expend a good deal of their effort focusing on what
12 they deemed to be proper implementing mechanisms, which
13 are the manual and the procedures, is very naive. So I
14 will leave it at that.

15 People should have known that the case was
16 going to end up on contention 13, importantly involving
17 the procedures in the manual. We knew it from reading
18 the contention, and particularly, after reading the
19 testimony.

20 MR. BORDENICK: Judge Brenner, can I just add
21 one further observation? I don't know what percentage
22 of the total QA/QC contentions package we're talking
23 about. I think it's a fairly small percentage as far as
24 the subject matter we've been discussing this morning.

25 In my mind, certainly there's going to be the

1 problem of what is the staff's final position as regards
2 the wording of a given procedure. But it seems to me
3 that the schedule that Mr. Starostecky has given us this
4 morning, when compared to other developments, unrelated
5 developments on QA/QC such as the Torrey Pines report
6 and the Teledyne report, which in effect is going to
7 preclude the closing of the record on QA/QC in any event
8 --

9 JUDGE BRENNER: Well, we have not made that
10 decision. Let me point that out. That's your statement.

11 MR. BORDENICK: I say that's my observation.
12 I recognize the Board has not made that particular
13 decision. But to the extent that we have a problem and
14 except insofar as the precise wording of a given
15 procedure, I don't think that the problems, if any, are
16 that significant in the overall context of the QA/QC
17 procedures.

18 I did want to point out one other thing. Mr.
19 Starosticki mentioned to me in connection with the
20 region's allocation of resources back -- and I'm not
21 sure of the timeframes because I was not involved with
22 the emergency planning contentions, but the region did
23 speed up a program at the site to accommodate the filing
24 of contentions.

25 So that's another complicating factor in the

1 whole process.

2 JUDGE BRENNER: Well, I think it was important
3 at the time, given the proposed settlements that
4 occurred thereafter. And that was one of the reasons we
5 talked about it, and we appreciated that at the time.

6 MR. ELLIS: Couldn't the staff expedite their
7 review, and we take construction QA staff first? And
8 then take the OQA staff?

9 JUDGE BRENNER: Well, there are a couple of
10 options, some of which have occurred to us, and what we
11 want the parties to do is to think about it, and we
12 would be willing to even talk about it at the end of the
13 day today, if we end the testimony a little earlier than
14 we had planned, or on Tuesday. But on Tuesday, you
15 might have different people there, so you might prefer
16 to do it here.

17 One option is along the lines that Mr. Ellis
18 started to suggest; to carve out the OQA aspect, the
19 procedures aspect. To the extent you think other
20 aspects are involved with it, we will hear from you,
21 such as staffing of the OQA organization. I don't know
22 what the staff sees as the connection or the lack
23 thereof or the extent to which that, too, is going to be
24 part of the review. But think about it. You don't have
25 to tell us now.

1 We would go ahead with construction QA, the
2 non-QQA matters. If we carved out QQA, I think we
3 should consider whether or not the QQA portion of Mr.
4 Hubbard's testimony should similarly be deferred. That
5 is, we wouldn't examine Mr. Hubbard on QQA either. He
6 could have the benefit of the staff's further work to
7 factor into his thinking, too. Then come back and do it
8 on a schedule to be developed.

9 Let me also point out that the schedule we're
10 in, if the inspection is moved up even one week, that
11 may not seem like a lot of time but it could make a
12 difference here, particularly given the overlap because
13 you're going to have staff witnesses involved in this
14 proceeding.

15 I recognize they will not be the same people,
16 but to the extent you involve the witnesses that you're
17 going to put on here in what is going on in this review,
18 that's going to be very valuable. Now, whether that means
19 I'm going to add to the witness panel here we're
20 planning so that you build in that involvement, so to
21 speak, is up to the staff.

22 But if we're going to look for this as a
23 valuable source of information -- and it is a
24 potentially valuable source -- you would want to factor
25 in the right people. Because if things get too spread

1 out in the communication chain, that becomes a problem.
2 You may be assisted in doing that if you move this up
3 one week because that week, Mr. Hubbard will be on the
4 stand.

5 In addition to that, the sooner we can get
6 this back before us, the better. It is that simple.
7 Remember, it is not just the staff's inspection and then
8 the delay, necessary delay, time lag for its report. It
9 is then the ability of the parties to read the report
10 and to focus their thinking.

11 An obvious possibility is to move some of the
12 other issues up, such as inadequate core cooling, ahead
13 of DQA, and any other safety matters that remain. We'll
14 know more about emergency planning after next Tuesday.

15 MR. BORDENICK: Judge Brenner, I was just
16 going to interject that Mr. Starostacki says that he
17 will look into and make every effort to at least move up
18 that full review by a week. So that --

19 JUDGE BRENNER: You can give him the detail to
20 include whether you agree or disagree with me that it
21 could make quite a difference, given where we are now in
22 the proceeding.

23 MR. BORDENICK: It conceivably could. And
24 also, I think you alluded to something that's been in
25 the back of my mind as a result of that full

1 inspection. We might want to add -- I know one
2 particular individual that will be on that team that we
3 might add to the panel just for that limited purpose.

4 JUDGE BRENNER: Yes. One advantage would be
5 that you would only be separating out the QA issues, so
6 you wouldn't tie up all your people all the time. We
7 would finish the construction QA matters.

8 There may be some good in all this, too.
9 Yesterday we urged the parties to continue talking about
10 areas of QA, and we were focusing in part on the
11 procedures in the QA Manual and improvements that are
12 possible in detail that are very cumbersome to litigate
13 before us, even though they had been litigated by
14 example before us.

15 This may be an opportunity to combine
16 discussions among the parties along with the staff's
17 review, and I'm sure you can all be imaginative as to
18 how that could take place. But the message is to make
19 sure to involve the county to the extent to which they
20 are entitled as a minimum, and perhaps beyond that in
21 the sense of discussions. You've got the record partly
22 educed already. We will have more of it educed today at
23 some point and continuing after next week.

24 So you can focus on where the interest might
25 be; the staff can. And then after the review or even

1 during the review, parties, through counsel and in
2 addition, through technical people, can keep talking and
3 see what develops. And that way, when the staff comes
4 out with its result and review, it will have anticipated
5 some areas of concern, even though you may continue to
6 disagree. At least you will be meshing on the issue.

7 In addition, you might be able to accommodate
8 joint things with LILCO, of course, heavily
9 participating.

10 MR. BORDENICK: Judge Brenner, I fully agree
11 with that. I have listened to some discussions between
12 counsel for applicant and the county and the Board's
13 discussion yesterday, and my personal view is that the
14 issue of what the final OGA procedures should look like,
15 even though it's been partially litigated, is certainly
16 one that can and should be settled. Knowing both these
17 parties, I think that they would do that, and the staff
18 will lend every effort to try to accommodate that.

19 So as you point out, there may be some good in
20 all of this in that regard.

21 JUDGE BRENNER: One thing that occurs to me is
22 on some of the past settlements, the staff did not get
23 active right from the beginning for reasons that we
24 recognize. That is, the staff had completely finished
25 its review and written its report and knew its position

1 quite well, so the staff allowed the parties to thrash
2 it out a little bit and then came in to assess the
3 potential settlements against what the staff's
4 well-established position had been.

5 I understand why in those circumstances it
6 made sense to proceed that way. In this case, since the
7 staff is in the midst of part of its review, I
8 understand that a lot has taken place, as described, but
9 it is closing in on things once again now through the
10 team effort just described. Staff could serve as a very
11 useful catalyst, I think. We will leave it to the
12 parties.

13 All right. In terms of how we should schedule
14 things here, let's think about it and maybe come back at
15 the end of the day today or even a little later, but it
16 would be better if we could get a handle on some of the
17 more immediate things today. Give me one moment on
18 something else.

19 (Board conferring.)

20 We want to add one thing on our own. An
21 important factor when we set the Torrey Pines testimony
22 schedule was looking at when we wanted to finish this
23 issue for the reasons we discussed. And we think it was
24 important to keep the record together. It was important
25 to us as the tryers of fact because we wanted to follow

1 very closely what happened. We also very much want the
2 county's assistance in looking at Torrey Pines on the
3 record here.

4 So why don't you consider what flexibility we
5 now have in that filing, but be reasonable. Let me tell
6 you again, your original proposal was just too long, Mr.
7 Lanpher. But if we move up inadequate core cooling to
8 right after construction QA here, you consider when Mr.
9 Hubbard might be done here, and you think about what
10 flexibility you have in not needing to have him
11 immediately at your side for all of the staff's cross
12 and see if you can come up with a mutually-agreeable --
13 or in the absence of that, the county's proposed date
14 for the filing of testimony on Torrey Pines.

15 In addition, we strongly encourage that you
16 take a deposition before the filing of testimony, or
17 very shortly thereafter. We will leave that up to the
18 parties to work out, also. There are advantages both
19 ways. We would prefer it before so that we get
20 well-scoped testimony.

21 And it's important because we think the Torrey
22 Pines report, if there are not major flaws in it -- and
23 we will hear about if there are -- may have
24 accomplished, at least as to part of the plant and part
25 of the subject matter, something that the county has

1 been advocating, and we would like to hear about it.

2 And it gives us the ability to assess what was done.

3 We now have some concrete thing that was done
4 to match up against the testimony of going back to 78 as
5 to what type of approaches should be taken in the
6 different views of the different parties.

7 But we're talking about flexibility of weeks
8 from our previous schedule, not months. So consider
9 that when you get together on a proposal.

10 MR. LANPHER: Judge Brenner, we will discuss
11 that and hopefully, be able to get back to you by the
12 end of the day. And as we said before, we are eager to
13 participate on Torrey Pines, and hopefully, this will
14 let us. So let us talk about it.

15 JUDGE BRENNER: Okay. The other thing is we
16 do want to thank the staff for telling us what it told
17 us today. We would liked to have heard about it quite
18 sometime ago, but we're glad you came forward now to
19 explain it to us. We would have asked questions that I
20 think you would want to have the benefit of that review
21 before you tried to answer them.

22 In addition, the schedule, while setting the
23 staff's responsibilities, may now, to our benefit and
24 hopefully to the staff's benefit, make your job a little
25 harder in the sense that in addition to looking at what

1 you would have looked at normally to carry out your own
2 responsibilities -- and I'm certainly not implying that
3 you would not have fully carried out your
4 responsibilities in the absence of a contested issue --
5 when you have a contested issue, you have the further
6 responsibility of not only coming up with the right
7 answer but being able to thoroughly show why the answer
8 is right. Those are two different things sometimes; not
9 mutually exclusive but not fully the same, either.

10 And you now have the advantage of knowing
11 where the litigation is and where it might go and being
12 able to very materially affect the course of the
13 litigation and very materially affect the quality of
14 this record; something that we are always interested in.

15 So we will appreciate the staff focusing on
16 all aspects now.

17 MR. DYNNER: Judge Brenner, if I could, first
18 of all, indicate on behalf of the county our belief that
19 what you stated insofar as the possibility of some kind
20 of settlement being worked out, given the staff's status
21 right now, is one that the county will intend to pursue.

22 Secondly, I have just a question for
23 clarification as to whether it will be the staff's
24 position that once it has completed whatever review of
25 the procedures and manual that it deems necessary,

1 assuming that the settlement is unsuccessful -- and I
2 hope that's not the case -- will it be the intention of
3 the staff to file testimony on its review of the
4 procedures and manual, or to make the report available
5 for the record to the parties?

6 JUDGE BRENNER: Certainly, you will get
7 whatever report they issue; that's a given. Let them
8 think about what the format might take, and we can all
9 discuss it further if such discussion will be fruitful
10 on the record, but have discussions off the record
11 first.

12 I want you to get more than just the report.
13 I want you to be apprised, to the extent that it does
14 not interfere with the staff's schedule and abilities to
15 carry out their work, as to what's happening, and if
16 there are any scoping meetings with the utility, to let
17 you know about it. And very simply, for the staff to --
18 for Mr. Bordenick to be able to pick up the phone and
19 let you know from time to time what's happening. And
20 all parties have been very good about that on all
21 issues. We expect that to continue.

22 I must add one thing about this issue. One
23 reason that I think that settlement or narrowing is
24 possible is that a lot of the questions and answers just
25 have not been disagreement on the substance of what

1 should be done. The questions would be: shouldn't you
2 do A, B, C and D, and the answers have been yes, we
3 should do A, B, C and D, and we do it.

4 The question would be: well, according to
5 this, you don't have to do it, or you could vary that,
6 or, we don't see here where you do it. And the answers
7 have been well, if you look somewhere else, it says that
8 we do it. Or, we think that means we should do it, we
9 have to do it. Or, we do it anyway, and we intend to
10 keep doing it.

11 So in this one subarea, there didn't appear to
12 be a great gulf. Some differences, to be sure, but
13 there did not appear to be a great gulf in terms of the
14 philosophy of what should be done. And given that, I
15 think there is room for settlement or narrowing.

16 All right. We have nothing to add and we're
17 prepared to pick up the questioning at this point.

18 MR. BORDENICK: Thank you, Judge Brenner.

19 JUDGE BRENNER: Implicit in our proceeding now
20 is I certainly think it would be useful to get the
21 redirect on the OCA that has been asked, while it is
22 still fresh. And given the fact that it is not likely
23 to take a lot of hearing time, it may also help focus
24 the parties in their further discussion.

25 I guess I should ask LILCO if it agrees or

1 disagrees.

2 MR. ELLIS: Yes, Judge, in general, I agree.
3 It is something I would like to reflect on at the
4 break. I think what we elected to do is to permit Mr.
5 Dynner to go ahead and ask whatever further questions he
6 may have on the staffing point related to the documents
7 that we gave him on November 10th, and the document that
8 he received yesterday. And maybe I will have a chance
9 to reflect on it more at the break.

10 But certainly, we're prepared to use all of
11 today on redirect and on subjects -- after Mr. Dynner is
12 through -- and on subjects which we think will be useful.

13 JUDGE BRENNER: Okay. And then you will have
14 the naturally occurring opportunity to think about it.
15 So we will prepare now with the county's further cross
16 examination on the staffing matter.

17 MR. DYNNER: Judge Brenner, I'm going to have
18 distributed a group of documents to be marked for
19 identification.

20 (Pause.)

21 Whereupon,

22 EDWARD J. YOUNGLING,

23 ARTHUR R. MULLER and

24 JOSEPH M. KELLY,

25 witnesses previously duly sworn, were examined and

1 testified further as follows:

2 CROSS EXAMINATION -- Resumed

3 BY MR. DYNNER:

4 Q Gentlemen, you should have before you now a
5 group of four documents. The first document is entitled
6 on the cover page, "Station Operational Quality
7 Assurance Section Planning Report, May 1980 to July
8 1982." In the lower righthand corner it says "Dennis M.
9 Durand, Operating QA Engineer." And in the lower
10 lefthand corner are the numbers and letters 1A,
11 1-1.920-LIM-RP-001, I think.

12 A (WITNESS MULLER) That is correct.

13 Q And this document consists of nine pages,
14 including the cover page, plus five pages of
15 appendices. Is that correct?

16 A (WITNESS MULLER) That is correct.

17 Q Thank you. The second document consists of
18 two pages. It is dated in the upper lefthand corner,
19 January 27, 1981, and states, "TO: All SNPS
20 Supervisors" and under that, "RE: Overtime Control
21 Guidelines." And on the second page it is signed by J.
22 Rivello, Plant Manager, Shoreham Nuclear Power Station.
23 Is that correct?

24 A (WITNESS MULLER) That is correct, and it's
25 also dated January 27, 1981.

1 Q Thank you. The third document is a list that
2 appears under three columns at the top, and the first
3 column states, "Activities Description;" the second
4 column, "September 81 to September 82;" the third
5 column, "September 82 to March 83;" and the fourth
6 column, "March 83 to March 84." Is that correct?

7 A (WITNESS MULLER) That is correct.

8 Q And under the Activities description, there is
9 a list of some 35 numbered items; correct?

10 A (WITNESS MULLER) Approximately 35, Mr.
11 Dynner. I am missing the numbers on mine. That is
12 correct, Mr. Dynner. I looked at another copy.

13 Q The final document is a typewritten document
14 entitled, "DQA Manpower Projection, First Year of
15 Operation." It consists of two pages. At the bottom of
16 the first page in the lower righthand corner it is
17 identified as "Attachment 2" in parentheses. Is that
18 correct?

19 A (WITNESS MULLER) That is correct.

20 MR. DYNNER: Judge Brenner, can we have these
21 marked for identification? I believe it's 83.

22 JUDGE BRENNER: So, the Station Operational
23 Quality Assurance Section Planning Report will be
24 Suffolk County Exhibit 83 for identification.

25 (The document referred to

1 was marked Suffolk County
2 Exhibit No. 83 for
3 identification.)

4 JUDGE BRENNER: The January 27, 1981 memo from
5 Mr. Rivello entitled, "Overtime Control Guidelines" will
6 be 84.

7 (The document referred to
8 was marked Suffolk County
9 Exhibit No. 84 for
10 identification.)

11 JUDGE BRENNER: The handwritten activities
12 description list of 35 activities will be 85.

13 (The document referred to
14 was marked Suffolk
15 Exhibit No. 85 for
16 identification.)

17 JUDGE BRENNER: And the two-page typed listing
18 entitled, "QCA Manhour Projection First Year of
19 Operation" will be 86, all for identification.

20 (The document referred to
21 was marked Suffolk County
22 Exhibit No. 86 for
23 identification.)

24 JUDGE BRENNER: Let's bind these exhibits for
25 identification numbered 83 through 86, Suffolk County

1 exhibits, into the transcript for convenience at this
2 point.

3 (Suffolk County Exhibits 83 through 86 follow:)

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SC Ex. 83

STATION OPERATIONAL QUALITY ASSURANCE SECTION

PLANNING REPORT

May 1980 to July 1982

LA11.920-LIM-RP-001

Dennis M. Durand
Operating QA Engineer

1.0 ORGANIZATION

Presently the OQA Section is divided by discipline into two distinct subsections: Quality Assurance and Quality Control. The present organizational structure is depicted in Appendix A of this report. The section is comprised of a LILCO Operating QA Engineer and a LILCO Quality Control Engineer. The remaining personnel are on temporary assignment from S&W Field Quality Control to support the Startup Test Program. In addition, (1) QA Engineer position and (2) QC Inspection positions have been approved for the operational phase. However, the QC Inspection positions are not expected to be filled until fuel load and the QA Engineer position has been vacant for the last year. The presently approved operating complement totals five persons.

In September, 1978 I prepared a report entitled "The Station OQA Manpower Study". This was written prior to the Technical Staff Analysis Report on Quality Assurance. At that time, I recommended an organization consisting of (3) Engineers and (4) Inspection personnel. This report included a training schedule and a time frame for acquiring LILCO inspection personnel. This schedule would have afforded a timely transfer of responsibility and experience from the S&W personnel currently assigned to this section to the new LILCO inspection personnel. As a result of those recommendations, two QA/QC Inspector vacancies were created. Filling these positions, however, has been deferred until fuel load.

2.0 SCOPE

For the purpose of this report, the scope of the QA Section's activities will encompass the following basic functions as they apply to safety-related structures, systems, components and activities.

1. Audit
2. Surveillance
3. Inspection
4. Review
5. Administration

3.0 AUDIT PROGRAM

Station OQA implements the operational audit system to provide independent verification of compliance with the requirements stipulated within the LILCO PSAR, and

3.0 AUDIT PROGRAM (continued)

associated support documents such as the QA Program Manual and the Nuclear Operation Corporate Policy Manual. Audits are conducted in accordance with established QA procedures and will provide plant management and off-site management with an objective evaluation of the status and adequacy of the QA Program implementation.

The audit system will be comprised of six basic functions; namely, scheduling; planning and preparation of checklists; conducting the audit, including pre-audit and post-audit conferences; writing the audit report; establishing and controlling the required followup activities and examining and evaluating quality trends.

In addition, each preoperational test package completed by startup will receive an OQA audit prior to approval by the Joint Test Group. Man-hours projected to accomplish this task are contained in Appendix C.

4.0 SURVEILLANCE AND INSPECTION

For the purpose of this report, surveillance and inspection shall be defined in accordance with the IILCO QA Program.

Inspection - a phase of quality control which by means of examination, observation, or measurement determines the conformance of items, processes, or structures to predetermined quality requirements.

Surveillance - the physical presence to monitor by observation, the designated activities to assure that they are performed in a specified manner.

Surveillance and inspections are combined in this section of the report because both of these functions are primarily hardware oriented. Both functions are therefore considered field activities for the purpose of staffing considerations.

Surveillance activities are conducted in accordance with the OQA Surveillance Tracking Program requirements. The OQA Section prepares plans and checklists detailing the attributes to be observed. Upon completion of the surveillance activity, a quality assurance report will be

4.0 SURVEILLANCE AND INSPECTION (continued)

issued indicating the results. Nonconformances and/or deviations will be appropriately identified, documented and followed up until the appropriate corrective action has been effected.

Surveillance activities will be conducted for all systems that are to be preoperationally tested within the next twenty-seven months. Presently there are sixty-two systems and approximately 1700 OQA witness points that will be completed by fuel load.

Inspection activities are normally designated by the inclusion of an OQA Inspection Point or sign-off prior to the close out of the work package. Presently, the Repair/Rework Program administered by Startup requires quality control inspection and sign-off to provide objective evidence that the quality aspects of the work performed comply with the LILCO Quality Assurance Program requirements. This effort to date, has been performed by the S&W Field Quality Control (FQC) organization. However, as FQC completes their final inspections, this responsibility will ultimately rest with the OQA section. The OQA section has been directed via the Site Engineering Office to perform additional inspections to satisfy the ASME quality control requirements of Courter Co., prior to signing the N-5 data reports.

In addition, the OQA section is responsible for performing receiving inspection of safety-related parts and components in accordance with documented checklists. A program to place acceptance tags on all safety-related items upon receipt and to backfit all past inspections is anticipated to commence in July, 1980.

5.0 REVIEWS

OQA Section will perform the reviews associated with the following:

- a) Review of procedures -
perform reviews of all safety-related test, calibration, special process, maintenance, modification, startup, administrative, and repair procedures and changes to same.
- b) Procurement document review -
perform reviews of procurement documents with respect to quality requirements. These documents consist of NSSS quotations, safety-

5.0 REVIEWS (continued)

related balance of plant quotations, and associated documents such as supplier QA programs, specifications and applicable procedures. In addition, the associated purchase requisitions and purchase orders must be reviewed to assure all appropriate items have been identified, referenced, and translated to the final purchase documents.

- c) Review of vendor documentation for original plant equipment. OQA Section samples the Shoreham Record Retrieval System (SR2) to assure that the required documentation delineated within the purchase specification is turned over to the SR2 by various construction organizations.

6.0 ADMINISTRATION

The OQA Section administrative functions include:

- a) Nonconformance Control Program
- b) Corrective Action Program
- c) Training
- d) Control and issuance of OQA Documents
- e) Inputting OQA section records to the SR2
- f) Preparation of additional OQA Procedures
- g) Revision and periodic review of existing OQA Procedures
- h) Maintenance of the following computerized tracking systems to support the OQA Section programs:

- 1. Audit Tracking System
- 2. LILCO Deficiency Report Tracking System
- 3. Document Tracking System
- 4. Surveillance Tracking System

- i) Preparation of Monthly Report and Annual Report
- j) Preparation of Quality Trend Analysis Reports

7.0 PROJECTED OQA ACTIVITY 5/1/80 - 6/30/82

A. Quality Assurance Subsection

The QA subsection will consist of (3) full-time QA persons, (1) records clerk and (1) part-time person

devoting 50% of his time to QA activities and the remaining to support the QC subsection.

The QA activities include the following:

1. audit program
2. review of vendor documentation
3. review of procurement documents to support the spare parts programs
4. QA indoctrination and training to support the General Employee Training Programs
5. Administrative functions previously noted
6. QA procedure development

Arrangements have been made with S&W to obtain an additional person to support the QA effort. This person is tentatively scheduled to report in June, 1980.

B. Quality Control Subsection

The QC subsection will consist of (1) QC engineer and six (6) full-time inspection personnel. In addition, one person will supplement the QA and QC groups. The QC activities include:

1. Surveillance of Startup Check Out and Initial Operation (C&IO) Testing and Preoperational Testing
2. Review of procedures and changes
3. Receipt inspection program
4. Development of procedures
5. Performing inspection of repair/reworks and satisfying hold-point requirements during flushing, pre-op testing and maintenance
6. Review of release packages prior to turnover of systems from construction to startup
7. Nonconformance followup activities
8. Training
9. Other (Administrative reports, planning)

7.0 PROJECTED OQA ACTIVITY 5/1/80 - 6/30/82 (continued)

The projected man-hours for these activities are contained in Appendix C.

8.0 RECOMMENDATIONS

Recently the President's Commission on the accident at Three Mile Island (TMI) published the "Technical Staff Analysis Report on Quality Assurance". The report concluded that there were insufficient engineering and inspection personnel assigned to the Quality Assurance organization to meet the intent of 10CFR 50, Appendix B or ANSI 18.7. TMI is a twin unit station and at the time of the accident had (13) inspectors performing the various quality functions. This report also suggested that lack of independent observation of surveillance activities contributed to the breakdown of the quality assurance program at that facility.

In view of the present QA program requirements and the impetus given to quality assurance as a discipline in the aforementioned report, I highly recommend that the Station OQA Section complement be increased from its present number of (5) to (8). The (3) additional persons would be assigned to support the respective quality assurance and quality control activities. In addition, the services of a full-time typist will be needed to accommodate the reporting requirements of this section and to maintain the active OQA section file system. The proposed functional OQA organization is depicted in Appendix D.

A position analysis and the minimum qualifications for the QA/QC Inspectors has been previously submitted for your review. This position description has the necessary flexibility and versatility to accommodate the following type personnel:

- 1) QA/QC Inspector-Procurement/Receipt Inspection
- 2) QA/QC Inspector-Mechanical Equipment
- 3) QA/QC Inspector-Electrical/I & C
- 4) QA/QC Inspector-Operations/Modifications
- 5) QA/QC Inspector-Welding/NDE

9.0 TRAINING

Quality assurance and quality control activities will encompass work being performed by all sections within the station. Therefore, QA/QC Staff personnel will require basic technical knowledge associated with each section in addition to more detailed knowledge and understanding of

9.0 TRAINING (continued)

To Art. 10

OQA

1 page

QA/QC. To reduce the individual training requirements in terms of time and dollars, the type of personnel specified in Section 8 of this report provide an optimum mix.

Generally, the QA/QC Staff will be required to meet the general training requirements for personnel not requiring NRC licenses as stipulated in ANSI N18.1, "Selection and Training of Nuclear Power Plant Personnel". This standard was endorsed by the NRC in Regulatory Guide 1.8. In addition, all plant QA/QC personnel will be qualified as Level II inspectors as stipulated in ANSI N45.6, "Qualifications of Inspection, Examination and Testing Personnel for the Construction Phase of Nuclear Power Plants" which the NRC endorsed for the operational phase in Regulatory Guide 1.58. As Level II inspectors, the Station QA/QC Inspection personnel will be able to implement surveillance and test procedures, evaluate inspection and test results and prepare necessary reports.

In order to satisfy the applicable regulatory requirements, indoctrination and training of the QA/QC inspectors will consist of enrollment in formal training programs administered by organizations both internal and external to LILCO, and on-the-job training.

Approximately 5-7 weeks of formal external QA training is recommended. An outline of recommended minimum training courses associated with each QA/QC inspector is contained in Appendix E of this report. It is expected that this training will be completed approximately one year after QA/QC inspector has been assigned.

In addition to the aforementioned training, I recommend that at least one individual from this section receive the necessary training to obtain the SRO License. The decision not to have an SRO in the OQA section ought to be re-evaluated in light of the various activities associated with the conduct of operations and technical specifications that will be accomplished by OQA.

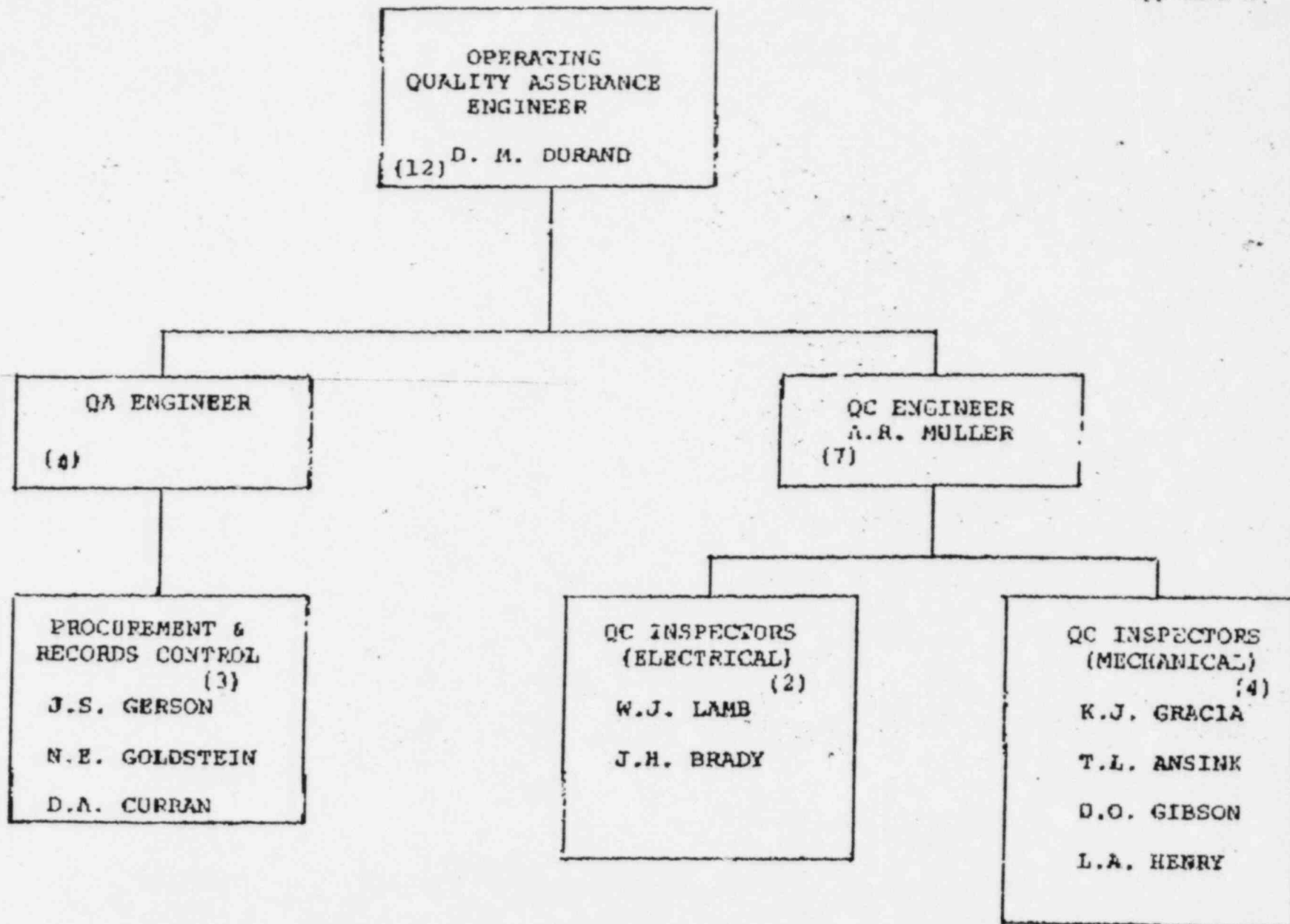
10.0 IMPLEMENTATION

The transition phase QA program, the subject of an earlier report, has been fully implemented. Each of the basic functions associated with this program has both a startup and operations application. Due to this inherent duality in QA programs, the transition phase presents a logical, if not ideal time frame to implement the OQA Staff requirements. This would provide the following advantages:

10.0 IMPLEMENTATION (continued)

1. Provide Shoreham with an experienced OQA section prior to fuel load. This will undoubtedly be a prerequisite for an operating license.
2. Additional manpower requirements during the transition phase to support Startup activities are scheduled to be supplied by Stone & Webster. By implementing the QA/QC staff requirements in a timely fashion, LILCO would experience a net savings of 1000-1100 dollars per man month.
3. Necessary training requirements addressed in Section 9 could be accomplished in a timely manner prior to fuel load.

Therefore it is recommended that the OQA section manning requirement be implemented as expeditiously as possible. Appendix F of this report indicates the recommended time frame for assignment of OQA section personnel.



QA/QC INSPECTION TRAINING MATRIX

QA/QC INSPECTOR	Basic Introduction to Nuclear Technology	Basic QA Codes and Standards	QA Auditing	Nondestructive Exam. for Non-test Person.	Practical Application of Statistics to QC	Electrical QA Surveillance	Procurement QA	QA for I&E	Ultrasonics	Mag. Particle & PT	Radiography	On Site Training Selective Sessions
1	X	X	X		X		X					X
2	X	X		X			X	X	X	X		X
3	X	X	X	X		X						X
4	X	X		X				X	X	X	X	X
5												X

QA/QC Inspector	TYPE
1	Procurement Receipt Inspection
2	Mechanical Equipment
3	Electrical/I&C
4	Operations/Modifications
5	Welding/NDR

(E)

PROJECTED CA ACTIVITY WORKSHEET
5/1/80 - 6/30/82

ACTIVITY	AVERAGE MANHOURS Per Month*	ESTIMATED MANHOURS			TOTAL
		1980 5/1 - 12/31	1981 1/1 - 12/31	1982 1/1 - 6/31	
1. Docum. Review a) Vendor b) Procurement	90 45	720 360	1080 540	540 270	2340 1,770
2. Procedure Development	20	160	240	120	520
3. Audit/Surv.	150	1200	1800	900	3900
4. Training	10	80	120	60	260
5. Admin. Functions	20	160	240	120	520
TOTAL	335	2680	6020	2010	8710

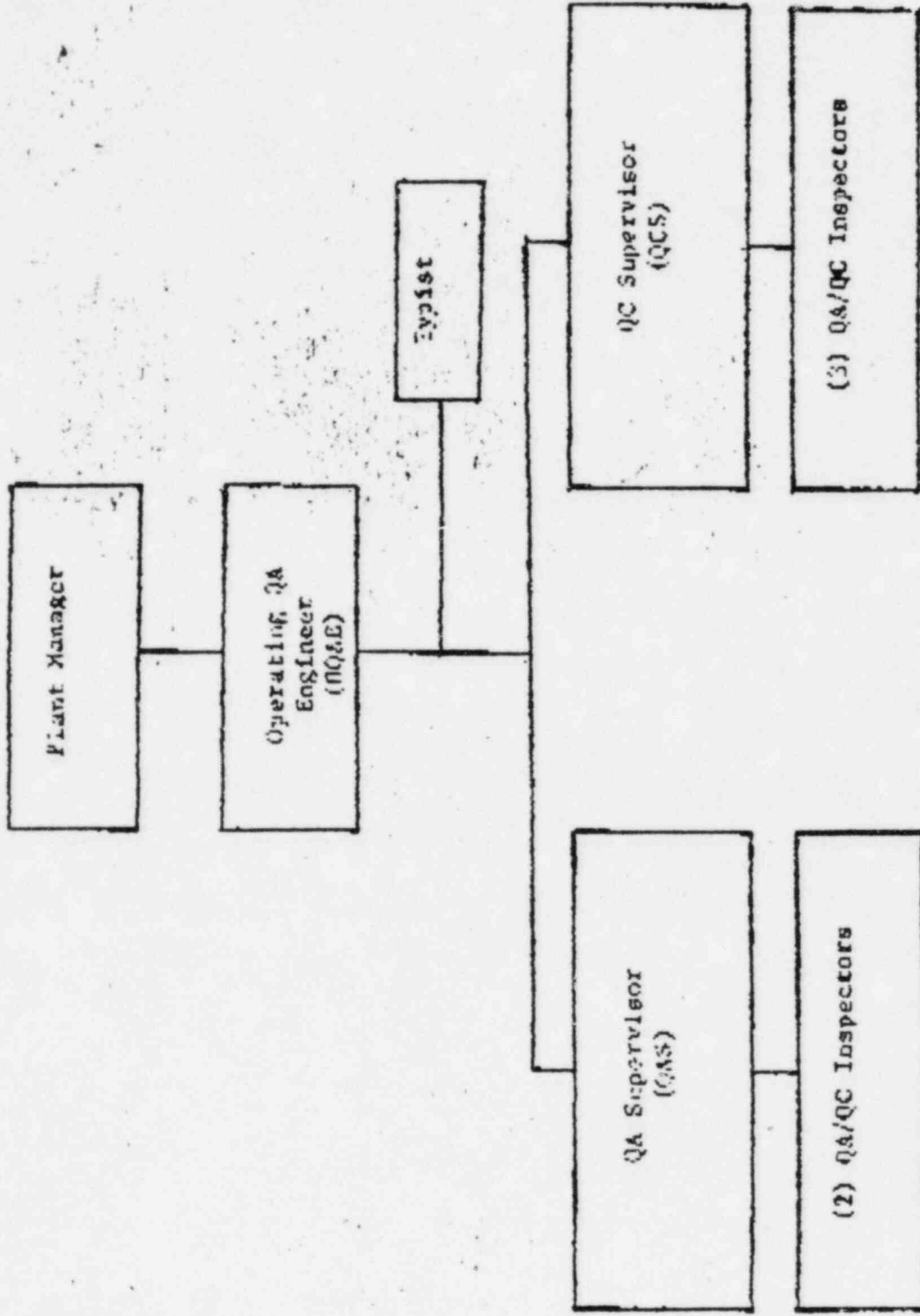
*2 Persons available with audits and program development supplemented by Supervisors

PROJECTED QC ACTIVITY WORKSHEET 5/1/80 - 6/30/82					
ACTIVITY	AVERAGE INSPECTOR* Hours/Month	ESTIMATED INSPECTION HOURS			
		1980 5/1 - 12/31	1981 1/1 - 12/31	1982 1/2 - 6/31	TOTAL
1. C & ID	315.0	2520	3780	1890	8190
2. Pre-Op	315.0	2520	3780	1890	8190
3. Procedure Review	52.5	420	630	315	1365
4. Repair/ Rework Inspection	105.0	840	252	630	2730
5. Release Pkg. Review	52.5	420	630	315	1365
6. Training	21.0	168	252	126	546
7. Non-Conform. Activities	52.5	420	630	315	1365
8. Procedure Development	52.5	420	630	315	1365
9. Receipt Insp.**	90.0	720	1080	540	2340
10. Other (Admin. Reports, Planning, etc.)	84.0	672	1008	504	2184
TOTAL	1140	9120	13680	6840	29640

*6 Inspectors available full time for inspection
1 QC Engineer

**Including backfitting existing safety related stock with tags

STATION OPERATIONAL QUALITY ASSURANCE ORGANIZATION
(POST FUEL LOAD)



January 27, 1981

JHK
Reisane
R

SC Ex. 84

TO: All SNPS Supervisors

RE: Overtime Control Guidelines

The Scheduling of Overtime guidelines set forth in the Personnel Policy and Procedure Guide III-15 point out the following:

"U.S. Department of Labor studies, confirmed by LILCO Management survey, indicate that continuous periods of overtime generally result in loss of productivity either through fatigue, illness, errors or other human factors. Furthermore, experience indicates that excessive overtime often leads to personal problems on the part of employees in fulfilling their commitments to families and friends, which may adversely affect productivity."

In keeping with this and Mr. W. Uhl's memo of March 7, 1980, the following guidelines become effective January 1, 1981 in order to control and prevent excessive individual overtime.

All calculations are based upon work hours, and not pay hours. Supervisory personnel will be given pertinent information from the Corporation's "Excessive Individual Overtime Report**Quarterly Cumulative Report" as it becomes available to the plant. Only individuals whose overtime hours exceed 15% of their regular hours will be listed. This report should be helpful in flagging excessive individual overtime.

The following guidelines are established:

1. No individual quarterly accumulative work hours is to exceed 30% of his regular hours without the approval of Plant Management.
2. No individual quarterly accumulative work hours is to exceed 33% of his regular hours without the approval of a Management Committee member (Vice President).
3. No classification* shall exceed the Plant Manager's overtime guidelines for a given calendar year without his approval.

As an example, using guideline #1, an employee who normally works fifty (50) weeks per year should not exceed 600 overtime work hours in that calendar year.

Note: For the year 1981, the overtime work hour guidelines, by classification, are as follows:

- a. Physical workers: Not to exceed 20% annually
- b. Clerical workers: Not to exceed 10% annually
- c. Supervisors: Not to exceed 20% annually

J. Rivallo
J. Rivallo

Plant Manager
Shoreham Nuclear Power Station

LJC/rwd

SR2-NF

* Classifications are defined as follows:

Physical workers: All IBEW 1049 SNPS members
Clerical workers: All IBEW 1381 SNPS members
Supervisory: All Supervisory personnel in an overtime pay status

ACTIVITIES DESCRIPTION	SEPT. 81 TO	SEPT. 82 TO	MARCH 83
	SEPT. 82	MARCH 83	MARCH 84
	MHS	MHS	MHS
1 SCHEDULED OQA AUDITS	2456	881	3000
2 UNSCHEDULED OQA AUDITS	3200	0	5600
3 TECH SPEC AUDITS	344	114	0
4 NRC AUDIT RESPONSE	40	13	400
5 LILLO FQA AUDIT RESPONSE	60	20	60
6 REVIEW OF SYSTEM T.O. PACKAGES (LSU)	1600	533	0
7 SCHEDULED SURVEILLANCES	1000	333	3000
8 UNSCHEDULED SURVEILLANCE	3000	1000	5000
9 WITNESSING FLUSHES	2000	666	500
10 WITNESSING PERFORMANCE TESTING	4000	1333	0
11 REPAIR REWORK INSPECTIONS TO 7-81	500	166	0
12 REPAIR REWORK INSPECTIONS TO 4-82	3700	1233	0
13 MAIN WORK REQUEST (MWR) INSPECTIONS	400	1800	10000
14 PROCEDURE REVIEW	2800	933	2800
15 PREPARE & REVISE OQA PROCEDURES	500	166	600
16 NON CONFORMANCE CONTROL (CAR/LDR)	300	100	500
17 VENDOR DOCUMENTATION REVIEWS	2600	866	400
18 REVIEW OF SPARE PARTS	800	266	1800
19 RECEIPT INSPECTION	600	200	1800
20 NRC COORDINATION	120	40	400
21 OQA TRAINING & PRESENTATION	400	133	400
22 OQA RECORDS	200	66	400
23 OQA MANAGEMENT REPORTS	600	200	600
24 ADMINISTRATION	1280	426	3500
25 OFFSITE SEMINARS & COMMITTEE WORK	180	60	380
26 QA POST TURNOVER MODIFICATIONS	500	166	2000
27 OQA ENGINEER TRAINING	1000	333	400
28 QC ENGINEER TRAINING	950	316	400
29 QA ENGINEER TRAINING	550	183	400
30 ASSIGN OQA INSPECTORS - 5			
31 OQA INSPECTOR TRAINING	1200	400	2800
32 ASSIGN OQA INSPECTORS - ADDITIONAL			
33 FW ENGINEER REASSIGNMENT			
34 NUCLEAR FUEL INSPECTION	200	66	200
35 OQA TO SUPPORT STATION MODIFICATIONS		900	1000
	37000	13912	49140

OQA MANHOOR PROJECTION
FIRST YEAR OF OPERATION

	<u>1st Year of Operation Manhours</u>
1. Audit	4,000
2. Tech Spec Audits	0
3. NRC Audit Response	400
4. LILCO FQA Audit Response	60
5. Review of System T.O. Packages (LSU)	0
6. Surveillance	4,000
7. Witnessing Flushes	500
8. Witnessing Performance Testing	0
9. Repair Rework Inspections to 7-81	0
10. Repair Rework Inspections to 4-82	0
11. Main Work Request (MWR) Inspections	4,000
12. Procedure Review	2,000
13. Prepare and Revise OQA Procedures	600
14. Nonconformance Control (CAR/LDR)	500
15. Vendor Documentation Reviews	400
16. Review of Spare Parts	1,800
17. Receipt Inspection	1,800
18. NRC Coordination	400
19. OQA Training and Presentation	400
20. OQA Records	400
21. OQA Management Reports	600
22. Administration	3,500

23.	Offsite Seminars and Committee Work	380
24.	QA Post-Turnover Modifications	500
25.	OQA Engineer Training	400
26.	QC Engineer Training	400
27.	QA Engineer Training	400
28.	Assign OQA Inspectors-5	
29.	OQA Inspector Training	2,800
30.	Assign OQA Inspectors-additional	
31.	S&W Engineer Reassignment	
32.	Nuclear Fuel Inspection	800

1 BY MR. DYNNER (Resuming):

2 Q Now, Mr. Muller, you will recall that on
3 November 4th during the examination on, among other
4 things, the OQA staffing question, you testified that in
5 addition to the survey of other nuclear power plants
6 which was used by you or by LILCO, I should say, in
7 determining the level of OQA staffing, that there were
8 also other documents that LILCO used to determine the
9 staffing levels. Is that basically the thrust of your
10 testimony, as you recall?

11 A (WITNESS MULLER) Yes.

12 Q And during the course of my asking you
13 questions, I asked you to identify what these
14 considerations were and which were in writing, and I
15 will ask you now whether you could identify which of
16 these four documents that we have just referred to you
17 have furnished in response to the Board's order that the
18 documents that were used by LILCO and which I questioned
19 you about should be furnished to the county.

20 A (WITNESS MULLER) Those were Exhibits 83, 84
21 and 85. We also listed a section of the FSAR.

22 MR. ELLIS: May I have the question and answer
23 read back?

24 JUDGE BRENNER: I'll tell you what the problem
25 was. Don't read it back. I almost jumped in on my

1 own. It was compound, and you asked him both what did
2 they supply in response to our request, and you also
3 included the fact of ones that he relied on for his
4 numbers.

5 And you know and I know that LILCO, in turning
6 over the documents, stated they were giving you
7 everything just to be sure but they did not, in their
8 view, rely on everything for the reasons they expressed.

9 MR. DYNNER: I will rephrase the question. I
10 certainly didn't mean to tangle up those two.

11 JUDGE BRENNER: You just want to know what he
12 turned over. You're not yet probing what he relied on?
13 Is that correct?

14 MR. DYNNER: My question was which of the
15 documents that they furnished us were in response to my
16 request for documents that they relied upon in the OQA
17 staffing.

18 JUDGE BRENNER: That does tangle it up, I'm
19 afraid. I don't know what you want to ask. Do you want
20 to know what he relied on? Do you just want to
21 ascertain what they turned over? You can ask one or the
22 other and separate out the problem. Is that your
23 problem, Mr. Ellis?

24 MR. ELLIS: Yes, sir.

25 BY MR. DYNNER (Resuming):

1 Q All right. As to the four documents that we
2 have just identified, were those documents furnished by
3 LILCO to the county?

4 A (WITNESS MULLER) 83, 84 and 85, yes.

5 Q Is it your testimony that the Suffolk County
6 Exhibit 86 entitled, "OQA Manpower Projection, First
7 Year of Operation" was not furnished by LILCO to the
8 county?

9 A (WITNESS MULLER) It was yesterday.

10 Q That was my question. I wasn't trying to say
11 at what date it was furnished. All four documents were
12 furnished by LILCO to the county; is that correct?

13 A (WITNESS MULLER) That is correct.

14 Q Thank you. Which of these four documents, if
15 any, constitutes the manpower projections that you
16 referred to in your November 4th testimony as having
17 been relied upon by LILCO in determining OQA staffing
18 levels?

19 (Panel of witnesses conferring.)

20 You might refer to -- if you have the
21 transcript there, page 13,024 and 13,025.

22 (Pause.)

23 A (WITNESS MULLER) Mr. Dynner, those were items
24 83 and 84.

25 Q Mr. Muller, my question may have gotten

1 refused. My question related to which of these
2 documents is the manpower projections. Suffolk County
3 84 is entitled, "Overtime Control Guidelines." Did you
4 intend to include that as the document constituting the
5 manpower projections?

6 A (WITNESS MULLER) I did testify that I had used
7 83 and 84 as guidelines. 84 does not specifically say
8 manpower requirements on it. It does say overtime goals.

9 Q Yes, so Exhibit 83 entitled "Station
10 Operational Quality Assurance Section" is the manpower
11 projections that you were referring to?

12 A (WITNESS MULLER) As far as the eight LILCO
13 people, yes. As referenced on 13,024 and 13,025.

14 Q Now, Mr. Muller, to assist you, if you will
15 look on page 13,027 of the transcript, at the bottom of
16 that page I asked the question: Was an analysis made of
17 the QA Manual and the OQA procedures in order to
18 determine the expected activities for the OQA Section in
19 the first year of operation. And at the top of page
20 13,028 you answered, Yes, we did estimate the amount of
21 time that would be spent on each activity during the
22 first year.

23 And there continue some questions and answers
24 in which you state on line 10, There was a document
25 noting our projected manpower requirements. And you go

1 on on line 13, I'm not sure whether every activity was
2 listed in detail in that document. We may have
3 summarized, et cetera.

4 Now, is the document that you were referring
5 to on page 13,028 of the transcript within the package
6 of four documents that we have identified this morning?

7 (Panel of witnesses conferring.)

8 A (WITNESS MULLER) Mr. Dynner, what I was
9 referring to were Exhibits 83 and 85. Exhibit 85 I had
10 not reviewed at the time I had answered that question.

11 Q But you have since determined that Exhibit 85,
12 which is entitled, "Activities Description" in fact was
13 one of the documents relied on by LILCO to assist it in
14 determining OQA staffing? Is that correct?

15 A (WITNESS MULLER) That document provided a list
16 of activities, as did the Station Operational Quality
17 Assurance Section. The Station Operational Quality
18 Assurance Section Planning Report categorized the
19 activities in I think five or six different categories,
20 and which was further broken down in Exhibit 85.

21 Q So it is your testimony that they were both
22 used and relied upon in establishing the OQA staff
23 levels? Is that correct?

24 A (WITNESS MULLER) Exhibit 83 provided summary;
25 Exhibit 85 provided more definition as far as the

1 activities were concerned.

2 MR. ELLIS: May I have the question and answer
3 read back, please?

4 JUDGE BRENNER: Because you missed it?

5 MR. ELLIS: No, sir, because I think the
6 witness did not understand it, and I think it's
7 important, Judge Brenner. I really do.

8 JUDGE BRENNER: It's going to save us a lot of
9 time doing it now rather than later?

10 MR. ELLIS: Yes, sir, I certainly think so.

11 (The reporter read the record as requested.)

12 WITNESS MULLER: Mr. Dynner, Exhibit 85 had
13 never been submitted. It was an internal document
14 prepared by the QA engineer. I had never reviewed it at
15 the time, and I had not reviewed it until last week. So
16 it was not used in a sense of providing manpower
17 estimates. I knew that something had been made up and
18 it listed the activities, or time sheets provide a
19 breakdown of different activities, and these are the
20 weekly time sheets that we use.

21 In the Station OQA Quality Assurance Section
22 Planning Report, Exhibit 83 we defined some of the
23 activities as audit surveillance, inspection, review and
24 administration. We have to break that down into further
25 categories in order to define our manpower requirements.

1 JUDGE CARPENTER: Mr. Dynner, if I may, was
2 the answer to the question yes or no?

3 WITNESS MULLER: Judge Carpenter, we did use
4 83 but 85 was never used as far as the manpower
5 projections.

6 JUDGE CARPENTER: Thank you. I wanted to be
7 sure I understood your answer.

8 WITNESS MULLER: So the answer was half yes
9 and half no.

10 JUDGE CARPENTER: Thank you.

11 JUDGE BRENNER: Off the record for a minute.

12 (Discussion off the record.)

13 JUDGE BRENNER: Back on the record. We will
14 take a 15-minute break until 10:30.

15 (A short recess was taken.)
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1 JUDGE BRENNER: Let's go back on the record.
2 We're ready to continue the county's cross examination
3 on the staffing matter of LILCO's panel.

4 MR. DYNNER: Thank you.

5 BY MR. DYNNER (Resuming):

6 Q Gentlemen, in order to go more rapidly, I'm
7 going to direct your attention and ask you a series of
8 questions about Exhibit 83, which is the Planning Report
9 of the Station Operational Quality Assurance Section.

10 Mr. Muller, this report is undated. Do you
11 know what the date of the report is?

12 A (WITNESS MULLER) It was just prior to May
13 1980. I think in the testimony I stated that it may
14 have been a 1981 report. I was incorrect. It was a
15 1980 report prepared just prior to May.

16 Q Mr. Muller, were you involved in the
17 preparation of this planning report?

18 A (WITNESS MULLER) Not that I remember.

19 Q Who was involved in the preparation of this
20 planning report?

21 A (WITNESS MULLER) The operating OQAE at the
22 time.

23 Q That was Mr. Durand, whose name is in the
24 lower righthand corner? Is that correct?

25 A (WITNESS MULLER) That is correct.

1 Q Who approved this planning report?

2 A (WITNESS MULLER) This report was submitted by
3 the OQAE to plant management. He submitted and approved
4 it.

5 Q Did you say the Plant Manager?

6 A (WITNESS MULLER) The plant management. I'm
7 not sure who specifically. I don't have a cover letter
8 for the report; all I have is the report.

9 Q Is there a document that indicates that this
10 planning report was, in fact, approved by the plant
11 management?

12 A (WITNESS MULLER) Not that I'm aware of.

13 (Panel of witnesses conferring.)

14 A (WITNESS MULLER) Mr. Dynner, it was part of a
15 presentation made to upper management. I'm not sure if
16 anyone had, in fact, approved the report.

17 Q Would a planning report such as this one need
18 to be approved by the plant management to whom it was
19 presented in order to be implemented?

20 (Panel of witnesses conferring.)

21 A (WITNESS MULLER) This report would form the
22 basis for the manpower increase. The plant management
23 would have to review it.

24 Q My question is, Mr. Muller, would the planning
25 report have to be approved by plant management in order

1 to be implemented?

2 A (WITNESS MULLER) It would have to be reviewed
3 and approved, in a sense, yes.

4 Q Was this the planning report which formed the
5 basis of the commitment of LILCO in the FSAR to a level
6 of eight personnel in the OQA Section?

7 A (WITNESS MULLER) That is the basis for the
8 eight LILCO personnel.

9 Q Do you know the process by which the
10 recommendations in this planning report became
11 effectuated into the FSAR?

12 (Panel of witnesses conferring.)

13 A (WITNESS MULLER) Mr. Dynner, this report was
14 only part of a presentation to management. This was
15 only the OQA input to a much larger staffing report that
16 had been presented to upper management. I understand it
17 went as far as the President of the company.

18 Q Do you have any personal knowledge of the
19 process by which this planning report was implemented
20 into the FSAR commitment for LILCO?

21 A (WITNESS MULLER) I am aware that this report
22 recommended that we have at least eight LILCO people on
23 the OQA staff. That request was approved and it did
24 become part of our FSAR commitment.

25 Q I'm confused, Mr. Muller, and I want to give

1 you the opportunity to clarify this. I had thought a
2 few minutes ago that you testified that you didn't know
3 whether this report had been approved.

4 A (WITNESS MULLER) I don't know that there is a
5 written approval on it, but as far as the
6 recommendations were taken into account -- and they were
7 -- the staffing levels were approved.

8 Q How do you know that this planning report was
9 approved?

10 (Panel of witnesses conferring.)

11 A (WITNESS YOUNGLING) Mr. Dynner, this report,
12 along with a series of other reports within the plant
13 staff, became the basis for a presentation to our
14 management chain, up to the president of the company,
15 which resulted in the approval by him of staffing levels
16 for the operation of the station.

17 Yes, it was approved, it was approved through
18 the president of the company. Otherwise, we wouldn't
19 get the people.

20 Q Mr. Youngling, I'm going to ask both you and
21 Mr. Muller how each of you has personal knowledge that
22 this particular planning report was approved by LILCO's
23 management.

24 (Panel of witnesses conferring.)

25 A (WITNESS YOUNGLING) I was in the board of

1 directors' room when the president of the company
2 approved the report, the presentation.

3 Q Thank you. Mr. Muller, you agree, don't you,
4 that this document entitled "Planning Report" in reality
5 does not consist of a projection of the number of people
6 that are required in the OQA Section? Isn't that true?

7 A (WITNESS MULLER) No, that's not true. The
8 eight people that we have or that we recommended was
9 part of the staff that we felt we would need into
10 Operations. As I testified earlier, LILCO does not have
11 a policy that we hire indiscriminately. At least, LILCO
12 people. We can only hire the number of LILCO people
13 that we feel we are going to safely need over the next
14 many years. If we need more people on a temporary
15 basis, we will hire them through contracts.

16 So this was our first indication that we would
17 have at least eight people on the LILCO OQA staff during
18 operations.

19 Q Let me give you an example of what I'm talking
20 about, Mr. Muller. If you turn to what appears to be
21 page 5 of the planning report, I don't have a page
22 number on mine but at the top of the page it says,
23 "Projected OQA activity, 5/1/80 to 6/30/82." Do you see
24 that page?

25 A (WITNESS MULLER) Yes, sir, it starts with

1 paragraph 7.

2 Q Yes. And if you look down to the paragraph
3 beginning with B, Quality Control Subsection, it states,
4 "The QC subsection will consist of one QC engineer and
5 six full-time inspection personnel; in addition, one
6 person will supplement the QA and QC groups."

7 Now, that is a statement of how many people
8 will be in the QC subsection, and there's no projection
9 which would back up the need for more or fewer of that
10 number, is there?

11 A (WITNESS MULLER) Do you mean we have actual
12 numbers in there that project? No, we do not.

13 Q So that what you have in here is an assumption
14 that starts out with the number of personnel that are in
15 the section, and then you have a series of appendices
16 that show how the man hours of those particular
17 personnel will be allocated among various general
18 tasks. Isn't that correct?

19 (Panel of witnesses conferring.)

20 A (WITNESS MULLER) Maybe I misunderstood your
21 first question, but as far as answering this question,
22 yes, we do say that the subsection will consist of one
23 QC engineer and six full-time inspection personnel, and
24 the timeframe is noted on Appendix C.

25 Q All right. Let's look at Appendix C for a

1 moment, Mr. Muller. Appendix C is entitled, "Projected
2 QC Activity Work Sheet, 5/1/80 to 6/31/82." The first
3 column lists activities, the second column says,
4 "average inspector* " and under that, "hours/month."
5 And if you look at the asterisk, it says, "six
6 inspectors available full-time for inspection, one QC
7 engineer."

8 So, this appendix is simply an allocation of
9 the time, given the fact that there will be six
10 inspectors and one QC engineer, isn't it?

11 (Pause.)

12 A (WITNESS MULLER) That's what that indicates
13 for the timeframe noted.

14 Q So your testimony is it's just an allocation,
15 isn't it, based upon a given, fixed number of people.
16 Is that correct?

17 A (WITNESS MULLER) No. It's a projection. The
18 report was made before May of 1980, and it extends to
19 1982. It's not an allocation; it's just a projection.

20 Q And that projection, given the initial
21 allocation of numbers of hours per activity, is in each
22 column for 1980, 1981 and 1982, based upon the
23 availability of six inspectors and one QC engineer,
24 isn't that correct?

25 A (WITNESS MULLER) No, sir.

1 Q All right. Where does it say on this chart
2 that there are going to be more than that number?

3 A (WITNESS MULLER) Once again, Mr. Dynner, this
4 is just an estimate. In 1982, we have more than six
5 inspectors. Because we found needed more, we obtained
6 more.

7 Q Well, I understand that that may be the case,
8 but I'm talking about this particular appendix.

9 (Panel of witnesses conferring.)

10 A (WITNESS MULLER) Mr. Dynner, this is based on
11 projections, not on the availability of six people.

12 Q Now, Mr. Muller, let's take a look at what
13 this projected QC activity work sheet really is and
14 really does. In the first line, the activity says,
15 "C&ID," and in the second column it says, "Average
16 inspector" with an asterisk stating, "six inspectors
17 available full time for inspection, one QC engineer."
18 And there is no other statement in this document that
19 says there will be more or fewer than that number, is
20 there?

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1 [Panel of witnesses conferring.]

2 A (WITNESS MULLER) Mr. Dynner, I would have to
3 go through the whole report to find out if those exact
4 words are in there. But that is not what the report --
5 the report was the best estimate at the time. And as we
6 found out, we needed more than six QC inspectors. We
7 obtained more than six QC inspectors. I think it shows
8 that we are not tied down to just six inspectors.

9 Q Yes, Mr. Muller, but what I am trying to
10 establish now is your reliance on this planning report
11 and, in turn, a part of the planning report, what
12 appears to be a critical part of the planning report,
13 Appendix C, and I am asking you to verify for me that,
14 as I read Appendix C, there is nothing on Appendix C
15 which indicates that there will ever be more than six
16 inspectors and one QC engineer. Isn't that correct?

17 A (WITNESS MULLER) There are no words on that
18 page that say we will increase the staff as necessary.
19 However, we have done that.

20 Q And if you look at the column under "Average
21 Inspector" with the asterisk, hours/month, at the bottom
22 there is a total number of hours, and that is 1140,
23 isn't it?

24 A (WITNESS MULLER) That is the number that
25 appears. I haven't checked the numbers on the report,

1 though.

2 Q All right. Well, let's just talk about this
3 Appendix C for a moment. Now, the 1140 hours is the
4 number of hours a month that seven personnel would work,
5 isn't it?

6 A (WITNESS KELLY) It's more like 6.47 persons.

7 Q 6.4? Thank you, Mr. Kelly.

8 A (WITNESS KELLY) 6.47.

9 Q 6.47. Thank you.

10 Now, if we look at the first line again, we
11 see that devoted to the activity of C&ID you have under
12 average inspector hours per month 315; isn't that
13 correct?

14 A (WITNESS MULLER) That is the number that
15 appears, yes.

16 Q That is the number of hours. Now look at the
17 next column, which says 1980 -- looks like May, 5/1, to
18 12/31; isn't that correct?

19 A (WITNESS MULLER) In 1980, yes.

20 Q And that is eight months, isn't it?

21 A (WITNESS MULLER) Yes.

22 Q Now, if you were to multiply eight months
23 times the 315 hours number in the column under "Average
24 Inspector," you would get 2520, which is the number in
25 that column under 1980, isn't it?

1 A (WITNESS MULLER) That's correct. And it also
2 says under those four columns -- the columns are headed
3 by the term "Estimated Inspecting Hours."

4 Q I understand these are projections according
5 to you and that they are estimates. My question now is,
6 if you look in the column under 1981, that says 1/1. I
7 assume that is January 1, to 12/31, which I assume is
8 December 31, and that is twelve months, isn't it?

9 A (WITNESS MULLER) That is correct.

10 Q And if you multiply 12 times 315, you would
11 get the number which appears to be 3780 in that column,
12 wouldn't you?

13 A (WITNESS MULLER) That is correct.

14 Q And the same is true under the column 1982,
15 which is for January 1 through June 31 and therefore
16 covers six months, and if you multiplied 6 times 315,
17 you would get 1890, wouldn't you?

18 A (WITNESS MULLER) Yes, you would.

19 Q So this is an estimate based upon a constant
20 workload over the period of time of these 1980, 1981 and
21 1982 periods, isn't it?

22 A (WITNESS MULLER) That is correct, because we
23 expected the activities to continue at a constant rate
24 during that time frame.

25 Q And all the activities are at a constant rate

1 and there aren't any more people than the assumed six
2 inspectors and one QC engineer; isn't that correct?

3 A (WITNESS MULLER) Once again, these are
4 average figures. They may not all come out on an annual
5 basis or over the three-year basis. It's just an
6 average.

7 Q All right. So it is an allocation, isn't it?
8 It is an allocation of these activities listed in the
9 first column projected into future years on a constant
10 basis, and assuming that there are going to be six
11 inspectors and one QC engineer; isn't that correct?

12 A (WITNESS MULLER) It is not an allocation.

13 Q All right. If I leave out the word
14 "allocation," is it correct that all this appendix does
15 is assume that if you had six inspectors and one QC
16 engineer, and if you divided up the activities as they
17 appear on this list, and if you had a constant workload
18 factor, that the number of hours for each one of those
19 activities would be as shown on this appendix? Is that
20 correct?

21 [Panel of witnesses conferring.]

22 A (WITNESS MULLER) Mr. Dynner, this does
23 provide a list of estimated manhours based upon the
24 first column, average inspector manhours per month.

25 Q And based upon a constant of six inspectors

1 and one QC engineer; isn't that correct?

2 A (WITNESS MULLER) During this time frame, yes.

3 Q Thank you.

4 A (WITNESS MULLER) Let me say once again, we
5 found that this estimate was not correct. The activity
6 levels did change and we did have to supplement our
7 staff.

8 Q Yes, I understand that, Mr. Muller. Now, I
9 would like to ask you to turn back to the page -- again,
10 mine is unnumbered, and yours may be too, Mr. Muller,
11 but at the top of the page I am referring to, it says
12 7.0, Projected OQA Activity, 5/8/80 to 6/30/82. It
13 seems to be page 6 not counting the cover page. Do you
14 have that page, Mr. Muller? It says projected OQ
15 activity under 7, and then the next paragraph down says
16 8.0, Recommendations.

17 A (WITNESS MULLER) Yes, sir, I have that page.

18 Q Thank you.

19 Now Mr. Muller, you will notice in there there
20 is reference made to the President's Commission on the
21 Accident at Three Mile Island, and the following
22 statement is quoted or appears. I am going to quote the
23 statement from this planning report. It says, "The
24 report" -- that is the Three Mile Island report --
25 "concluded that there were insufficient engineering and

1 inspection personnel assigned to the quality assurance
2 organization to meet the intent of 10 CFR 50, Appendix
3 B, or ANSI 18.7."

4 I add parenthetically that they are talking
5 about Three Mile Island; isn't that correct?

6 A (WITNESS MULLER) That is correct.

7 Q The next sentence says, "TMI" -- that is Three
8 Mile Island -- "is a twin unit station, and at the time
9 of the accident had 13 inspectors performing the various
10 quality functions. This report also suggested that lack
11 of independent observation of surveillance activities
12 contributed to the breakdown of the quality assurance
13 program at that facility."

14 Now Mr. Muller, if there were 13 inspectors at
15 a twin unit station like TMI, and therefore you divided
16 13 inspectors by 2 and applied it to a single unit
17 station, you would come out exactly or almost exactly to
18 the number of inspectors that Mr. Kelly just gave us of
19 6.5, wouldn't you?

20 A (WITNESS MULLER) If you divided 13 by 2, yes,
21 you would.

22 Q And in fact, as Mr. Kelly has helped us out
23 with, there were on your projections on Appendix C 6.5
24 inspectors doing those tests, weren't there? The six
25 inspectors and the one QC engineer, which Mr. Kelly told

1 us when you looked at the average inspectors hours/month
2 total of 1140 hours came out to something like, he said,
3 6.5 people. Isn't that correct?

4 A (WITNESS MULLER) Mr. Dynner, we are confused
5 about the question.

6 Q Well, I will try to simplify it. I am sorry.
7 If you took the 13 inspectors for a twin unit at TMI and
8 you divided it in half, you would come out to 6.5
9 inspectors, which is the same number of inspectors that
10 LILCO used in this planning report, Appendix C, isn't
11 that correct?

12 A (WITNESS MULLER) That is correct. You would
13 come out with six inspectors. However, as I have
14 testified previously, LILCO realizes that six inspectors
15 are not quite enough. We are going to have a staff of
16 14 during the first year of operations, and we will
17 assess on a continuing basis the need for the number of
18 people in the OQA section.

19 A (WITNESS YOUNGLING) I would also like to add
20 that in all of our manpower projections for the plant
21 staffs, we tend to lean away and shy away from dual unit
22 facilities because of the economies of scale and so
23 forth. We don't -- as a matter of fact, in the EEI
24 report that we discussed at length, we saw there that we
25 only looked at single unit utilities.

1 So if you are trying to imply that we are just
2 taking that number and applying it, cutting it in half,
3 I don't think that is a correct characterization at all.

4 Q Well, Mr. Youngling, if you were going to do
5 this projection, would you say that 6.5 inspectors were
6 too many or too few?

7 A (WITNESS YOUNGLING) I would say that the
8 conclusions of this report are perfectly valid and
9 adequate.

10 Q Mr. Muller, could you identify for me the
11 document which is apparently one of the appendices that
12 is attached to the back of the report and forms a part
13 of it that is entitled "Projected QA Activity
14 Worksheet"? Do you know which appendix this is? The
15 appendix letter on my copy does not appear.

16 [Pause.]

17 MR. DYNNER: I don't want to take up
18 everyone's time. If counsel for LILCO can be of
19 assistance, please chime in.

20 MR. ELLIS: I don't know which one it is; but
21 I might point out that I think that the examination is
22 not going as expeditiously on the merits of the issue
23 which was the point of our pleading.

24 JUDGE BRENNER: That is not what he invited
25 you to chime in on. We had the bare bones of an outline

1 of the cross plan given the time circumstances we
2 discussed yesterday. It is still within paragraph 3 of
3 that plan. I certainly had hoped that it would proceed
4 much quicker than this, but he is within the subject.
5 Whether it has to proceed quite this way, I am not ready
6 to agree or disagree. We all hoped it would move faster.

7 Why do you need the appendix number, in order
8 to tie it to the reference?

9 MR. DYNNER: Well, Judge Brenner, there is
10 reference in this to Appendices A, B, C, D, E and F.
11 That is six. We have only got five. I am trying to
12 ascertain on the record which is missing. Is it F that
13 is missing or B that is missing? It looks to us as
14 though this is B. Maybe we could just have you confirm,
15 if you would, whether in fact -- I will ask the question
16 differently.

17 BY MR. DYNNER: (Resuming)

18 Q Is the projected QA activity worksheet
19 appendix intended to be Appendix B or Appendix F?

20 MR. ELLIS: Can you help him out, Mr. Dynner,
21 with a reference in the text to the particular appendix?

22 BY MR. DYNNER: (Resuming)

23 Q I am going to help you out as much as I can,
24 and you can confirm or deny whether I am right, but as I
25 read the planning report, what Mr. Hubbard and I have

1 been able to figure out is that on the page 2 of the
2 text, the textual material, at the top of the page it
3 says Audit Program. There is a reference there to
4 Appendix C in the last line of that paragraph. What we
5 have tried to piece together, it looks like Appendix C
6 should be Appendix B, and the projected QA activity
7 worksheet is, in fact, Appendix B.

8 Maybe you could confirm that for me.

9 A (WITNESS MULLER) What I will try to do is get
10 it back to a paragraph. It applies to Paragraph 7 alpha
11 under Quality Assurance subsection. We have a QA
12 subsection projected activity worksheet, and we have a
13 QA section activity worksheet.

14 Q Thank you, Mr. Muller.

15 A (WITNESS MULLER) Did that help?

16 Q Yes. I think that will be sufficient for
17 identification purposes.

18 Now, that being the case, isn't it true that
19 this appendix entitled "Projected QA Activity Worksheet"
20 relates to the Quality Assurance subsection in the same
21 way as Appendix C that we have just been discussing
22 relates to the Quality Control subsection?

23 A (WITNESS MULLER) It is a similar document,
24 yes.

25 Q And it is also true, isn't it, that this

1 document contains as a first column, Activity, as a
2 second column, Average Manhours Per Month, with an
3 asterisk, and that the asterisk at the bottom of the
4 page says two persons available with audits and program
5 development supplemented by supervisors? That is true,
6 isn't it?

7 A (WITNESS MULLER) That is what that asterisk
8 means, yes.

9 Q So that as in the case of Appendix C, what we
10 have here is a document that makes an assumption that
11 there will be two persons available plus some
12 supplementation by supervisors and does not project an
13 increase above those two persons, does it?

14 A (WITNESS MULLER) There is no projection on
15 that page indicating an increase in personnel. However,
16 once again, we have noted for the past two years that we
17 have required more people and we have, in fact, gotten
18 those people.

19 Q So the fact of the matter is, Mr. Muller, that
20 if you look carefully at this planning report, it does
21 not project anywhere in it the OQA staffing needs of
22 LILCO but simply contains an analysis which allocates
23 various tasks to a given number of people. Isn't that
24 correct?

25 A (WITNESS MULLER) No, sir.

1 Q All right. I am going to try a different
2 tack, Mr. Muller. You show me in this document where it
3 projects a greater number of personnel needs in the OQA
4 section.

5 A (WITNESS MULLER) Section 8 under
6 Recommendations, second paragraph.

7 Q Well, Mr. Muller, tell me if I am wrong, but
8 the statement that you are referring to is the one that
9 recommends that the Station OQA Section complement be
10 increased from its present number of five to eight;
11 isn't that correct?

12 A (WITNESS MULLER) That is correct. And once
13 again, that refers to the number of permanent LILCO
14 employees within the section.

15 Q Yes. And the appendices that we have just
16 looked at in fact are based upon the eight, aren't they?

17 A (WITNESS MULLER) They are based upon the
18 average need for eight.

19 I would like to also note at the time this
20 report was written, we had 12 people in the section.
21 That is noted in Appendix A. I am sorry, Mr. Dynner, 11
22 people.

23 Q Well, Mr. Muller, is it your testimony that
24 this suggests that the eleven people have been reduced
25 to five and should now be increased to eight?

1 A (WITNESS MULLER) No, sir.

2 Q Well, would you explain that for me?

3 A (WITNESS MULLER) At the time this report was
4 written, it was to justify the number of permanent LILCO
5 employees, and at that time we had authorization for
6 five permanent LILCO employees in the section. We felt
7 the need to increase it to eight, and those tables
8 justified the need for eight people during the long-term
9 operation of at least two years.

10 JUDGE BRENNER: You had eleven people while you
11 were trying to justify eight?

12 WITNESS MULLER: We were trying to justify
13 eight long-term LILCO employees at the time we wrote the
14 report. Appendix A indicates the number of people that
15 we had at the time. Once again, we were in the startup
16 phase or the pre-operational test phase, not in the
17 operating phase.

18 BY MR. DYNNER: (Resuming)

19 Q So the justification is to go to eight now of
20 full-time personnel in the OQA Section, "now" being
21 sometime immediately prior to May of 1980; is that right?

22 A (WITNESS MULLER) Not immediately prior to,
23 but during the next few months it was intended to
24 increase our staff to eight prior to fuel load so that
25 we would have eight permanent LILCO employees at the

1 time of fuel load. And once again, that didn't preclude
2 us from having additional contractors assigned to the
3 OCA Section.

4 Q So you had eleven, you wanted to justify --
5 the eleven, I take it, were not all permanent LILCO
6 employees? Is that the distinction you are making?

7 A (WITNESS MULLER) That is correct.

8 Q All right. So you had five permanent LILCO
9 people and you wanted to go to eight, and what these
10 appendices show is that you were going to stay at eight
11 for the period up through 1982; isn't that correct?

12 A (WITNESS MULLER) Mr. Dynner, at the time, we
13 did not have five LILCO permanent employees; we had
14 justification for five. We wanted to increase that
15 number to eight. What the report showed is that we
16 could justify eight people and we would need at least
17 eight people to perform the activities noted.

18 JUDGE BRENNER: I don't know if it is
19 important, but in giving your answer, maybe you had
20 better give us the number. How many of those people
21 were permanent LILCO employees?

22 WITNESS MULLER: At the time of the report
23 there were two. The QA engineer had just left and we
24 had posted for inspection personnel. Those positions
25 had not been filled at the time of the report, and I can

1 tell by the names that these individuals were not at the
2 time LILCO employees.

3 BY MR. DYNNER: (Resuming)

4 Q Mr. Muller, let's move away from the planning
5 report for a while and look at, if you will, Exhibit 85,
6 which is the listing that we have identified and can
7 call here the activities description. You have
8 testified, haven't you, that this particular document
9 was not, in fact, used in establishing the DQA staffing
10 levels of eight; isn't that correct?

11 A (WITNESS MULLER) That is correct. This
12 document, once again, was prepared by the QA engineer in
13 September of 1981 and it remained in his desk until a
14 few weeks ago.

15 Q Don't you find this document, if you were
16 going to be involved with DQA staffing, to be a rather
17 useful one in that it makes an attempt at setting forth
18 the activities to be performed by the DQA Section and
19 then matching them up with the manhours that it is
20 estimated each activity would take?

21 A (WITNESS MULLER) Mr. Dynner, this document is
22 not necessary because what we use is the monthly
23 timesheet, which describes similar activities, and we
24 keep track each month of the number of manhours spent on
25 each activity. From those reports we develop our

1 projections. But if there is no need to submit a report
2 to increase our personnel, we would not submit a report.

3 Q Well, the time records that you are referring
4 to are retrospective, a retrospective look at your OQA
5 Section, aren't they? Do you understand what I mean?
6 You are looking backwards, in other words; you are not
7 looking ahead when you examine the past timecards.

8 A (WITNESS MULLER) That is correct, but that
9 gives us a good idea of how much time we spend on each
10 activity. It provides a good data base. But once again,
11 that data base is not complete because certain
12 activities are not being performed at the present and
13 certain activities are being performed and completed in
14 the past.

15 Q To make a meaningful projection, Mr. Muller,
16 you certainly would want to have the past timecards to
17 see what number of hours were spent on each activity,
18 but wouldn't you also want to have a fairly detailed
19 list of what the activities were likely to be in the
20 future?

21 A (WITNESS MULLER) Many of the activities that
22 have occurred in the past will, in fact, occur in the
23 future.

24 Q So you would want to have that kind of
25 information, wouldn't you?

1 A (WITNESS MULLER) We would project it the best
2 we could. We would need some information.

3 Q You would want to examine, for example, a
4 revised version of a QA manual that came out in June of
5 1982, for example, in order to see whether the various
6 tasks of the OQA Section had changed and therefore
7 whether you might need additional people; isn't that
8 true?

9 A (WITNESS MULLER) I would consider something
10 like that, and any other item that LILCO had committed
11 to that might change our activities.

12 Q That would include, for example, revised
13 procedures, wouldn't it?

14 A (WITNESS MULLER) Revised procedures, revised
15 commitments to reg guides, any number of activities. I
16 would have to monitor our activities on a continuing
17 basis, and I would have to estimate some of the
18 activities and project how many manhours they might take.

19 Q To your knowledge, that in fact wasn't done in
20 preparing the planning report and the estimates for the
21 number of OQA personnel that would be needed in the
22 initial period of plant operation; isn't that correct?

23

24

25

1 A (WITNESS MULLER) Those types of estimates
2 would have to be done.

3 Q But for some reason, the people that were
4 involved in that process saw fit not to include them in
5 the planning report that was going to have to justify
6 staffing levels? Is that your testimony?

7 A (WITNESS MULLER) You mean as far as the 1980
8 report?

9 Q Yes.

10 A (WITNESS MULLER) The activities listed in the
11 report were sufficient for planning. Once again, they
12 are general categories.

13 Q When you said that these activities or this
14 planning in terms of matching the activities in the
15 future with the number of man hours it would take to
16 perform them has to be done, are you suggesting they
17 were done but there are no documents that indicate that
18 they were done that were used in connection with the
19 planning of QA staffing up to a level of eight, as your
20 FSAR commitment provides?

21 A (WITNESS MULLER) No, that report provided that
22 planning. Once again, that report was written before
23 May of 1980 and it extended until 1982. It projected
24 some of the activities that would be performed during
25 that timeframe.

1 Q All right. Mr. Muller, let me move now to the
2 document entitled, "QQA Man Hour Projection, First Year
3 of Operation." Before I do that, let me just cover a
4 few more quick items on Exhibit 85, the Activities
5 Description, just so I can get this on the record. Do
6 you know who prepared this document?

7 A (WITNESS MULLER) Exhibit 85?

8 Q Yes.

9 A (WITNESS MULLER) That was prepared by the QA
10 engineer.

11 Q Do you have personal knowledge that the QA
12 engineer prepared this?

13 A (WITNESS MULLER) Yes. He told me that he had
14 prepared it.

15 Q Thank you. Do you know what was done with the
16 document after it was prepared?

17 A (WITNESS MULLER) I think I already testified
18 that it had never been used. It remained in his desk.
19 I had not seen it until a few weeks ago.

20 Q Thank you, I just wanted to clarify that.

21 JUDGE CARPENTER: Excuse me, Mr. Dynner, why
22 are we looking at this document if it was never used?

23 MR. DYNNER: Are you asking me, sir?

24 JUDGE CARPENTER: No, I'm asking the witness.

25 WITNESS MULLER: Judge Carpenter, that was

1 provided to the county in the spirit of the request that
2 had occurred a number of days ago. The county had
3 requested certain documents concerning manpower
4 projections and official reports that had been submitted.

5 MR. ELLIS: Judge Carpenter, I made the
6 decision to produce this document. It was disclosed. I
7 asked Mr. Muller to go back and see what he could find.
8 He went back and he said, I found this; I didn't know it
9 existed. It wasn't used, and in reading the transcript
10 and in being sensitive to what Judge Brenner had said, I
11 said let's give it to them. We had a meeting with them
12 and offered to discuss it at the time.

13 JUDGE BRENNER: Let me cut you off. Judge
14 Carpenter isn't asking you why you turned it over, and
15 if you're looking for a word from me, it's very good
16 that you did turn it over. Certainly, if you want to
17 use the word "spirit" that's okay. It is very close to
18 the spirit, if not the letter, and we appreciate the
19 fact that you did turn it over. That's not the question.

20 JUDGE CARPENTER: I just was trying to be
21 sure. Maybe some months from now I might be looking at
22 these documents again, and I just wanted to be sure I
23 understood which ones were used and which ones weren't
24 used. We've spent a lot of time on this one that wasn't
25 used, and I just wanted to be sure that I understood

1 that. I thank you.

2 BY MR. DYNNER (Resuming):

3 Q All right, Mr. Muller. Let me turn your
4 attention back to the OQA Manhour Projection, First Year
5 of Operation, and at the bottom it is entitled, -- it
6 states, "Attachment 2." This is SC Exhibit 86. Mr.
7 Muller, do you know when this document was prepared?

8 A (WITNESS MULLER) Yes, sir. Wednesday night.

9 Q This Wednesday night, the 17th of November?

10 A (WITNESS MULLER) Yes, sir. That would mean it
11 was put in final form. It was typed up on Thursday. I
12 think that's when you received it.

13 Q Do you know who prepared this document, Mr.
14 Muller?

15 A (WITNESS MULLER) I prepared this in
16 conjunction with the QA engineer.

17 Q The QA engineer would be who?

18 A (WITNESS MULLER) At the site, Thomas Rose.

19 Q Well, you were here in Bethesda in this area
20 on November 17th. How did you get Mr. Rose's input?

21 A (WITNESS MULLER) Over the phone.

22 Q Thank you. Why was this document prepared,
23 Mr. Muller?

24 A (WITNESS MULLER) This document was prepared to
25 show that some of the numbers on Exhibit 85 were

1 unrealistic. Many of the activities described in 85 and
2 86 are similar. It shows a relationship between some of
3 the activities that had been performed in the past will
4 be performed in the future, and it shows activities that
5 will be performed in the future that haven't been
6 performed in the past, and activities that had been
7 performed in the past that will not be performed in the
8 future.

9 Once again, because they are related to the
10 pre-operational test program, they will not be carried
11 out through the operational program because the
12 activities will no longer exist.

13 Q So you prepared this document basically to
14 show that you disagreed with the activities description,
15 SC 85, which wasn't used by LILCO anyway. Is that
16 correct?

17 A (WITNESS MULLER) That is correct, in part. I
18 also wanted to show that some of the numbers were not
19 correct, and the reason why the Activities Description
20 described in 85 stood was because some of these
21 activities were going to continue through September 81
22 through September 82.

23 Q Do you have there a total of the numbers that
24 appear in your first year of operation manhours column
25 for us? Do you know what the total number is?

1 A (WITNESS MULLER) It's approximately 31,000.
2 And I'd like to add, Mr. Dynner, that some of those
3 numbers in the report are still high.

4 Q So you wanted to show by this document that
5 Mr. Durand's projection on the Activities Description,
6 Exhibit 85, in the last column for March 83 to March 84,
7 which was 47,140 hours, was a number that you don't
8 agree with. Is that correct?

9 A (WITNESS MULLER) First of all, it was Mr.
10 Rose, it was not Mr. Durand. And yes, I did want to
11 show that I do not agree with all the numbers in that
12 column. Once again, these are just estimates.

13 Q For clarification, you said Mr. Rose prepared
14 the Activities Description?

15 A (WITNESS MULLER) Mr. Rose prepared Exhibit 85;
16 that is correct. Mr. Rose is the QA engineer.

17 JUDGE BRENNER: I was confused, too, so you'd
18 better be careful between the QA engineer and the QQA
19 engineer.

20 WITNESS MULLER: Okay, Judge Brenner, I will
21 try to keep QQA engineer and QA engineer and QC engineer
22 in the best context I can.

23 JUDGE BRENNER: Thank you.

24 BY MR. DYNNER (Resuming):

25 Q Mr. Muller, if you were to take the 31,000 man

1 hours on your QQA man hour projection, how many QQA
2 personnel would that result in?

3 (Panel of witnesses conferring.)

4 A (WITNESS MULLER) It would be 13 at 20 percent
5 overtime and 15 at 10 percent overtime.

6 Q And how much if there was no overtime? How
7 many people would be involved?

8 A (WITNESS MULLER) Rounded up, 16. Once again,
9 let me add that some of the numbers, I feel, are still
10 high.

11 Q Yes. Now, if these are your numbers, Mr.
12 Muller, I'd like to work with them for a minute. If you
13 take the 31,000 man hours and you assume no overtime,
14 divided by 16, how many hours per person do you come out
15 with?

16 A (WITNESS MULLER) How many people was that?

17 Q Your number was 16. Mr. Kelly, did you want
18 to --

19 A (WITNESS KELLY) No.

20 Q I thought you said that your 31,000 man hours
21 would require 16 people, assuming no overtime. Is that
22 correct?

23 A (WITNESS MULLER) That's approximately right,
24 yes.

25

Q All right. So if you divide -- I wish I had my calculator here, I'd do it myself. If you divide 31,000 by 16, what do you get per person? Does anyone have a calculator?

A (WITNESS MULLER) 1937 1/2.

Q 1937.5 hours.

JUDGE BRENNER: Did you ever get the base hours per month that they used? Why don't we get that in one place, and we can play around with the record later if we need to.

WITNESS MULLER: Judge Brenner, it's 2,000 per year.

JUDGE BRENNER: Thank you.

JUDGE MORRIS: Which I observe is 40 times 52, which doesn't allow any time for vacation, training, et cetera.

WITNESS MULLER: Vacation may not be included, but training is included in the man hours. Once again, it's an estimate, it's a number to work with.

BY MR. DYNNER (Resuming):

Q The 1,937 1/2 hours per person are the actual working hours to complete these tasks without any time off for vacations, holidays, training, having lunch, talking to coworkers or all the other good things people do when they work. Isn't that correct?

1 A (WITNESS KELLY) As far as training -- that is
2 on page 2 of that exhibit -- those hours are
3 incorporated. Lunchtime, so far as the Long Island
4 Lighting Company is concerned, does not count as part of
5 your 40-hour work week. Working hours are in addition
6 to lunch. What were the other categories?

7 Q Vacations, holidays, talking to coworkers,
8 being sick, walking down the hallways, all kinds of
9 other things people do during the day that don't
10 constitute their actual attention to a specific task
11 that might be presented on this work list.

12 A (WITNESS KELLY) The difference between the
13 22,080 and the approximately 1940 hours gives you
14 approximately the three weeks left in the year, so you
15 can have two weeks vacation and a week sick. As far as
16 your question about talking to coworkers, walking down
17 the hallway, those factors are normally considered into
18 any estimate. I have never seen in any estimate of man
19 hours in any industry that I have ever seen where you
20 have hallway walking time as a category of man hour
21 expenditure.

22 Q So, Mr. Muller, your projection for the first
23 year of operation man hours that you have prepared for
24 us on this list, if matched up with your statement as to
25 the number of people you expect to use through the first

1 fueling outage for OQA staffing, which I believe was 14,
2 assumes that those 14 people are going to be working a
3 fair amount of overtime, doesn't it?

4 A (WITNESS MULLER) It does assume that they will
5 work some overtime, yes. We have to do that, and once
6 again, these numbers are just estimates. If the
7 overtime gets excessive, that indicates to me that I
8 need more people, and I will, in fact, get more people.

9 I'd like to add another thing, Mr. Dynner. If
10 there comes a time when there are more activities going
11 on than the average number of activities, I may have to
12 supplement even more people during a shorter timeframe.

13 Q You testified that at 20 percent overtime,
14 which is the maximum, isn't it, in terms of the
15 requirements of Exhibit 84 which is the Overtime Control
16 Guidelines, isn't that right?

17 A (WITNESS MULLER) No, sir. 20 percent
18 indicates that that is a goal for the plant supervisory
19 personnel. I think the number of a maximum of 33
20 percent is listed and then it requires special
21 management approval for someone to exceed 33 percent of
22 his regular work hours.

23 Q All right. Well, the overtime work hour
24 guidelines, as they are referred to in your Overtime
25 Control Guidelines, Exhibit 84, are 20 percent for

1 supervisors and physical workers, isn't that true?

2 A (WITNESS MULLER) The guidelines are 20 percent
3 for physical workers and supervisors, yes.

4 Q And 10 percent for clerical workers, right?

5 A (WITNESS MULLER) That is correct.

6 Q What classification would the OQA Section
7 personnel fall under?

8 A (WITNESS MULLER) As I testified before, they
9 would be considered supervisory personnel.

10 I'd like to add that in all the estimates
11 we've had, the clerical time was not included. We did
12 not include the clerical individual in our manpower
13 estimates.

14 Q So if your 31,000 man hours result, as you
15 have testified, in 13 people at 20 percent overtime
16 numbers, which is the maximum guideline, then your
17 projection or decision to use 14 people is not very
18 conservative, is it?

19 A (WITNESS MULLER) It's conservative enough for
20 me.

21 JUDGE BRENNER: Mr. Dynner should we take a
22 break now, or are you going to finish in the next couple
23 of minutes?

24 MR. DYNNER: I hope I'll be able to finish in
25 just a few more minutes, Judge Brenner.

1 JUDGE BRENNER: All right.

2 BY MR. DYNNER (Resuming):

3 Q Now, Mr. Muller, have you made any other
4 projections for the staffing of the OQA Section on the
5 basis of comparing the tasks to be performed with the
6 number of man hours required to perform them for over
7 the next several years?

8 A (WITNESS MULLER) No, Mr. Dynner, I haven't.
9 And the reason why I haven't is that I need a better
10 baseline. By that I mean during the first year of
11 operations we're going to have a lot of activities going
12 on; some of them will not continue throughout the life
13 of the plant. The actual startup testing is initial for
14 the plant. We will not go through that every time we
15 start up the plant. We will go through some initial
16 testing each time, but not the same magnitude.

17 We also may perform other activities that I'm
18 not aware of yet. It may take us more time to perform
19 inspections than I'm aware of. During the first year of
20 operations, I will have a very good handle on what is
21 going on.

22 At the time that Mr. Rose wrote up Attachment
23 85, I was, in fact, at Millstone for a month visiting
24 that plant, and that gave me an idea of what activities
25 went on during operations. Both units were in

1 operation; they were not during a refueling outage. And
2 I was able to overview their operation as far as quality
3 control and quality assurance are concerned.

4 MR. DYNNER: I have no further questions.

5 JUDGE BRENNER: All right, we'll take a
6 15-minute break, and when we come back at 12:00, let's
7 decide what aspect of examination to go into and whether
8 or not the staff wants to ask some questions now on
9 redirect and so on. In any event, we will stop the
10 testimony at 12:30 and then take up procedural matters.

11 (A short recess was taken.)

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1 JUDGE BRENNER: Back on the record. What's
2 the pleasure of the parties?

3 MR. ELLIS: Judge Brenner, as I understood it,
4 we will go until 12:30 and then we would take up the
5 other matters; is that correct?

6 JUDGE BRENNER: If you want to. If you feel
7 that there is nothing useful you can accomplish, we
8 won't. I wanted to know whether the staff wanted to ask
9 questions about staffing now.

10 MR. BORDENICK: I have no questions at the
11 present time.

12 JUDGE BRENNER: So you have a half hour's
13 redirect that you want to do.

14 MR. ELLIS: Yes, sir. I can make use of half
15 an hour if the Board thinks that's useful. What I'd
16 like to do is ask just a few questions on the last point
17 that was raised, not staffing as a whole, and then go on
18 to another topic that I think I can cover in whole
19 before the 12:30 period.

20 JUDGE BRENNER: Fine.

21 MR. ELLIS: That other topic, for everyone's
22 convenience, would be organization generally.

23 JUDGE BRENNER: Okay.

24 REDIRECT EXAMINATION

25 BY MR. ELLIS:

1 Q Mr. Muller, prior to the break you mentioned,
2 in response to Mr. Dynner's question, that you had spent
3 some time at Millstone. How long did you spend at
4 Millstone?

5 A (WITNESS MULLER) I spent four weeks at
6 Millstone and that was September of 1981.

7 Q Did you have an opportunity to observe their
8 Operational QA Division in operation, their functions,
9 their duties?

10 A (WITNESS MULLER) Yes, sir, I spent the four
11 weeks within that group.

12 Q And are they, the duties the Operational QA
13 Section at Millstone, did you find them essentially
14 similar to or different from the duties and
15 responsibilities that you are familiar with at Shoreham
16 for the DQA Section?

17 A (WITNESS MULLER) The activities and
18 responsibilities were very similar.

19 Q And did the Millstone CQA Section report to an
20 on-site plant manager or off-site?

21 MR. DYNNER: Judge Brenner, pardon me. It
22 seems to there's an awful lot of leading questions going
23 on here, and I will leave it to the Board, but I do want
24 to object.

25 JUDGE BRENNER: I didn't think the last one

1 was leading.

2 MR. DYNNER: Maybe the other three were. I
3 was waiting to see how far it would be carried.

4 JUDGE BRENNER: I'm not prepared to comment
5 directly unless I go back and hear the other questions,
6 and I don't want to do that. Let's see what happens
7 from here on in.

8 BY MR. ELLIS (Resuming):

9 Q Do you remember the question, Mr. Muller?

10 A (WITNESS MULLER) Yes, Mr. Ellis. The QC/QA
11 engineer, supervisor, whatever his title was -- and I
12 don't specifically remember -- reported to on-site
13 management. The management level that he reported to
14 reported to the site superintendent. That's a
15 multi-unit facility.

16 JUDGE BRENNER: Do you want to say how many
17 units, for the record?

18 WITNESS MULLER: There are two units in
19 operation, one unit under construction; a total of three
20 units.

21 BY MR. ELLIS (Resuming):

22 Q Were the duties and responsibilities of the
23 QQA Section at Millstone limited to the two operating
24 units?

25 A (WITNESS MULLER) Yes, they were. The QA/QC

1 responsibilities were covered by a different section at
2 the construction unit.

3 Q How many people were in the Millstone CQA
4 Section?

5 A (WITNESS MULLER) In the operating section
6 there were 12 people.

7 MR. ELLIS: Judge Brenner, I'm now going to
8 turn to the general subject of organization.

9 BY MR. ELLIS (Resuming):

10 Q Mr. Muller, in your cross examination, I
11 believe you testified that the two organizations with
12 LILCO with primary responsibility for quality assurance
13 were the CQA Division and the Quality Assurance
14 Department. Is that correct?

15 A (WITNESS MULLER) That is correct. The Quality
16 Assurance Department has the overall responsibility for
17 establishing and implementing the LILCO corporate QA
18 program. The CQA Section is responsible for
19 implementing the QA program at the Shoreham operating
20 plant.

21 Q Does the QA Department have any on-site
22 quality assurance functions?

23 A (WITNESS KELLY) Yes, they do, Mr. Ellis. They
24 include such things as the auditing of the Station QA
25 organization, review of the Station CQA procedures,

1 review of all station LILCC deficiency reports, review
2 of all non-destructive examination reports initiated
3 from the station, review of all in-service inspection
4 reports initiated at the station, approval of the audit
5 schedule, the station OQA, audits of fire protection
6 security, emergency planning, environmental monitoring
7 and also would be involved with the resolution of
8 differences that might come up between -- regarding
9 quality matters between the Plant Manager and Station
10 OQA.

11 As I said, those are the activities that
12 relate to directly the on-site activities. There are
13 additional Quality Assurance Department activities
14 performed offsite.

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1 Q Mr. Kelly, you mentioned in your answer, I
2 think you said something about resolution of
3 differences. Could you elaborate on that please, sir?

4 A (WITNESS KELLY) Should a quality problem
5 arise which cannot be resolved between the station OQA
6 engineer and the plant manager, the OQA engineer has the
7 right to go to the Quality Assurance Department
8 manager. At that time the Quality Assurance Department
9 manager, together with the station OQAE, would discuss
10 the matter with the plant manager. If successful
11 resolution of that could not occur, the Quality
12 Assurance Department manager would additionally go to
13 the vice president of Nuclear. If that could not occur,
14 he would then go to the vice president of Engineering
15 and the issue would continue to escalate up, if
16 necessary, to the president of the company.

17 [Counsel for LILCO conferring.]

18 Q Mr. Muller, you were asked a number of
19 questions concerning the organizational structure of the
20 QA organizations at LILCO. Does Criterion 1 of Appendix
21 B require or mandate a specific organizational reporting
22 structure for the QA organizations on site?

23 A (WITNESS MULLER) No, but it does mandate that
24 we report to a management level sufficiently free from
25 cost and schedule when compared to safety considerations.

1 Q All right. Is that the statement that appears
2 in Appendix B that requires that you have sufficient
3 independence?

4 A (WITNESS MULLER) That is the statement I'm
5 talking about, yes.

6 Q Are you aware of any NRPC-published guidance
7 on quality assurance organizational structures to
8 achieve the sufficient independence required by
9 Criterion 1 of Appendix B?

10 A (WITNESS MULLER) Yes, sir. That would be
11 WASH-1284, 1973, ANS 3.2 or ANSI N.18.7, and Reg Guide
12 1.33. If I may quote from those documents --

13 Q If you are going to read from a document,
14 would you preface what you are reading with what
15 document it is from and what page number, and then let's
16 wait a minute to see if the parties need a chance to
17 look at it.

18 A (WITNESS MULLER) I am going to start out with
19 the WASH document, page D-4. I am not going to read it,
20 I am just going to paraphrase. That page sets examples
21 of acceptable organizations as shown in Figures 1, 2, 3
22 and 4. LILCO, in fact, follows Figure 2 of the four
23 figures, which allows an onsite QA/QC organization to
24 report to a plant manager or plant superintendent as
25 long as our activities are monitored by an offsite QA

1 organization.

2 Q Rather than paraphrase, Mr. Muller, why don't
3 you just read the statement. And for the convenience of
4 parties and the Board, I would like to hand out this
5 chart and have it marked so that we can have the witness
6 refer to it. I believe it would be LILCO Exhibit 39.

7 JUDGE MORRIS: It would be 38.

8 (The document referred to
9 was marked LILCO Exhibit
10 No. 38 for
11 identification.)

12 WITNESS MULLER: Specifically, the second
13 paragraph reads, "Examples of acceptable organizations
14 are shown in Figures 1, 2, 3 and 4. Specifically
15 related to onsite quality assurance activities, the
16 quality assurance supervisor should be responsible for
17 assuring that the quality assurance program at the
18 nuclear power plant site is being effectively
19 implemented. The quality assurance supervisor should be
20 knowledgeable and experienced in nuclear power plant
21 operations phase activities and should have no other
22 duties and responsibilities so that he can direct his
23 full attention to this effort.

24 "The activities of the onsite quality
25 assurance supervisor should be audited by offsite

1 personnel to determine the effectiveness of these
2 activities."

3 BY MR. ELLIS: (Resuming)

4 Q All right, Mr. Muller. The figure that you
5 referred to -- do you have LILCO Exhibit 38 in front of
6 you?

7 A (WITNESS MULLER) Yes, sir.

8 JUDGE BRENNER: Let's bind it in for
9 convenience at this point.

10 [The document referred to, LILCO Exhibit 38
11 for identification, follows:]

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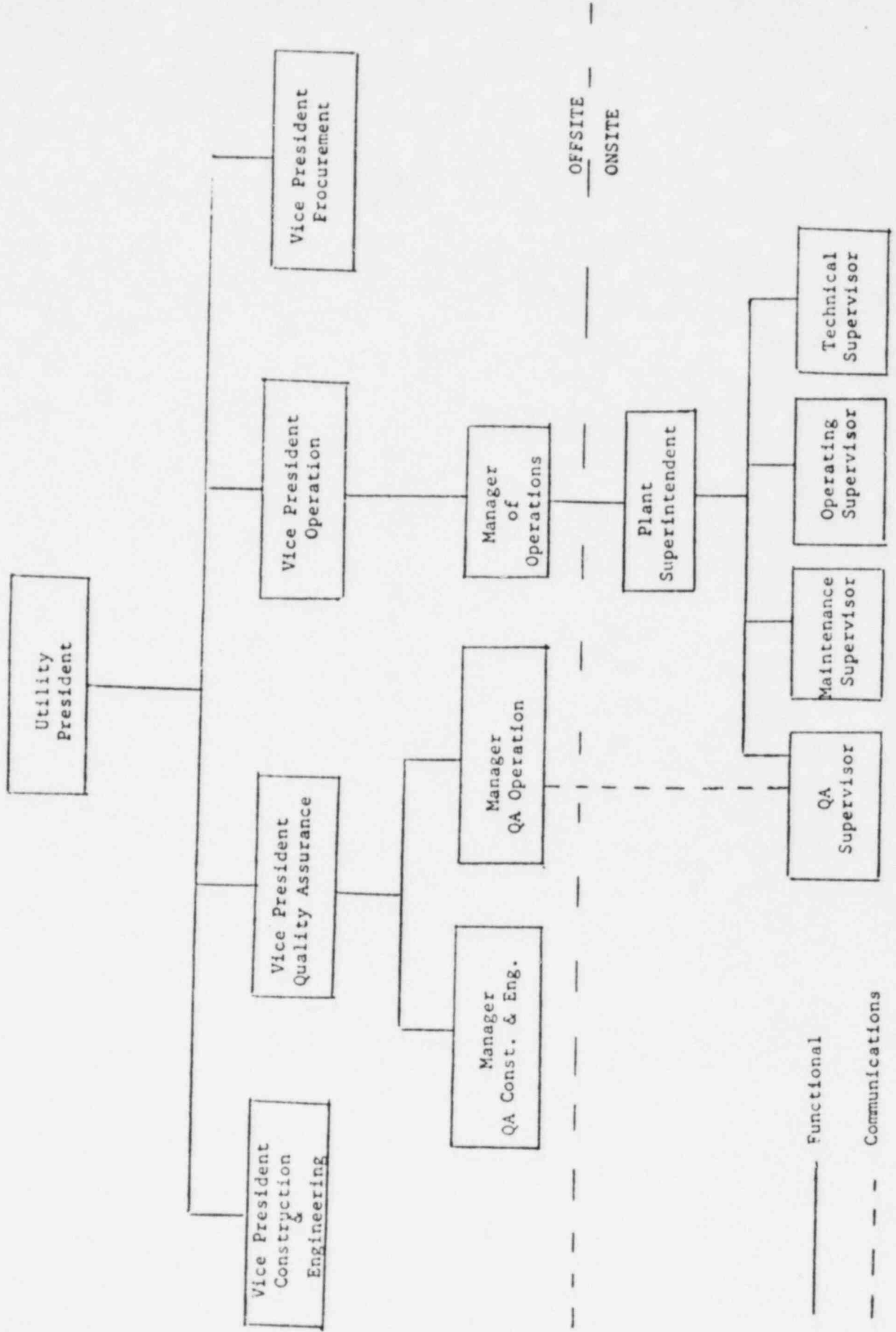
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Figure 2



— Functional
- - - Communications

1 BY MR. ELLIS: (Resuming)

2 Q Is that figure from the WASH document?

3 A (WITNESS MULLER) Yes, sir.

4 Q And it has Figure 2 on the top of it. Is that
5 one of -- you said there were four permissible
6 organizations. Is this one of the permissible
7 organizations?

8 A (WITNESS MULLER) Yes, sir.

9 Q Is Figure 2 the organization that LILCO has
10 followed?

11 A (WITNESS MULLER) Figure 2 is the organization
12 that LILCO is following.

13 Q In your opinion, does LILCO meet the criteria
14 or the standards that you read from the WASH-1284
15 document?

16 A (WITNESS MULLER) Yes, we do.

17 JUDGE BRENNER: Did we ever get the full title
18 of that document?

19 BY MR. ELLIS: (Resuming)

20 Q Mr. Muller, do you have a full title there?

21 A (WITNESS MULLER) I am missing the first page.
22 I don't want to misquote the title.

23 MR. ELLIS: Give us a moment, Judge Brenner.
24 We may have it here.

25 [Pause.]

1 JUDGE BRENNER: With the help of page 12 of
2 Mr. Hubbard's prefiled testimony, there is a document
3 referenced there as WASH-1284, October 26, 1974,
4 entitled "Guidance on Quality Assurance Requirements
5 during the Operations Phase of Nuclear Power Plants."
6 Does that sound like the title to you, Mr. Muller?

7 WITNESS MULLER: That is correct. I just
8 didn't want to misquote it.

9 JUDGE BRENNER: And this is issued by whom? Do
10 you know?

11 WITNESS MULLER: The NRC.

12 JUDGE BRENNER: The NRC Staff? Well, let me
13 ask your counsel. You are not ascribing any weight to
14 this document besides staff guidance, are you?

15 MR. ELLIS: That is right, Judge Brenner.

16 BY MR. ELLIS: (Resuming)

17 Q All right, Mr. Muller. You mentioned other
18 guidance from the NRC with respect to what constitutes
19 sufficient independence for quality assurance onsite
20 organizations. What were the others?

21 A (WITNESS MULLER) The other documents?

22 Q Yes.

23 A (WITNESS MULLER) That would be ANS 3.2 or
24 ANSI N.18.7, which is entitled "Administrative Controls
25 and Quality Assurance for the Operational Phase of

1 Nuclear Power Plants."

2 Q All right, that is an industry standard, not
3 an NRC-published guidance, isn't it?

4 A (WITNESS MULLER) That is correct, but Reg
5 Guide 1.33 endorses it.

6 Q All right, thank you.

7 Is there something in the ANSI or ANS document
8 that refers to organizational structures, and if so,
9 would you give us a page and reference?

10 MR. DYNNER: Excuse me. Could you identify
11 the date of the ANSI 18.7 you are referring to and the
12 applicable revision of the Reg Guide, please?

13 WITNESS MULLER: That would be 1976. The reg
14 guide is Revision 2. I don't remember the exact date on
15 the reg guide.

16 In reading from Paragraph 3.4.2 entitled
17 "Requirements for Onsite Operating Organizations," which
18 is on page 4, it says, "Reporting to an onsite plant
19 management is preferable since such an arrangement
20 usually results in improved communications and
21 identifying problems and initiating corrective action."

22 This refers to the Operational QA Section.

23 BY MR. ELLIS: (Resuming)

24 Q Is what you just read, Mr. Muller, from the
25 ANSI Standard N.18.7-1976?

1 A (WITNESS MULLER) Yes, sir.

2 Q And what page, again, was that?

3 A (WITNESS MULLER) Page 4.

4 C Has the NRC indicated endorsement of this ANSI
5 standard?

6 A (WITNESS MULLER) Yes, through the Reg Guide
7 1.33.

8 Q That was Revision 2?

9 A (WITNESS MULLER) Yes, sir. And this
10 document, once again, notes that if the QA organization
11 reports onsite, it must be audited by an offsite
12 organization.

13 Q I think you have already testified, but let me
14 ask it again. Is the QQA Section at the Shoreham
15 station audited by an offsite organization?

16 A (WITNESS KELLY) Yes, it is. It is audited by
17 the Quality Assurance Department.

18 Q Is it also audited by any other organizations?

19 A (WITNESS KELLY) The Nuclear Review Board.

20 Q Mr. Muller, in reading from the ANSI standard,
21 it indicated, I think the words were, that it was
22 preferable. Do you consider that there are advantages
23 to the organizational structure that has been selected
24 by LILCO?

25 A (WITNESS MULLER) Yes, sir, I do.

1 Q Can you tell us why?

2 A (WITNESS MULLER) First of all, we are a
3 member of the plant staff organization. We are
4 considered members of the plant staff. We are not an
5 outside organization looking from the outside in. We do
6 report to the plant manager. The plant manager does
7 have the responsibility for implementing the quality
8 assurance program at the station. And as part of our
9 day-to-day activities, we are involved with daily
10 meetings and daily interfaces with all the members of
11 the station staff.

12 I would also like to note that the only
13 responsibility that the QQA Section has is the
14 implementation of the QA program at the station; we are
15 not responsible for maintenance, operations, INC or any
16 other activities, nor do we report to the supervisors
17 responsible for those activities.

18 [Counsel for LILCO conferring.]

19 Q I think you also testified in your
20 cross-examination by Mr. Dynner that you were a member
21 as the DQAE of ROC. Is that also an advantage?

22 A (WITNESS MULLER) It is an advantage in that I
23 have a voice in the approval of procedures other than
24 the normal review cycle and at the signature cycle. I
25 participate and the members provide input, the quality

1 assurance input into those procedures. And at the
2 meetings, I am able to voice quality concerns.

3 Q You said that you were involved or at least
4 exposed to the day-to-day operations of the plant. What
5 is the advantage, in your view, of that?

6 A (WITNESS MULLER) Being a member of the plant
7 staff, I am obligated to attend the plant staff
8 meetings, daily meetings. As far as the communication
9 is concerned, as far as the distribution of the reading
10 list and reading material, I am required to review that
11 material as a member of the plant staff. They have
12 direct control over the distribution, and the fact that
13 I am a member of the plant staff means that I have to in
14 fact review it.

15 JUDGE BRENNER: You don't have to be a member
16 of the plant staff to engage in the activities you have
17 just described, do you?

18 WITNESS MULLER: Possibly not all the
19 activities. However, we are not involved with working
20 with offsite organizations as far as the distribution of
21 mail and that type of thing. The information doesn't
22 come from another organization offsite in Hicksville; it
23 comes from the plant. It would take much longer to
24 disseminate that information going back up the chain and
25 back down again.

1 JUDGE BRENNER: Well, can't you be exactly
2 where you are physically, exactly where you are in terms
3 of your mail delivery, exactly where you are in the
4 distribution lists and yet not report through the plant
5 staff? I am trying to understand the balance of
6 advantages and disadvantages to different organizations
7 that you are pointing out.

8 WITNESS MULLER: Yes, Judge Brenner, I would
9 receive the mail no matter where my location was or who
10 I reported to; however, I think the one factor that is
11 involved is that, which I did state, is that I am a
12 member of the plant staff, I am not an outsider.

13 WITNESS KELLY: Judge Brenner, along those
14 lines, if someone is having a staff meeting, obviously
15 you could put a requirement that some exterior
16 organization attend, but I think the freedom and
17 exchange of information is a lot better when the staff
18 meeting is consisting of just staff and not outsiders.
19 I think it promotes for probably a more effective
20 meeting for exchange of information, especially to the
21 OQAE.

22 WITNESS MULLER: I think, Judge Brenner, as a
23 member of the plant staff I am required to attend those
24 meetings, whereas being from an outside organization, my
25 presence may or may not be known or no one might have a

1 concern about it because no one in an offsite
2 organization would know if I went to the meetings or
3 not, whereas on a day-to-day basis, the plant manager
4 does know who goes to the meetings and who does come
5 prepared to attend those meetings.

6 It is a matter of you instill the fact that
7 you are a member of that organization, you are not an
8 outsider. You are part of the organization. Quality is
9 part of the plant staff organization. We are not an
10 outside concern. We are not just concerned about the
11 paperwork. We are concerned about everything, the
12 operations, the maintenance; and anything that goes on
13 at the plant, we need to be aware of it and we need to
14 impress everyone that Quality is part of that
15 organization and it is part of the requirements.

16 BY MR. ELLIS: (Resuming)

17 Q Mr. Kelly and Mr. Muller, do the OQA
18 Departments and the QA Department manager -- let me
19 rephrase that. Do the OQAE and the QA Department
20 manager have sufficient authority and organizational
21 freedom and independence, in your opinion, to implement
22 the QA program at Shoreham?

23 A (WITNESS MULLER) Yes, we do. Both the OQAE
24 and the QA Department manager report to management
25 levels that are adequate. They are sufficiently free

1 from cost and schedule obligations. I report to the
2 plant manager. The plant manager is responsible, in
3 addition to the plant, he is responsible for
4 implementing the quality assurance program at the
5 plant. And that is described in the QA manual.

6 The QA manager has the same responsibility in
7 addition to establishing and implementing the QA
8 program, but on a corporate level. The QA manager
9 reports to a level of management outside the
10 VP-Nuclear. He reports to the vice president of
11 Engineering. The interface between the two provides me
12 with additional independence that I need.

13 The QA manager audits my operations or my
14 activities. He assesses my activities and reports those
15 assessments to his management and the plant manager.

16 MR. ELLIS: Judge Brenner, I am not going to
17 be able to finish this section within the next five
18 minutes or so, so that being the case, perhaps this is
19 an appropriate point.

20 JUDGE BRENNER: Okay. Let's halt the
21 testimony, and thank the witnesses for their appearances
22 again and we will be seeing you again. Where or when,
23 we will find out soon, sooner or later, anyway. So thank
24 you again.

25 I am not sure what order to take some of these

1 miscellaneous things up. Let me take up some emergency
2 planning matters first since I think that is severable
3 from the other scheduling matters. We received in our
4 office about an hour ago Mr. Shapiro's filing. In
5 addition, the counsel for the County apparently just
6 this morning received it also and had provided us
7 another copy just now, which we appreciate.

8 Mr. Shapiro unfortunately put it in the
9 Federal Express yesterday, which obviously did not
10 ensure that we receive it on the due date, which was
11 yesterday. Nevertheless, we are going to take it into
12 account. We have read it. I read it during the break,
13 the last break, and I want to take note on the record of
14 some things in his filing so he can be apprised of what
15 we are saying through the courtesy of the County.

16 In the first instance, Mr. Shapiro raises two
17 matters that were not previously raised by the County or
18 SCC in objection to our procedure. I deem both of them
19 to be in the category of flexibility of procedural
20 implementation, and that is why I want to make note of
21 them now, because they are exactly the kind of thing
22 that we can discuss at the Tuesday conference and
23 accommodate or see if we can't accommodate, and if we
24 cannot accommodate them, then take appropriate action.

25 One of the matters is the matter of NSC's

1 financial ability to pay a court reporter for the
2 depositions. We will be prepared to discuss that matter
3 on Tuesday. The other matter, one difference that Mr.
4 Shapiro raises is his view that a deposition is
5 different from a hearing because counsel can talk with
6 the witness, whereas counsel cannot consult with the
7 witness at the hearing. That is exactly a minor
8 procedural detail of the type that we can discuss on
9 Tuesday.

10 So to the extent that those are important
11 reasons to Mr. Shapiro, he is well advised to attend on
12 Tuesday because we can discuss and accommodate his
13 concerns, or attempt to accommodate them. In addition,
14 Mr. Shapiro's cover letter states that he is waiving his
15 right to participate in the hearing. I think from the
16 context, he means the conference. In any event, that
17 is consistent with his conversation with my secretary
18 yesterday.

19 In part that is based on his belief that the
20 only things that will transpire will be argument on the
21 motions to strike and the motion for summary judgment
22 and the Board's proposal for evidentiary depositions, as
23 he terms them. As we stated, we think the latter is
24 very important for him to be there, particularly given
25 the points he raises, which were discussed. In

1 addition, we are not limiting the discussion. We may
2 well get into other procedural matters that affect
3 emergency planning, and we are not going to preclude
4 that.

5 So we are going to New York at the last
6 moment, as we indicated yesterday, and this should make
7 it easier for him. We rescheduled it for SCC, and on
8 the basis that Mr. Shapiro did not want to attend. Now,
9 if he says he wants to come but can't make that
10 particular time, we are just out of flexibility. Courts
11 and boards have to set some time for things, and to
12 accommodate one intervenor, this is exactly the
13 coordination we had hoped would be worked out among the
14 intervenors, who presumably are friendly enough to keep
15 talking to each other. If he can make only part of the
16 session, we will accommodate him by discussing his
17 concerns directly when he is there. We will do
18 everything we can to make it easy for him to be there,
19 but arrangements are made and we will have to meet on
20 Tuesday. So please call him and tell him about my
21 comments here.

22 In addition, we will be prepared to take up
23 the matter of the proposed settlements on the emergency
24 planning contentions next Tuesday, so that parties
25 should have enough copies there to make exhibits and
bind in if appropriate and so on.

1 It's not yet 1:00 o'clock, so I wanted to ask
2 about the response to the motion for summary
3 disposition.

4 MR. LANPHER: I was told it would be here by
5 1:00 o'clock.

6 JUDGE BRENNER: It is imminent?

7 MR. LANPHER: It's imminent.

8 JUDGE BRENNER: The object was to get it very
9 shortly after we broke, and I assume that will be done
10 unless we hear differently.

11 That's all we have on emergency planning. I
12 don't know if the parties, as a result of whatever
13 discussion they've been able to have in the short time
14 available this morning, have any suggestions on what to
15 discuss first in terms of the schedule, in light of the
16 staff's schedule raised this afternoon. This morning I
17 mean.

18 MR. LANPHER: Let me start off with two
19 things. First, on Torrey Pines, we attempted during the
20 last break to try to see how the situation affects our
21 ability to participate. We think it will affect that,
22 and add some flexibility. But quite frankly, we didn't
23 have enough time to work it out.

24 What we would be willing to offer, Judge
25 Brenner, is that on Monday relatively early in the day,

1 we will transmit in writing to the Board and to the
2 parties, or to Hunton & Williams by telecopier, what we
3 would propose so that it could be available for
4 discussion on Tuesday and you would have it well in
5 advance.

6 JUDGE BRENNER: All right, that is certainly
7 very acceptable.

8 MR. LANPHER: We just didn't have time.

9 JUDGE BRENNER: Let me raise a suggestion and
10 you can think about it. We re-emphasize our point that
11 the prime possessor of the knowledge, at least so far,
12 is LILCO and its agents. It might be appropriate, in
13 order not to unduly delay matters, at the same time,
14 giving the county as full an opportunity as is fair and
15 reasonable to all parties, including the county, to
16 participate as fully as the county sees fit. And I
17 understand that after you look at everything you may
18 deem your participation not to be as full as you might
19 have thought.

20 I'm not going to claim that you misled us. I
21 understand your point that you want to make a decision
22 as to how fully to participate.

23 Given all that, we can get the LILCO testimony
24 filed on the date we have previously established along
25 the lines of what we asked for, December 7th. Have that

1 before us, set a staggered date for the filing of
2 additional testimony by the county, -- and I will
3 inquire of the staff in a moment -- of two weeks or
4 thereabouts, that would be the 21st, to work in
5 somewhere around the time of the filing of LILCO by its
6 testimony a deposition, either shortly before the filing
7 of testimony or immediately thereafter. And that is
8 something the parties can think about, again, to aid the
9 county in focusing and formulating its testimony.

10 And then at the time of filing of the county's
11 testimony, it can file its testimony taking account of
12 LILCO's testimony and the deposition if you choose to
13 take one, and for that matter, if you wish, filing
14 portions of the deposition also in addition, either as
15 part of the testimony or as a reference which you
16 summarize in the testimony, and we would give LILCO the
17 opportunity on the 14th if a deposition is taken, to
18 file another brief supplement summarizing the
19 deposition, along with the applicable portions, along
20 with the portions that LILCO would seek to move into
21 evidence.

22 That is one possibility and the parties might
23 think about that. Then we could be prepared to litigate
24 the matter shortly after the 14th. Not that week, of
25 course. I'm sorry, shortly after the 21st, which would,

1 I guess, push it into January, but early January.
2 That's one possibility. I'm sure there are a lot of
3 variations. That's just a suggestion for you to
4 consider and maybe talk about.

5 And then maybe we can get a coordinated filing
6 on Monday. I don't know if you have a quick reaction or
7 not. You can make it now or save it. Let me ask the
8 staff what its plans, if any, are with respect to Torrey
9 Pines.

10 MR. BORDENICK: Judge Brenner, I have probably
11 stated this prefatory comment before, but in any event,
12 I will state it again. The Torrey Pines report was not
13 prepared by LILCO in response to any regulatory
14 requirements, so to speak. I'll start with that
15 proposition.

16 The staff, of course, is aware of its
17 existence. The staff is aware that it has relevance to
18 portions of the contention and is of interest to the
19 Board, and that the Board will want the benefit of the
20 staff's view on it.

21 From the standpoint of the former aspect; that
22 is, it's not submitted as part of a regulatory
23 requirement, the staff is not planning to make a formal
24 detailed type of review that they would make in a normal
25 context. The report has been read completely by one

1 staff member, and I guess his general comment is he has
2 -- he thinks it's a good report and he has no problems
3 with the report. This is what I'm told. I haven't had
4 an opportunity to fully discuss it with that particular
5 staff member yet.

6 Other staff members have reviewed portions of
7 it, are still in the process of reviewing it. There is,
8 I think, an informal interest at least among staff on
9 this type of report, not only for Shoreham but for any
10 other facility.

11 I think that preparation of testimony at this
12 point isn't going to produce any kind of testimony
13 that's going to be meaningful to the Board, so in that
14 sense, I would say that no, we won't be filing testimony.

15 On the other hand, I'd like to keep the option
16 open, and certainly, I think that members of the staff
17 panel are going to be prepared to address any questions
18 that the Board might have on the report at the
19 appropriate time. But whether the staff will put these
20 views down ahead of time in a report or in testimony, at
21 least in the short period of time that I have had to
22 consider the question posed by the Board of whether or
23 not the staff is going to file testimony, I would say
24 the answer is no.

25 JUDGE BRENNER: Give me one moment.

1 (Board conferring.)

2 JUDGE BRENNER: Let's leave it like this. We
3 appreciate that the staff's witnesses will be prepared
4 to answer questions about Torrey Pines. We understand
5 it's not going to be a full review of everything the
6 Torrey Pines people did. And staff and parties know we
7 are very interested in the significant results of that
8 report and would expect them to be prepared on that as a
9 minimum.

10 In addition, if we adopt a staggered filing
11 procedure, this should give the staff an opportunity to
12 consider it; whether it would be more efficient to set
13 down in writing at the time would require another filing
14 from the other parties. Anything they might wish to
15 say. That could be very efficient in the hearing process
16 so that we don't have to get everything here through
17 oral cross examination and oral questions from the Board.

18 The staff, it occurs to us, can bring a
19 perspective to the significant results in line with the
20 type of -- in the context of the review the staff has
21 done, including the CAT inspection, in the context of
22 the kind of review of this nature that has been done or
23 is being contemplated at other facilities by Torrey
24 Pines or other organizations.

25 It's a perspective that LILCO is not in as

1 good a position to give us as the staff is, and that is
2 something that I'm certainly not in a position to say
3 how important it is, but potentially, it could be
4 helpful. And I'd like the staff to consider that, and
5 consider the knowledge of people it has here in light of
6 that.

7 MR. BORDENICK: We certainly will take that
8 into consideration, Judge Brenner. I don't want to
9 imply that it's a closed matter, at this point. But in
10 answer to your direct question, do we presently intend
11 to file testimony, based on my limited opportunity to
12 pursue this matter, I don't think we could really
13 present any kind of fruitful testimony.

14 It may be that after, on a staggered filing
15 schedule, we will see something and we will certainly
16 come in with some prefiled testimony in line with any
17 schedule the Board might set, in addition to any verbal
18 questions that the parties or the Board would have.

19 JUDGE BRENNER: We would expect the staff
20 witnesses, as I said, to be able to discuss their view
21 of the significant results of the study. And if they're
22 going to be prepared to do that, it might be more
23 efficient to write it out.

24 MR. BORDENICK: Well, we will certainly
25 consider that.

1 MR. ELLIS: Judge Brenner, would you entertain
2 an observation or two concerning what the Board is
3 thinking about in terms of Torrey Pines?

4 JUDGE BRENNER: Yes. These are just proposals
5 for you to consider to stimulate your thinking.

6 MR. ELLIS: Let me offer my first impression.
7 With respect to depositions, the Board originally, I
8 think recognizing that this is a voluminous document and
9 a lengthy study involving thousands of hours and
10 thousands of components and structures and so forth, I
11 think very sensibly and appropriately indicated that the
12 deposition should not be without limit; that the
13 deposition should be focused.

14 And pursuant to that, the Board indicated that
15 there ought to be a time limit. I've forgotten what it
16 was now, a day or a day and a half. And in order for
17 the answers to be reasonably focused, that LILCO and
18 Torrey Pines should have an opportunity or should be
19 told in advance by the county which areas and which
20 particular findings they were interested in.

21 Now subsequent to that, of course, the county
22 indicated that they couldn't be prepared to take the
23 deposition. The Board indicated that they still would
24 offer that opportunity and in connection with that, I
25 suggested that we still wanted those limitations or

1 those aides, and the Board appropriately I think pointed
2 out that it wouldn't do any good, since they weren't
3 prepared to give it.

4 But if we're now going to go to a procedure
5 where they are going to be prepared, it seems to me that
6 the same considerations that led the Board initially to
7 impose both the time and subject matter not limits but
8 focusing would be very appropriate in this context. And
9 we certainly would want them if we're going to do it in
10 the way the Board has outlined.

11 JUDGE BRENNER: Well, preliminarily, I think
12 that makes a lot of sense. Again, I will let the
13 parties discuss it. It would certainly make sense to
14 have the witnesses prepared with the answers at the
15 deposition. In order to be assured of that, we would
16 want to get an identification of the matters being
17 inquired into from the county.

18 The extent of the identification might vary a
19 little depending on whether the deposition is before or
20 after the testimony is filed. I'll let you all discuss
21 the timing, too. There should be some limitations on it
22 so it doesn't detract from other matters going on.

23 On the other hand, the more limited it is,
24 then the more that is left for the hearing after in
25 terms of probing and so on. So I'll let the parties try

1 to draw that balance. But I agree that it should be
2 scheduled in advance so that the witnesses have an idea
3 when they are coming and when they are leaving and so on.

4 And we would also be inclined, as we were
5 previously, to allow a time for questioning by all
6 parties, so that matters can be focused, and even some
7 follow-up questions if time permits. Especially since
8 what we contemplate preliminarily is that the county
9 would not have to file its testimony until after that
10 deposition. And that kind of focusing would be ideal I
11 think for assisting the county, which in turn will
12 assist the record in focusing on the important matters.

13 So it sounds like a good idea to talk about it.

14 MR. LANPHER: Judge Brenner, I have some
15 information to report on the ICC issue, if you want to
16 take that up.

17 JUDGE BRENNER: Yes. It's my assumption that
18 what we would do -- and I guess I should check the
19 parties' agreement on that -- is to finish quality
20 assurance other than operational quality assurance, at
21 least other than the procedures and so on, that aspect,
22 and whether or not we should also hold off on other
23 related, arguably related matters such as anymore on
24 staffing, or maybe just operational QA in total. I'll
25 let you think about it and we will hear from you.

1 But in any event, some part is separated out.
2 We would go ahead with all the quality assurance/quality
3 control matters that we can with Mr. Hubbard, and then
4 in turn, staff witnesses. After completing the staff
5 witnesses, go to another subject which we think should
6 be inadequate core cooling. Am I in line with the
7 parties' thinking so far?

8 MR. LANPHER: That's my understanding.

9 MR. BORDENICK: That is ours, Judge.

10 MR. ELLIS: Excuse me, Your Honor. We still
11 plan, do we not, to complete OCA entirely with respect
12 to LILCO?

13 JUDGE BRENNER: If you want to. I have left
14 it up to you. And in fact, I think I offered the fact
15 that given this natural break you can think about it
16 beyond today. I am not capable right now of carefully
17 parsing what would be productive and what would have to
18 be repeated. And I think the parties are in a better
19 position to decide that, and you don't have to do it by
20 negotiation. I'll leave it up to LILCO to decide for
21 itself how far it, on its own, wants to go with the
22 redirect now as distinguished from later.

23 We encourage going ahead with the redirect on
24 things that you think are readily severable from that
25 which the staff is looking at. I don't know what those

1 things are precisely that are readily severable.

2 MR. DYNNER: Excuse me, Judge Brenner, I would
3 just like to make one observation. And that is that the
4 cross examination in the original prefiled testimony of
5 LILCO all took place without the input of the staff.
6 I'm a little bit puzzled as to why there's any
7 particularly good reason now to further bifurcate the
8 redirect examination on OQA.

9 And in any case, I would like to observe that
10 whatever you determine on that, certainly I would hope
11 that our schedule would be taken into consideration as
12 well. I mean that both from the county's point of view
13 and from the attorneys that are working on these various
14 matters.

15 JUDGE BRENNER: Well, we will do what we can
16 in terms of scheduling. But you know, I have often
17 stated the view that as we get to things, we get to
18 them. Obviously, we won't just say show up in two
19 minutes. On the other hand, there may be some
20 uncertainty because it will depend on when we finish the
21 matter before.

22 But certainly, if there is one subject that we
23 keep talking about in this proceeding, it is
24 scheduling. So we will know where we're going. We'll
25 see what the flexibility is.

1 In terms of substance, that one we will
2 certainly take cognizance of, what has changed, if
3 anything, as a result of further matters being looked
4 at. I want to leave it up to LILCO to separate out the
5 redirect if it wants to because I don't want to hear a
6 lot of redirect on things that may change.

7 MR. ELLIS: Judge Brenner, we will consider
8 that, given what you have said. We will also discuss it
9 with the county.

10 I might observe preliminarily that based on
11 what Mr. Dynner just said, that he doesn't see any
12 reason for bifurcation, we agree. We don't think there
13 should be any bifurcation of Mr. Hubbard's testimony
14 either. We would be prepared to go forward with that as
15 a whole as well. We don't think the staff's necessarily
16 should have anything to do with what he's already
17 prefiled.

18 JUDGE BRENNER: The large bulk of what he has
19 prefiled is not going to be affected, it's my
20 recollection. However, it seems useless to everybody,
21 including us, to require any examination of Mr. Hubbard
22 on at least the narrow point of the adequacy of
23 implementation of the Appendix B requirements through
24 the procedures and the QA Manual, given what the staff
25 is going to look at.

1 And we are certainly going to give all parties
2 including the county an opportunity to react after we
3 get the staff's report. And depending on what is agreed
4 or not agreed upon, that action can take a number of
5 different forms, and one of the forms it can take is
6 examination before us. And further details are that
7 examination before us can be cross examination or direct
8 testimony by the county or both. And it may be
9 efficient to encourage the county to give us direct
10 testimony on it; not necessarily as a substitute to
11 cross examination, but as a more efficient means of
12 seeing where the issues lie.

13 That's up to the county and it depends on the
14 extent of the disagreement at that time. But we are
15 certainly not going to say you've had your chance and
16 then the subject matter changes and that's it. So, Mr.
17 Dynner didn't, I don't think, talk about substantive
18 matters as much as I am. I'm less interested in your
19 schedule than I am in making sure that you have due
20 process to deal with the substance. So to the extent
21 the two overlap, we'll accommodate.

22 MR. DYNNER: I agree entirely, Judge Brenner.
23 My comment was directed more toward the hope that we
24 would have a response so that we can start to plan who
25 does what after the Thanksgiving break.

1 JUDGE BRENNER: Well, you're not going to get
2 the staff's report until December at the earliest, and
3 maybe even a little bit beyond. But you have to stay
4 plugged into what they're doing. They have to keep you
5 keyed in and you have responsibility affirmatively to
6 see what's happening, also. That's the situation you're
7 in.

8 Our full expectation was to be in New York
9 starting in January. To the extent we thought there
10 might be a conflict with the emergency planning
11 depositions going on, so we will work out different
12 facilities. If that becomes a non-problem because of
13 various other factors, we won't have to take it into
14 account.

15 We have been here this month by the agreement
16 of all parties, and in fact, we have been here by the
17 agreement of the county with the proviso that we were
18 going to certainly go back for emergency planning
19 matters, a proviso that we always agreed with. I note
20 that because it is inconsistent with filing I have seen
21 from the county.

22 So you might clue your client in as to what
23 the facts are as to our schedule here, Mr. Lanpher,
24 because that was inaccurate. It's a minor point.

25 You know, if it means carting off hundreds of

1 pounds of things for two days or three days, we might
2 want to adjust that if all parties want to. But we will
3 be flexible and leave it up to the parties. Did you
4 want to say something?

5 MR. LANPHER: Judge Brenner, I thought earlier
6 you wanted an ICC status report. As I understand the
7 situation, it is as follows. There were meetings on the
8 11th and 18th of this month, and pursuant to those
9 meetings, they have another meeting scheduled with all
10 the participants on SC Contention 3 for this Tuesday in
11 Long Island. So, the meetings are continuing.

12 Before we describe the issue as breaking into
13 two parts, the adequacy of existing order level
14 measurement and number two, the diversity of that
15 measurement system, it seems as if the first issue,
16 there is a reasonable possibility that there may be some
17 resolution of that, and Mr. Irwin is going to be
18 submitting some proposed language on that on Monday
19 which is going to be discussed on Tuesday.

20 There will also be discussions on Tuesday
21 related to the diversity issue, and whether acceptance
22 criteria can be developed. There seems to be a less
23 likely possibility of resolving that issue absent
24 litigation.

25 I can say that the county, if there is no

1 resolution, will be submitting supplemental testimony on
2 December 7th on that issue.

3 MR. REVELEY: We expect to settle the first
4 issue and not to settle the second.

5 JUDGE BRENNER: And are the other parties
6 prepared to file any necessary modifications in
7 testimony on December 7th, as the county indicated it
8 would?

9 MR. LANPHER: I might indicate my experts
10 aren't happy with that date. They say it's extremely
11 tight, but they think they can make it.

12 JUDGE BRENNER: Well, we discussed previously
13 what the problems then were, and they are even more
14 exigent now.

15 MR. LANPHER: I understand. That's why I
16 wasn't asking for a change.

17 JUDGE BRENNER: All right. We are going to
18 discuss a number of miscellaneous matters on November
19 30th, as we've already discussed. Let's come back on
20 this point, but parties are to be prepared to file
21 testimony on December 7th. So if we say that on
22 November 30th, it won't be a surprise. If we have any
23 flexibility when we look at the situation -- well, we
24 won't know anything different on November 30th than we
25 know now in terms of how long things are, so we'd better

1 set it for that date because we need to have follow-up
2 motions and so on.

3 And depending on how things proceed, we could
4 start with inadequate core cooling in December. I don't
5 know and neither does anybody else, but we could.

6 (Board conferring.)

7 JUDGE BRENNER: I want to tell you now, since
8 you are worried about our arrangements, that we will
9 have a hearing on that Monday, December 20th. However,
10 we will not have a hearing on that Thursday, the 23rd.
11 So it will be a shorter hearing week, but it will be --
12 we are planning on a full three days unless there is a
13 strong reason not to, so make your arrangements. By
14 doing this we gain a half a day at least over what we
15 would have had, had we started on Tuesday, and we think
16 it is worthwhile to try to do that.

17 All right. I think we understand the
18 sequence. The remote shutdown panel members will be
19 coming, also. Testimony is going to be filed.

20 MR. REVELEY: On the 2nd.

21 JUDGE BRENNER: Yes, on the 2nd. We will have
22 to set due dates for motions to strike and answers after
23 that. We can talk about it as we get close. Presumably
24 it will follow a typical pattern of a week for the
25 motions to strike and then a week thereafter for the

1 answers.

2 MR. REVELEY: We still hope to settle that
3 one, Judge.

4 JUDGE BRENNER: I know. I didn't want to
5 preclude that, but just in case, I wanted you to think
6 about the dates and the schedule. Everyone was
7 reasonably optimistic on all or a significant part of
8 that one last time, but I can't judge anymore.

9 All right, that's all we have. Hearing
10 nothing else from the parties, we will adjourn until
11 Tuesday at 10:30 in Hauppauge, and for those of you who
12 we won't see, have a nice Thanksgiving.

13 (Whereupon, at 1:05 p.m., the hearing in the
14 above-entitled matter was recessed, to reconvene at
15 10:30 a.m. on Tuesday, November 22, 1982.)

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NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the

ATOMIC SAFETY AND LICENSING BOARD

the matter of: LONG ISLAND LIGHTING COMPANY (Shoreham Nuclear Power Station)

Date of Proceeding: November 19, 1982

Docket Number: 50-322-OL

Place of Proceeding: Bethesda, Maryland

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Susan A. Harris

Official Reporter (Typed)

Susan A. Harris

(SIGNATURE OF REPORTER)