UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

In the matter of:

LONG ISLAND LIGHTING COMPANY

(Shoreham Nuclear Power Station Unit 1.)

Docket No. 50-322 OL

ORAL ARGUMENT

Location: Bethesda, Maryland

Date: Thursday, September 26, 1985 Pages: 1 - 67

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| 6 | LONG ISLAND LIGHTING COMPANY : Docket No. 50-322 OL |
| 7 | (Shoreham Nuclear Power Station : |
| 8 | Unit 1.) : |
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| 11 | ORAL ARGUMENT |
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| 13 | Fifth Floor Hearing Room |
| 14 | 4350 East West Highway |
| 15 | Bethesda, Maryland |
| 16 | Thursday, September 26, 198 |
| 17 | Oral argument was heard in the above entitled |
| 18 | matter, commencing at 2:30 p.m., before the Atomic Safety & |
| 19 | Licensing Board Appeal Board Panel, Judge Alan S. Rosenthal |
| 20 | Presiding. |
| 21 | |
| 22 | PRESENT: |
| 23 | ALAN S. ROSENTHAL, Chairman |
| 24 | GARY J. EDLES, Member |
| 25 | HOWARD A. WILBER, Member. |

| 1 | APPEARANCES: |
|----|-------------------------------------|
| 2 | |
| 3 | On behalf of the Applicant, LILCO: |
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| 9 | |
| Ø | On behalf of the State of New York: |
| 1 | FABIAN PALOMINO, Esq. |
| 2 | Governor's Office |
| 3 | Capitol Building |
| 4 | Albany, New York 12224 |
| 5 | |
| 6 | On behalf of Suffolk County: |
| 7 | EUGENE R. KELLEY, Esq. |
| 8 | Chief Deputy County Attorney, |
| 9 | LEONARD PILZER, Esq. |
| 0 | Assistant County Attorney |
| 1 | Suffolk County Department of Law |
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1 APPEARANCES: (Continued)
2
    On behalf of the Nuclear Regulatory Commission Staff:
3
         EDWIN REIS, Esq.
        RICHARD J. GODDARD, Esq.
5
      ROBERT PERLIS, Esq.
6
        Office of Executive Legal Director
7
         Nuclear Regulatory Commission
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9
        Washington, D. C.
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    Also present:
         RALPH CARUSO, Shoreham Project Manager.
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PROCEEDINGS 1 JUDGE ROSENTHAL: Good afternoon, ladies and 2 gentlemen. 3 I apologize for our late start, but I understand our reporter got caught in one of the truck accidents on our 5 Beltway which are becoming virtually daily occurrences. 6 We are hearing oral arguments today on the appeal of Intervenors, Suffolk County and the State of New York, on the 8 Licensing Board's June 14, 1985 partial initial decision in this operating licensing proceeding concerned with the 10 11 Shoreham nuclear power facility. 12 That decision dealt with the issues in controversy pertaining to the diesel generators that the Applicant 13 proposes to use for the first fuel cycle to supply emergency 14 electrical power to the facility as required by General Design 15 Criterion 17. The Licensing Board concluded that those diesel 16 generators were acceptable for that purpose. 17

- The oral argument is governed by the terms of our
- 19 August 27, 1985 Order. As provided therein, each side
- 20 will have 45 minutes for presentation of argument, and the
- 21 Appellants may, if they so desire, reserve a portion of their
- 22 time for rebuttal.
- 23 As also indicated in the August 27 Order, this Board
- 24 is generally familiar with the relevant portions of the
- 25 record, including the June 14 partial initial decision and the

- 1 appellate positions of the respective parties. For this
- 2 reason, it will not be necessary for any counsel to embark
- 3 upon a recitation of the background or the controversy;
- 4 rather, each counsel should proceed immediately to address the
- 5 issue raised by the appeal of the County and State.
- At this juncture I will call upon counsel for the
- 7 respective parties to identify themselves formally for the
- 8 record, and I will start with Mr. Kelley.
- 9 MR. KELLEY: Thank you.
- 10 For the County of Suffolk, Martin Bradley Ashare,
- 11 County Attorney, by Eugene R. Kelley, Chief Deputy County
- 12 Attorney, and Lee Pilzer, Assistant County Attorney.
- 13 JUDGE ROSENTHAL: Thank you, Mr. Kelley.
- 14 Mr. Palomino.
- 15 MR. PALOMINO: Fabian Palomino for the State of New
- 16 York.
- 17 JUDGE ROSENTHAL: Thank you, Mr. Palomino.
- 18 Let me ask you this, Mr. Palomino. Have you and
- 19 Mr. Kelley agreed upon division of time and also order of
- 20 presentation?
- 21 MR. PLLOMINO: Yes, we have, Judge. At the request
- 22 and with the approval of the County, I will be arguing the
- 23 entire matter for the State and County, and I expect to use
- 24 about 30 to 35 minutes on direct argument, and reserve the
- 25 remainder --

- JUDGE ROSENTHAL: I take it you are not
- 2 participating, Mr. Kelley, in the argument itself?
- 3 MR. KELLEY: That is correct, Mr. Chairman.
- JUDGE ROSENTHAL: Very good, Mr. Palomino.
- 5 All right, Mr. Ellis.
- 6 MR. ELLIS: Yes, sir. I am Tim Ellis from the firm
- 7 of Hunton and Williams, representing the Long Island Lighting
- 8 Company, the Applicant in this matter.
- 9 I have discussed the matter with Mr. Goddard, who is
- 19 counsel for the Staff. We agreed to divide our time, I
- 11 believe, in terms of 30 and 15 minutes. I will be taking 30
- 12 minutes. If the Board pleases, I can take roughly 20 minutes
- 13 at the outset, and perhaps if the Board wishes, I can reserve
- 14 10 minutes following Mr. Goddard if the Board has any further
- 15 questions.
- 16 JUDGE ROSENTHAL: I don't think so. You are the
- 17 Appellee and we normally provide rebuttal time only to the
- 18 Appellants. I think you should take your full time at the
- 19 outset.
- 20 MR. ELLIS: Yes, sir.
- 21 JUDGE ROSENTHAL: If we do have any residual
- 22 questions, of course, we have the flexibility to bring you up
- 23 again, but I think we should count on utilizing your time in
- 24 one piece.
- 25 MR. ELLIS: I will do that.

- JUDGE ROSENTHAL: Mr. Goddard.
- 2 MR. GODDARD: Richard J. Goddard of the Office of
- 3 the Executive Legal Director, representing the NRC Staff.
- JUDGE ROSENTHAL: Thank you, Mr. Goddard.
- 5 Mr. Palomino, we will hear from you.
- 6 ORAL ARGUMENT OF FABIAN PALOMINO
- 7 ON BEHALF OF THE STATE OF NEW YORK
- 8 MR. PALOMINO: It is the contention of the State and
- 9 County that in denying the introduction of this evidence and
- 10 also cross examination on the grounds of irrelevance in that
- 11 it was a matter collateral to the issue, the Board not only
- 12 erred but also denied us a right to a hearing on this issue,
- 13 which we are entitled to under the rules of the NRC.
- 14 JUDGE ROSENTHAL: What do you think that evidence
- 15 established, specifically? We are talking about a table, are
- 16 we not, in essence?
- 17 MR. PALOMINO: Yes.
- 18 JUDGE ROSENTHAL: What --
- 19 MR. PALOMINO: In essence it is not a table; it is
- 20 testimony and a table.
- 21 JUDGE ROSENTHAL: Let's take the table, to begin
- 22 with. What does the table establish?
- 23 MR. PALOMINO: What we sought to establish by the
- 24 table was that as a result of the application of the standard
- 25 that had been uniformly applied by the NRC in all other

- 1 licensing proceedings, that it would result in -- if they
- 2 followed this practice of adding the single load that an
- 3 operator could put on to the MESL.
- 4 JUDGE WILBER: Does the table demonstrate that, that
- 5 they are allowing for this added load?
- 6 MR. PALOMINO: The table would be the result. If
- 7 they follow this practice, the result would be that there
- 8 would be a substantial higher margin than the MESL, which
- 9 would be a margin of safety that would merely be a result of
- 10 the standard practice they followed.
- 11 JUDGE ROSENTHAL: Where do you get the standard
- 12 practice? Where in that table is there anything to support
- 13 the inference that the NRC as a regulatory body required this
- 14 additional margin? Is there anything in the table at all that
- 15 shows that?
- 16 MR. PALOMINO: Not in the table; in the testimony.
- JUDGE ROSENTHAL: In the testimony? These were the
- 18 testimony of the Staff witnesses, the effectiveness of the
- 19 practice of the Agency?
- 20 MR. PALOMINO: Yes, sir.
- 21 JUDGE ROSENTHAL: Who were these witnesses --
- 22 MR. PALOMINO: Dr. Carl A. Sperling said that "many
- 23 plants" refers to just about every plant that I am familiar
- 24 with, and that is either in operation or under construction in
- 25 the United States. I don't know of any exceptions to that.

- JUDGE ROSENTHAL: Does the Staff require it? We are
- 2 dealing here, are we not, Mr. Palomino, with a question as to
- 3 whether the excluded evidence establishes that the Staff had a
- 4 uniform interpretation of GDC-17 that requires this additional
- 5 margin. Isn't that the question?
- 6 MR. PALOMINO: We don't only prove the evidence from
- 7 this. There is testimony in the record that it was a standard
- 8 practice. If you look at page 7 of our brief, Knox, that it
- 9 was a standard practice of the Staff. It's not only Staff.
- 10 These plants were licensed by the Commission, and that was a
- 11 construction that applied --
- 12 JUDGE EDLES: Are there any exceptions that you are
- 13 aware of, Mr. Palomino?
- 14 MR. PALOMINO: I think that would be for the
- 15 hearing. That's just the point. That's just the point. We
- 16 are contending, and the --
- 17 JUDGE EDLES: Let's assume that's true. Are there
- 18 any exceptions that you are aware of?
- 19 MR. PALOMINO: Not that I'm aware of. I just
- 20 prepared for the argument. I'm not familiar with all other
- 21 plants. That would have been established by cross examining
- 22 on NEC the Staff people. They have that information. That is
- 23 what we sought to do, and we were denied that right. That is
- 24 all we are saying. We were denied a right to a fair hearing.
- 25 JUDGE EDLES: You were denied the right to cross

- 1 examine the Staff itself on this issue?
- 2 MR. PALOMINO: Yes. Up to a point, and then he
- 3 stopped. So that it goes to the heart of it. We wanted to
- 4 establish that this was the practice.
- 5 You know, the GDC-17 came in, what was it, 1971 --
- 6 February of 1971. So that all the plants before that would
- 7 not be relevant to the construction of GDC-17, and we sought
- 8 to establish it.
- 9 JUDGE EDLES: But you don't include all the plants,
- 10 post-1971 plants on your chart, though.
- 11 MR. PALOMINO: I don't know whether we do or not.
- 12 That was what the purpose of the hearing was. If they wanted
- 13 to be --
- 14 JUDGE WILBER: There are no PWRs on it, so we know
- 15 for sure you haven't included the pressurized water.
- 16 MR. PALOMINO: I know, but the testimony is
- 17 sufficient to have let us go forward on that and let them
- 18 rebut it if that was the case.
- 19 JUDGE ROSENTHAL: I thought the issue on this appeal
- 20 was whether or not the evidence that the State and County
- 21 proffered that was excluded should have been admitted. Is
- 22 that the issue? I didn't think we were dealing with cross
- 23 examination here. Is that raised by your appeal, the question
- 24 as to whether --
- 25 MR. PALOMINO: It is in the brief that we mention

- 1 it, yes.
- JUDGE EDLES: At the end of your brief in says, "In
- 3 summary, the Licensing Board's erroneous exclusion of the
- 4 evidence precluded the County and the State from introducing
- 5 vital evidence on how the requirements --
- 6 MR. PALOMINO: Yes, it was vital evidence. It would
- 7 tend to show -- he permitted a contention which allowed this
- 8 evidence. It was broad enough to allow this evidence. What
- 9 we intended to show was if this uniform practice existed and
- 10 the uniform practice would result in these higher margins of
- 11 safety, and the chart was in support of that.
- 12 If they wanted to rebut it, they would have the
- 13 opportunity at the hearing to rebut it.
- 14 JUDGE WILBER: I thought that part of the contention
- 15 that dealt with practices at other power plants was not
- 16 admitted. Wasn't that part of that contention excluded?
- 17 MR. PALOMINO: Part of that contention was excluded.
- 18 JUDGE WILBER: It was the part that dealt with --
- 19 MR. PALOMINO: Yes.
- 20 JUDGE WILBER: -- margins at other power plants;
- 21 isn't that correct?
- 22 MR. PALOMINO: Yes.
- JUDGE WILBER: So why isn't this a logical follow-on
- 24 on that?
- MR. PALOMINO: Because this was representative of

- 1 the safety factor and the need for the safety factor.
- 2 JUDGE ROSENTHAL: Mr. Palomino --
- 3 MR. PALOMINO: Which they have been applying.
- 4 JUDGE ROSENTHAL: I am reading the introduction to
- 5 the brief that was filed on behalf of the County and the
- 6 State, and the introduction says the decision should be
- 7 reversed because the Licensing erroneously excluded evidence
- 8 showing that GDC-17 has been consistently interpreted and
- 9 applied to require that -- et cetera.
- 10 Now, I don't find that to raise an issue respecting
- 11 the denial of cross examination. From that statement and from
- 12 the brief as a whole, including the statement at the end to
- 13 which Mr. Edles referred, I got that the issue that was raised
- 14 by the State's and County's brief was whether or not the
- 15 evidence which was excluded should have been admitted as
- 16 establishing or tending to establish that there was a
- 17 particular Staff i rpretation of GDC-17 that was contrary to
- 18 the Licensing Board's view of this matter.
- Now, if you are raising here an issue beyond the
- 20 question of the exclusion of this particular affirmative
- 21 evidence that you sought to introduce, I would like to know
- 22 where in your brief you indicate that because that was not in
- 23 my reading of the brief. And as I say, from the very
- 24 introduction --
- 25 MR. PALOMINO: The evidence refers to the practice,

- 1 the testimony. It definitely refers to the practice in
- 2 several places.
- 3 JUDGE ROSENTHAL: I want to know in what specific
- 4 respect did the evidence which was excluded tend to establish
- 5 that the Staff had a uniform interpretation of GDC-17 along
- 6 the lines that the State and County are contending. Point
- 7 specifically to what there was in that evidence that would
- 8 tend to show that this was the Staff's consistent
- 9 interpretation and application of GDC-17.
- 10 MR. PALOMINO: The testimony of Carl Berlinger, the
- 11 testimony of --
- 12 JUDGE ROSENTHAL: Specifically, what would this
- 13 individual have testified to which would have established the
- 14 Staff practices?
- 15 MR. PALOMINO: "Many plants" referred to just about
- 16 every plant. He is talking about the practice of requiring
- 17 the off-site --
- 18 JUDGE EDLES: Mr. Palomino, where are you reading,
- 19 so I can follow?
- 20 MR. PALOMINO: It is on the top of page 17 in the
- 21 box. Also Mr. Bridenbaugh's testimony on page 15.
- 22 JUDGE ROSENTHAL: It is the testimony of
- 23 Dr. Berlinger that you have in mind?
- 24 MR. PALOMINO: "Many plants" refers to just about
- 25 every plant that I am familiar with that is either in

- 1 operation or under construction in the United States. I don't
- 2 know of any exceptions to that.
- 3 JUDGE ROSENTHAL: Is that -- the fact that these
- 4 plants may have that particular margin, does that make that a
- 5 Staff requirement? We are dealing here not with the question
- 6 of whether plants as a general matter do have this margin. We
- 7 are dealing, are we not, Mr. Palomino, with the question --
- 8 MR. PALOMINO: The thrust of the contention was to
- 9 prove that they do, and we never got a hearing on it.
- 10 JUDGE ROSENTHAL: I'm asking you where this evidence
- 11 establishes that, in point of fact, the Staff had a
- 12 requirement that the Staff read GDC-17 as meaning that there
- 13 has to be this margin. Now, where in the excluded evidence --
- 14 because the issue, again, Mr. Palomino, is, unless I have
- 15 missed the point, whether or not the Licensing Board
- 16 erroneously excluded this evidence as irrelevant.
- 17 MR. PALOMINO: We contend the proof would have
- 18 showed that, if given the opportunity, which we didn't get,
- 19 that the past practice in every plant since the adoption of
- 20 GDC-17 was for the Staff to require this additional test to
- 21 the MESL which would result in this additional substantial
- 22 margin of safety.
- 23 JUDGE EDLES: What is the minimum substantial margin
- 24 required under your thesis?
- 25 MR. PALOMINO: There is no minimum. It depends on

- 1 the plant. The reason you can't reach a minimum, plants have
- 2 different capacities. They have different diesel generators,
- 3 they have different loading requirements. They change the
- 4 loading requirements, but at least at the licensing stage,
- 5 they should meet this requirement because -- the reason is --
- 6 JUDGE EDLES: I don't understand. What is the
- 7 requirement that they have to reach? That there has to be a
- 8 difference between the two?
- 9 MR. PALOMINO: There has to be a difference. They
- 10 imposed this requirement, which was adopted by the Commission
- 11 uniformly in licensing these plants, that in addition to the
- 12 MESL, you established a maximum power limit by requiring them
- 13 to show the load that could be added, that the engines could
- 14 carry a load which a single -- a maximum electrical load which
- 15 a single operator could put on, either intentionally or
- 16 accidentally.
- JUDGE WILBER: Are you saying Dr. Berlinger's
- 18 statement says that in there? I don't see that at all.
- 19 MR. PALOMINO: I'm saying that reading this whole
- 20 testimony in context, you will find that that is what it does.
- 21 JUDGE WILBER: By Dr. Berlinger?
- MR. PALOMINO: Reading Bridenbaugh's testimony and
- 23 Berlinger's testimony.
- 24 JUDGE ROSENTHAL: Bridenbaugh isn't a Staff
- 25 employee. It seems to me that if you were endeavoring to

- 1 establish what the Staff's practice had been in terms of its
- 2 construction and application of GDC-17, you would have called
- 3 or sought to have called a Staff witness in a position to
- 4 testify as to a Staff practice.
- 5 MR. PALOMINO: The testimony was sufficient to raise
- 6 the issue. We never were permitted to reach that stage.
- JUDGE ROSENTHAL: The question here is whether this
- 8 evidence established or tended to establish --
- 9 MR. PALOMINO: We also have Staff testimony --
- 10 that's not Staff. We also sought to establish it through Knox,
- 11 and Knox's testimony said on page 7 of our brief that it was a
- 12 standard practice of the Agency.
- 13 JUDGE ROSENTHAL: This was excluded testimony?
- MR. PALOMINO: They permitted that testimony, but
- 15 that in conjunction with the other testimony --
- 16 JUDGE WILBER: So what is the complaint if that
- 17 testimony is in?
- 18 MR. PALOMINO: Well, the complaint was that some of
- 19 the other witnesses didn't have full recollections the same as
- 20 Knox and we should have had a full hearing on it of the NRC
- 21 people.
- 22 JUDGE EDLES: Mr. Palomino, just following up on the
- 23 Chairman's line of argument, it does seem to me there is
- 24 nothing in yoru brief in which you point to areas in which you
- 25 were denied cross examination. The issue is that you were

- 1 denied the right to present affirmative evidence. Am I right
- 2 or wrong on that?
- 3 MR. PALOMINO: There was a limited cross
- 4 examination. It is in our brief.
- 5 JUDGE EDLES: There are substantial references to
- 6 thing like "excluded evidence." That term is used frequently
- 7 in the brief.
- 8 MR. PALOMINO: On page 10, footnote 10, similarly
- 9 Licensing Board erred by refusing to permit the County to
- 10 cross examine LILCO and NRC Staff witnesses concerning a
- 11 substantial difference between --
- 12 JUDGE EDLES: Is that footnote now the sum and
- 13 substance of your argument with respect to the cross
- 14 examination point?
- 15 MR. PALOMINO: That would be it. I don't know. I
- 16 wasn't at the hearings. But I know they were limited.
- 17 JUDGE EDLES: I am only trying to ascertain your
- 18 position; I'm not being critical.
- 19 MR. PALOMINO: I am saying it's in the brief. There
- 20 is a contention raised.
- 21 JUDGE ROSENTHAL: In a footnote. But it does seem
- 22 to me that when your introduction to this brief states that
- 23 decisions should be reversed for a particular reason and cite
- 24 one reason and no others, it is asking a great deal of us to
- 25 expand your appeal on the basis of a passing shot in a

- 1 footnote in the middle of the brief.
- 2 MR. PALOMINO: The sentence it is attached to says
- 3 this evidence is clearly relevant and material, and that is
- 4 what he denied it on, to the EG load contention because it
- 5 demonstrates how GDC-17 has been interpreted in part to prior
- 6 licensing proceedings, as footnote 10.
- 7 JUDGE EDLES: That still goes back to the excluded
- 8 evidence point, which I understand.
- 9 MR. PALOMINO: The excluded evidence was broad
- 10 enough to entitle us to a hearing. That's my contention.
- 11 JUDGE ROSENTHAL: I understand that. Is your
- 12 contention that that is so?
- 13 MR. PALOMINO: The testimony and the chart under the
- 14 contention that was allowed was sufficient to give us a
- 15 hearing to prove that there was a standard practice of the
- 16 Staff which resulted in all the prior licenses granted under
- 17 GDC-17.
- JUDGE ROSENTHAL: Why does that show a standard
- 19 practice of the Staff?
- 20 MR. PALOMINO: Not the Staff, the Commission in
- 21 adopting the licensing.
- 22 JUDGE ROSENTHAL: Why does it show a consistent
- 23 practice of the Commission? All it shows is that the
- 24 utilities had as a practice the providing of this margin.
- 25 Now, we don't know whether the utilities provided this margin

- 1 because the Staff required them to do so or whether they did
- 2 it on their own hook. Are you here with the matter of whether
- 3 there is a requirement for that margin?
- 4 MR. PALOMINO: I don't know either except for Knox's
- 5 testimony that it was a standard practice of the Staff to do
- 6 this. It doesn't say the utilities.
- 7 JUDGE ROSENTHAL: If you have testimony in the
- 8 record that it was a standard practice, then why did you need
- 9 this?
- 10 MR. PALOMINO: We need it to go on with it, to prove
- 11 it through all of them. Now the Judge raised the issue is it
- 12 relevant because we didn't cover all plants. You are now
- 13 asking do I know of another plant where it didn't happen.
- 14 JUDGE EDLES: What I was trying to get at is how you
- 15 selected -- I appreciate that you were not intimately involved
- 16 in this perhaps at the time in preparation, but I am trying to
- 17 get a flavor for how you selected the particular plants that
- 18 you listed in the chart since that is not a 100 percent sample
- 19 of all nuclear power plants since 1971.
- 20 MR. PALOMINO: I don't know. Mr. Bridenbaugh
- 21 selected them. He purports that it is, but that would be a
- 22 matter for dispute in the hearing. What we are trying to do
- 23 and what the other side is trying to do is try the case. For
- 24 example, they point to LaSalle, and LILCO does, and says,
- 25 look, they have a negative safety margin. And the fact is

- 1 that if you look at the figures, he transposed the figures in
- 2 two columns, and the typist transposed the figures in two
- 3 columns on that chart, and those figures would establish, when
- 4 transposed properly, would establish the proper percentage.
- 5 He points to Millstone. As I understand it,
- 6 Millstone was licensed before GDC-17 was adopted. All these
- 7 things could have been explained if there were a hearing.
- 8 JUDGE ROSENTHAL: All right. Was there any endeavor
- 9 made on the part of the County and/or State to have subpoenaed
- 10 a Staff witness who would have been in a position to testify
- 11 as to these matters? Wouldn't that have been the --
- MR. PALOMINO: I think they sought to examine them
- 13 before the hearing and they never got the right people who had
- 14 the knowledge, and the hearing could have helped us on that.
- 15 JUDGE ROSENTHAL: Wait a minute. Did they call that
- 16 to the attention of the Board? They didn't get the right
- 17 people? Did they make any endeavor to get -- I'm sure there
- 18 must be a number of people on the NRC Staff who are quite
- 19 familiar --
- 20 MR. PALOMINO: I don't know if the right people were
- 21 all there. They are not there now. Maybe they are not there
- 22 now.
- 23 JUDGE ROSENTHAL: You keep talking about the denial
- 24 of hearing rights.
- 25 MR. PALOMINO: Yes.

- JUDGE ROSENTHAL: I keep suggesting to you that I
- 2 don't see how the exclusion of this particular evidence denied
- 3 you of any hearing rights at all. It may be a question as to
- 4 whether this evidence was relevant on the Staff practice. It
- 5 seems to me at best it was a very thin tie between this
- 6 particular evidence and what the Staff's practice might have
- 7 been.
- 8 I would have thought that the counsel who tried this
- 9 case, and I realize, Mr. Palomino, it wasn't you, but you are
- 10 responsible today for the conduct of this case on your side.
- II I would have thought that the approach here would have been a
- 12 lot more direct: get the Staff witnesses who know what the
- 13 practice was on the stand and say to them, okay, did the Staff
- 14 have this practice? Was the fact that the plants had these
- 15 margins indicative of a Staff interpretation of GDC-17 that a
- 16 margin had to exist?
- 17 MR. PALOMINO: I think they did, and that is the
- 18 reason I am raising the question of the limitation of cross
- 19 examination on all of the Staff witnesses.
- 20 JUDGE ROSENTHAL: They were precluded from cross
- 21 examining Staff witnesses on what their practice was?
- 22 MR. PALOMINO: When you go to the load margins.
- 23 JUDGE ROSENTHAL: You weren't allowed to cross
- 24 examine Staff witnesses on whether there was a Staff practice
- 25 to require a particular margin?

- 1 MR. PALOMINO: To some extent that was permitted,
- 2 yes. There is evidence in the record of it. There is evidence
- 3 that we point to in the record that is in the brief where they
- 4 said it was a standard practice.
- 5 JUDGE WILBER: Then they weren't excluded from
- 6 testifying to it, then? You are saying that they did testify
- 7 to that, that it was standard pratice. Is that what you are
- 8 saying?
- 9 MR. PALOMINO: It's a question of extent, what
- 10 plants, how many. The problem was they, as I understand it as
- Il it has been told to me, didn't have recollections, they didn't
- 12 have the records. Were we permitted to go more into it, we
- 13 could have gotten them. We could have proved the point.
- 14 JUDGE EDLES: Mr. Palomino, let me pursue a slightly
- 15 different line of argument. As I understand it, the argument
- 16 you are making with respect to the margin of safety evolves
- 17 from the treatment that the Commission or the Staff may apply
- 18 pursuant to Regulatory Guide 1.9; is that correct?
- 19 MR. PALOMINO: No, we are not. We are going
- 20 directly to GDC-17.
- 21 JUDGE EDLES: But your argument, as I understand it,
- 22 is that the Staff has a consistent interpretation of GDC-17
- 23 which is reflected in Reg Guide 1.9.
- 24 MR. PALOMINO: No. We are saying they would have
- 25 applied this whether they used Reg 9 or not. We are saying,

- 1 as we say it, that GDC-17 is not quantitative. It talks in
- 2 terms of functional capacity, and that the Staff and the
- 3 Commission adopted it over the years by licensing this plant,
- 4 went to a quantitative standard, and that quantitative
- 5 standard of GDC-17 was the application of this.
- 6 We are saying that was standard, whether it was the
- 7 Guide went in or not.@
- 8 JUDGE EDLES: What your chart appears to demonstrate
- 9 is that to the extent there is a quantitative standard, it is
- 10 different at every single plant.
- 11 MR. PALOMINO: That is because you have different
- 12 loads at every plant, different capacities --
- 13 JUDGE EDLES: Why shouldn't we then just simply look
- 14 at the Shoreham plant, then whatever design load you think you
- 15 need to carry out, you have a diesel generator that --
- 16 MR. PALOMINO: We are saying it is the construction
- 17 of GDC-17 required that you arrive at it by this particular
- 18 practice, then that is what you have to do.@ The reason this
- 19 was not done is because if you do, you will find that these
- 20 engines are not qualified. They are rated at 3300. They
- 21 brought them up to 3585, which was higher than what they
- 22 allowed even for two hours in an 18-month period.
- 23 JUDGE WILBER: Are you contesting the MESL, the
- 24 Maximum Emergency Service Load?
- 25 MR. PALOMINO: No. We are saying if you followed

- 1 this standard practice the way the statute had been construed
- 2 over the years by the Commission, you would have reached this
- 3 additional load, which would be the safety factor margin we
- 4 are talking about, and they would not have been able to comply
- 5 with it.
- And that is where, when they talk about, it wouldn't
- 7 have changed the result, it would have absolutely changed the
- 8 results.
- 9 And we say it is relevant because it involved this
- 10 construction of GDC-17, all of this evidence.
- 11 We also say that -- and what we would have been able
- 12 to prove it if we had a hearing -- we say it is not collateral
- 13 because it was allowed in under the contention. It may have
- 14 been burdensome. They may have avoided by seeking the
- 15 information and either rebutting it at a hearing or
- 16 stipulating. So that it was not -- but it definitely was not
- 17 collateral.
- 18 JUDGE EDLES: Must we make a determination as to how
- 19 credible the evidence is? I mean don't you have to meet
- 20 some minimum threshold of reliability for this evidence before
- 21 it triggers a responsibility on the other side?
- 22 MR. PALOMINO: That is the purpose of the hearing,
- 23 isn't it?
- 24 JUDGE EDLES: It might be in due course, but I
- 25 obviously can't serve up anything, and as long as I submit a

- 1 paper that automatically gives me a right to a hearing if it
- 2 is worthless information.
- MR. PALOMINO: It tends to be confirmed by Dr. Knox,
- 4 doesn't it? When he testified, he said it was a standard
- 5 practice.
- 6 JUDGE ROSENTHAL: So you had a hearing on the issue,
- 7 didn't you?
- 8 MR. PALOMINO: We had a limited hearing.
- 9 JUDGE ROSENTHAL: You had a hearing in which certain
- 10 evidence --
- 11 MR. PALOMINO: On part of it. We wanted to show
- 12 this was a necessary result and we would have had a margin of
- 13 safety for the people of Long Island if they complied with
- 14 GDC-17 as had been in the past, which would have been the same
- 15 as people at other nuclear plants, and that they were entitled
- 16 to that.
- 17 JUDGE EDLES: Mr. Palomino, what would have
- 18 happened, if, in point of fact, there were lots of nuclear
- 19 power plants out there that didn't follow this method?
- 20 What conclusion would we draw from that?
- 21 MR. PALOMINO: Then he could have confirmed his
- 22 hearing at the 33 level. If that is not --
- 23 JUDGE EDLES: If it's not the standard, exclusive
- 24 practice?
- 25 MR. PALOMINO: That I don't know. That you'd have

- 1 to tell in the hearing, because somebody might have gotten a
- 2 waiver. I don't know. They may have referred to cases --
- 3 they do here -- which existed before the licensing proceeding,
- 4 before GDC-17.
- JUDGE EDLES: What would happen if we were to
- 6 discover that this type of diesel generator is always tested
- 7 by a method different from the one used in Regulatory Guide
- 8 1.9? What conclusion would you draw from that?
- 9 MR. PALOMINO: I don't think it was because there
- 10 were plants that were approved with diesel generators before
- 11 Shoreham had its troubles, weren't there?
- 12 JUDGE EDLES: Yes, but I'm talking about --
- 13 MR. PALOMINO: So they would have applied the
- 14 standard. I think that would be due to the hearing, and see
- 15 what the circumstances were. I don't think you can avoid it
- 16 by doing that. In fact, Millstone, the low rating at
- 17 Millstone, establishes that before they adopted GDC-17, they
- 18 didn't have the standard that they came to. If you look at
- 19 all the plants after, you'll notice they had much higher than
- 20 what the chart shows.
- 21 It also shows another relevant thing. With the
- 22 higher power plants, there are larger margins of safety. With
- 23 the lower capacity plants, the 500 and 600 megawatts, they are
- 24 lower. And it tends to show a uniform application -- not only
- 25 a uniform application; evidence attached to that which might

- 1 have developed would have shown that it was a standard
- 2 practice, as stated by Dr. Knox.
- 3 We never got the chance. We say that it was all
- 4 relevant. It was relevant because it involved the
- 5 construction of statute. It wasn't collateral, because it
- 6 involved the construction of statute to determine whether they
- 7 could qualify.
- 8 They talk about different methods of reaching
- 9 compliance, but still you have to comply to the standard, if
- 10 that's the standard. It isn't the methodology you use. We
- 11 don't complain about that.
- 12 They seem to seek to sidestep the issue by implying
- 13 that the Judge found these diesels qualified, on this
- 14 qualified load under GDC-17. What they are talking about is a
- 15 single failure test, which has nothing to do with the GDC-17
- 16 requirements, as far as capacity and capability are concerned.
- 17 JUDGE WILBER: All GDC-17 says is that you must have
- 18 enough load to accomplish -- I think it's two items in there.
- 19 MR. PALOMINO: Basically three items.
- JUDGE WILBER: It says nothing about error. It says
- 21 nothing about intermittent loads. So why isn't this technique
- 22 -- and they've written a Safety Evaluation Report, as I
- 23 understand it, on TDIs, which I will ask someone else later if
- 24 this is a general Safety Evaluation Report -- but why isn't
- 25 this an acceptable path?

- 1 MR. PALOMINO: It isn't acceptable because they
- 2 have, by required practice, it is our contention --
- JUDGE WILBER: Under Reg Guide 1.9, they have -- all
- 4 of these have been evaluated under 1.9, evidently.
- 5 MR. PALOMINO: That's not what we're saying. That's
- 6 what has been established under the Reg Guide. We're saying
- 7 as a standard practice, Dr. Knox said, that it applied
- 8 uniformly to all plants. And our contention is that they did,
- 9 in fact, require them to meet the standard.
- 10 And if that is the standard, then that is the
- 11 construction of the statute, and we're entitled to the benefit
- 12 of it, and that they did it, because the fact is, GDC-17 talks
- 13 functionally and not quantitatively, and they felt they needed
- 14 a quantitative standard, and they did, and it's a very sound
- 15 one.
- 16 It is sound, indeed, because if you look at what
- 17 they have proved under this qualified load, the short-term
- 18 load is two hours in eighteen months. In any other plant,
- 19 it's two hours in any 24.
- 20 JUDGE WILBER: Under Reg Guide 1.9 or the IEEE
- 21 standard that goes with it.
- 22 MR. PALOMINO: But the point is, there's no margin
- 23 of safety here by all their past practices, and the people of
- 24 New York State are entitled to it, the inhabitants of New York
- 25 State, if everybody else got it, and that's the standard way

- 1 they have been doing it. There is no reason why we shouldn't
- 2 get the benefit of it.
- 3 JUDGE ROSENTHAL: You're close to the 35-minute
- 4 mark.
- 5 MR. PALOMINO: I'll reserve ten minutes.
- 6 JUDGE WILBER: Could I ask for a clarification?
- You used the expression "maximum permitted load" in
- 8 your brief. In reading your brief, I find that it appears to
- 9 be equated to "continuous rating" at one point, "qualified
- 10 rating" at another, and "short-term rating" in still a third.
- I just don't understand what it's supposed to mean.
- 12 MR. PALOMINO: As I understand it in the brief, the
- 13 maximum permitted load is the continuous rating, short-term
- 14 load, and as confirmed --
- 15 JUDGE WILBER: You just put two definitions in one
- 16 breath there. Short-term and continuous rating are two
- 17 different things.
- Now which is it? Is it short-term rating,
- 19 continuous rating?
- 20 MR. PALOMINO: Basically it's a continuous rating,
- 21 and you add to it the load that any single operator could put
- 22 on it, accidentally or intentionally, and that's what the
- 23 maximum permissible load is.
- 24 JUDGE WILBER: Then it is not the continuous rating.
- 25 MR. PALOMINO: That's how they confirm the

- 1 continuous rating, by standard past practice. If you look at
- 2 it -- you're looking at me, and you seem shocked -- but
- 3 according to Knox' testimony on page 7 -- I'll read it to you
- 4 -- it says: "The Staff's standard practices confirm the
- 5 continuous rating, which constitutes the maximum permitted
- 6 load, encompasses the MESL, and the short-term rating
- 7 encompasses the MESL plus the single highest additional load
- 8 that could be connected by an operator."
- 9 So that was their standard practice. Maybe it
- 10 sounds confusing to you, but I'm just repeating what they say
- 11 is their standard practice.
- 12 JUDGE ROSENTHAL: If you think that Mr. Knox or
- 13 Dr. Knox as the case may be, his testimony established this
- 14 practice, then I don't understand why --
- 15 MR. PALOMINO: I don't think it did, because -- I
- 16 think it warranted a full hearing, let me put it that way.
- 17 JUDGE ROSENTHAL: It warranted a full hearing. He
- 18 testified. You were in a hearing. Now you are telling me
- 19 that his testimony was not sufficient of itself. Then, you
- 20 are entitled not to a new hearing, but you are entitled to do
- 21 something else in this hearing, which was devoted to this --
- 22 MR. PALOMINO: Let me say this. If that was
- 23 acceptable -- apparently, it wasn't acceptable to the Hearing
- 24 Board, because they never ruled on that basis. They just
- 25 stuck to the approach of qualified load, and it was sufficient

- 1 that you didn't have to meet GDC-17, that they did qualify --
- JUDGE WILBER: Did they say that?
- 3 MR. PALOMINO: Rather that they met GDC-17 with a
- 4 qualified load. That's why I'm hesitant. I don't want to be
- 5 the judge of that. I'm just going on what they did.
- 6 JUDGE ROSENTHAL: Thank you, Mr. Palomino.
- 7 We will now hear from Mr. Ellis.
- 8 ORAL ARGUMENT ON BEHALF OF LONG ISLAND LIGHTING
- 9 COMPANY BY MR. ELLIS
- 10 MR. ELLIS: Thank you, Judge Rosenthal.
- 11 May it please this Appeal Board, as I indicated at
- 12 the outset, my name is Tim Ellis. I am here today on behalf
- 13 of the Long Island Lighting Company, the Applicant.
- 14 Let me go directly to what I think is a
- 15 misunderstanding by Mr. Palomino.
- 16 There was not a denial of cross-examination on that
- 17 point. In fact, the testimony that he repeatedly referred to
- 18 by Mr. Knox or Dr. Knox -- I don't recall which -- was later
- 19 withdrawn -- not withdrawn, but Mr. Knox was cross-examined on
- 20 it, and he later admitted that that was not the case. We
- 21 covered that in our Footnote No. 19.
- 22 JUDGE ROSENTHAL: What was not the case?
- 23 MR. ELLIS: That it was not -- that the design load
- 24 did not encompass the single worst operator error load. The
- 25 design load encompasses only the equipment required to respond

- 1 to the accident, the design-basis accident, and not the single
- 2 worst operator error load.
- The diesels as a whole, as a unit, because they are
- 4 single-failure as a unit, of course, accommodate a single
- 5 operator load, if the single operator load is a single
- 6 additional failure.
- 7 We pointed out in Footnote 19 that if you go to the
- 8 transcript, Judge Brenner and the Licensing Board did permit
- 9 the County to cross-examine at some length on this. In fact,
- 10 it is my recollection -- I may have the dubious distinction of
- 11 being the only person in the room who was there for every one
- 12 of those 42 days and some of the other 100 days before that --
- 13 but my recollection is that the County Attorney, whoever it
- 14 was at the time, came back the next morning and said he wanted
- 15 to ask additional questions, and I cross-examined on that
- 16 point.
- 17 And the final substance was, the question was
- 18 generally: Do you know of any case in which there is a plant
- 19 where the single worst operator error load is not accommodated
- 20 within the short-term rating? And the answer was no, but when
- 21 cross-examined, it was, "No, we don't know of any case, one
- 22 way or the other." And further, at Transcript Page 28,200,
- 23 Messrs. Hodges and Knox indicated there might be.
- 24 The testimony was that there may be and probably are
- 25 licensed plants where additional operator error loads would

- 1 result in exceeding diesel generator ratings.
- So I wanted to cover that straightaway and indicate
- 3 that there was cross-examination, and fairly substantial
- 4 cross-examination, and examination on that point.
- JUDGE ROSENTHAL: Wouldn't it have been helpful to
- 6 have that matter explored?
- 7 MR. ELLIS: It was explored.
- 8 JUDGE ROSENTHAL: As to whether there were or
- 9 weren't? I thought you just told me that the answer that was
- 10 given is that there might or might not be.
- 11 MR. ELLIS: In that connection, they indicated that
- 12 there probably are, but their testimony was -- and this is the
- 13 important point -- was that the design load, in their
- 14 interpretation of GDC-17, is that it does not have to
- 15 accomplish that or encompass that.
- 16 JUDGE ROSENTHAL: But these plants that were listed
- 17 in the excluded table, all did have that margin.
- 18 MR. ELLIS: No, sir. The table doesn't show that.
- 19 As I think the Board's questions may have suggested, the table
- 20 shows nothing at all about operator loads at any of these
- 21 other plants, nothing whatever about operator loads.
- 22 All the table shows is -- if one takes it at face
- 23 value and as our brief indicates, we think there are serious
- 24 facial with it -- but putting to one side that even at face
- 25 value, all it shows or purports to show are basic loading

- 1 conditions. It does not show anything about the imposition of
- 2 a requirement. It does not show anything about the
- 3 interpretation of GDC-17.
- 4 If you want to look at what the Staff thinks of
- 5 GDC-17, the evidence in the record of this case and this Board
- 6 is quite correct. They certainly had the power to subpoena
- 7 people, and they didn't. They had discovery on the issue, and
- 8 they didn't subpoena anybody in that instance. But if you
- 9 look at the evidence we have in the record, what we have is
- 10 the testimony of the Staff saying that their interpretation of
- 11 GDC-17 is that it does not require that the diesel qualified
- 12 load, or for short-term rating, whichever method is used,
- 13 accommodates a single --
- 14 JUDGE EDLES: Why isn't it a fair point, as
- 15 Mr. Falomino makes, that yes, I hear them. I know what the
- 16 Staff says when you ask them affirmatively, but I'll show you
- 17 what they do here. And what they do isn't what they say.
- MR. ELLIS: Wrong. Because when he says what they
- 19 do, it doesn't show what he says it shows. It does not show
- 20 that.
- 21 Moreover, there is another piece of important
- 22 evidence that is in the record, or at least it is available,
- 23 both to the County and to this Board, and that is the
- 24 Regulatory Guide, which adopts the IEEE standard. There is no
- 25 discussion in either of those of any margin. In fact, quite

- 1 the contrary.
- 2 By its terms, GDC-17, of course, doesn't require a
- 3 specific margin. The word "margin" doesn't apply in it --
- 4 doesn't appear in it. Neither does it appear in the Reg
- 5 Guide.
- 6 If you look at the Reg Guide, which adopts the IEEE
- 7 standard, Section 5.2.3 in the standard says: "The diesel
- 8 generator units may be utilized to the limit of their power
- 9 capabilities, as defined by the continuous and short-term
- 10 ratings." And it also states: "At the operating license
- 11 stage, the predicted load should not exceed -- the predicted
- 12 load should not exceed the short-term rating."
- 13 Mr. Knox testified several times that the design
- 14 load is what has to be accommodated by either the qualified
- 15 load, if you use the qualified load concept, or the short-term
- 16 rating, if you use the Reg Guide system.
- 17 So the evidence in the record is, I think, very
- 18 clear about the construction of GDC-17 and the terms of
- 19 GDC-17.
- 20 JUDGE EDLES: Why isn't the Reg Guide approach used
- 21 for the diesel generators at Shoreham?
- 22 MR. ELLIS: Why wasn't it used?
- 23 JUDGE EDLES: Right.
- 24 MR. ELLIS: It was determined by the Staff. The
- 25 Staff issued -- in answer to Judge Wilber's question, let me

- 1 just say -- the Staff did issue a generic SER that established
- 2 the qualified load concept. There are specific SERs that
- 3 apply to the results of the Shoreham qualified load testing.
- It was determined, Judge Edles, that as a result of
- 5 the sequence of events that occurred after the crankshaft
- 6 failure -- after the crankshaft failure, the engines were
- 7 completely torn down. There was a design review and quality
- 8 revalidation program, where there was a design review of
- 9 components, key components, and a design review and a quality
- 10 revalidation, and the engines were put back together, and they
- 11 were subjected to an expanded preoperational test program, a
- 12 complete one that they had gone through before the crankshaft
- 13 failure, another complete one that was expanded to include
- 14 such things as an additional 100 starts.
- But then because of the crankshaft, there was
- 16 largely some concern about the crankshaft. If you are not at
- 17 185 BMEP, they said, "You've got to prove to us that that's
- 18 going to be okay, so go to the 10 to the 7th, 10 million
- 19 cycles of loading, and if you do 10 million cycles of loading
- 20 at a qualified load which encompasses the design load, then
- 21 that accomplishes, functionally equivalent to the short-term
- 22 -- to the process of the Reg Guide."
- 23 It is, in fact, at least as rigorous, given the fact
- 24 that you've got a 10 million cycle loading test, and after the
- 25 other review, it is at least as rigorous as the Reg Guide,

- 1 which requires only 22 hours a year at a continuous rating and
- 2 two hours in that year at the short-term rating.
- JUDGE EDLES: But I think you've told me what they
- 4 have done, and that it is just as rigorous, but I still am not
- 5 clear why it was that they adopted this method for these
- 6 diesels.
- 7 MR. ELLIS: Well, I think it is more rigorous. And
- 8 I can't tell you what was in their minds, except to say that
- 9 there was some skepticism about the qualification of the
- 10 engines, and therefore they wanted it to undergo this more
- 11 rigorous testing.
- 12 JUDGE EDLES: Maybe I'll take that up with the
- 13 Staff, then.
- 14 MR. ELLIS: Yes, sir. But I can't tell you what was
- 15 in their minds, except to say that an alternative method was
- 16 devised, which was perceived to be very rigorous and involving
- 17 this very extensive testing and additional testing in the
- 18 preoperational phase as well, and that it accomplished the
- 19 purpose of GDC-17, because it ensured that there was a 10 to
- 20 the 7th cycle test at a load that encompassed the design load,
- 21 which is what they construed the regulation as requiring.
- 22 JUDGE WILBER: Can you tell me what your definition
- 23 of design load is now?
- 24 MR. ELLIS: Yes, sir. I think my definition of
- 25 design load is the same definition as is used in the IEEE

- 1 standard and is used by the Staff. It's also LILCO's
- 2 definition. But, if you will permit me, in layman's terms,
- 3 it's the aggregate load of that equipment required to respond
- 4 to the design-basis accident and mitigate the accident.
- JUDGE WILBER: That's the same as MESL, the
- 6 expression they used, the MESL?
- 7 MR. ELLIS: Yes, sir, that's correct, the MESL.
- 8 JUDGE ROSENTHAL: Well, you do agree that at these
- 9 facilities listed in that table, there is a margin that
- 10 exceeds the margin at Shoreham.
- 11 MR. ELLIS: I think what the table shows -- yes, sir
- 12 -- the table shows margins all the way from three percent to
- 13 very large percentages.
- 14 JUDGE ROSENTHAL: Granting that that doesn't
- 15 necessarily mean that there was some requirement along that
- 16 line, why wasn't that enough to get that table into evidence
- 17 for the purpose of then exploring whether the load margins
- 18 at those reactors was indicative of a Staff interpretation of
- 19 GDC-17 and accompanying requirement, or whether it was pure
- 20 happenstance, or whether it was simply a matter of the
- 21 utility's own choice?
- In other words, even if that table, of itself, did
- 23 not conclusively establish that the Staff had this practice
- 24 which the utilities were following in regard to those
- 25 reactors, why wasn't it at least relevant enough to get it in

- 1 there and open the door to an exploration as to whether those
- 2 load margins did reflect the Staff practice, indicative of the
- 3 Staff practice?
- 4 MR. ELLIS: In the first place, they were not
- 5 precluded from asking about what -- whether there was a
- 6 practice. They were never precluded from that. I can show no
- 7 place in the record where they were precluded from that.
- 8 As I already indicated to the Board, there is
- 9 evidence in the record as to what the practice is. It is in
- 10 the Reg Guide and the IEEE standard, which says you use them
- 11 to the limit.
- 12 Secondly, as the Board, I think, pointed out, there
- 13 has got to be some threshold showing not only that it's
- 14 reliable under the regulation -- I've forgotten the number
- 15 now, but the regulation that requires some threshold showing
- 16 of reliability, and moreover some threshold showing of
- 17 relevancy, other than the mere fact of these figures.
- 18 Moreover --
- 19 JUDGE ROSENTHAL: These tables -- that table being
- 20 in evidence -- could the Intervenors have asked the Staff
- 21 witness whether the load margin in a particular plant was
- 22 such-and-such and the load margin in another plant was
- 23 such-and-such, and then have explored the reasons for that
- 24 margin with the witness?
- In other words, did they need to get this table into

- 1 evidence, or could they have just used it as a basis for
- 2 cross-examination?
- 3 MR. ELLIS: Hypothetically, I don't know what my
- 4 reaction would have been and what the Judge's ruling would
- 5 have been.
- I can tell you they were permitted to ask, and they
- 7 did ask: Do you know of any other case where the single worst
- 8 operator error load is not encompassed by the short-term
- 9 rating?
- 10 It is that series of testimony that I summarized at
- 11 the outset. Whether Judge Brenner and the Licensing Board
- 12 would have permitted them to go into these collateral matters
- 13 ---
- 14 JUDGE ROSENTHAL: What collateral matters? Ask a
- 15 question of the witness, could they have taken a list of
- 16 plants in the United States and said to the Staff, "All right,
- 17 let's take them one at a time. What is the margin at Plant
- 18 X? What is the margin at Plant Y? What is the margin at
- 19 Plant 2?"
- 20 That would have been collateral? If so, I don't
- 21 understand why.
- 22 MR. ELLIS: That would have involved the Licensing
- 23 Board, given the argument that we have made in our brief,
- 24 given the lack of any showing of similarity or that the
- 25 situations were similar between Shoreham and all these other

- 1 plants. Indeed, one of them, as he indicated, was prior to
- 2 GDC-17. I think there are others as well.
- I think that would have been collateral, to have
- 4 been investigating whether the 2000 hour rating is equivalent
- 5 to the MESL or the qualified load.
- 6 JUDGE ROSENTHAL: Wouldn't the answer have been, the
- 7 witness could have said, "Yes, there was this different load
- 8 margin, but it didn't reflect Staff practice. What it
- 9 reflected was that you had different conditions."
- 10 We are dealing here not with a matter of relevance,
- 11 but rather with a matter of what a particular piece of
- 12 evidence might conclusively establish.
- 13 MR. ELLIS: I do not believe that that evidence
- 14 would have been relevant.
- 15 JUDGE ROSENTHAL: So you don't think that they could
- 16 get in at all to the matter of what were load margins at other
- 17 plants, in connection with their inquiry into whether there
- 18 was a uniform Staff interpretation and application of GDC-17
- 19 along the lines that they are suggesting?
- 20 MR. ELLIS: I do think it's relevant whether there
- 21 was a consistent Staff interpretation of GDC-17.
- JUDGE ROSENTHAL: You don't think it's relevant to
- 23 that question -- what happened at particular other facilities?
- MR. ELLIS: Only if they could show all of the facts
- 25 that I indicated were predicates to relevancy -- namely, that

- 1 it was a Staff imposition, that it was consistent, that, as
- 2 this Board asked -- I think one of the opening questions was,
- 3 What is the consistent margin?
- 4 There is no consistent margin. There's nothing on
- 5 the table about operator error loads. That's the contention,
- 6 that it's operator error loads. And they have some
- ; preliminary obligation to make some showing, and they
- 8 certainly had every opportunity. They had depositions. They
- 9 had hearings. They had plenty of Staff witnesses they had the
- 10 right to subpoena. And they did none of those things.
- JUDGE ROSENTHAL: Were they denied the opportunity
- 12 to cross-examine any particular Staff witness that they sought
- 13 to examine?
- 14 Maybe I ought to ask that question of Mr. Goddard.
- MR. ELLIS: Not to my knowledge, Judge Rosenthal.
- 16 JUDGE ROSENTHAL: There was not a question of the
- 17 Staff objecting to a particular endeavor of discovery?
- 18 MR. ELLIS: Not to my knowledge.
- 19 JUDGE ROSENTHAL: I'll ask Mr. Goddard about that.
- 20 MR. ELLIS: I have reviewed with the Board, the
- 21 Appeal Board, the fact that GDC-17, the Regulatory Guide, and
- 22 the IEEE standard that it endorses, do not use the term
- 23 "margin," do not require a margin, and on the contrary, state
- 24 explicitly that the diesel generators may be used to the limit
- 25 of their ratings. That is -- and it certainly would have been

- 1 quite easy for the Staff to write in, "And we require a margin
- 2 sufficient to satisfy the single worst operator error load
- 3 that may be inadvertently added."
- JUDGE ROSENTHAL: Given the terms of GDC-17, as you
- 5 understand them, could the Staff, without amending GDC-17,
- 6 have required this additional margin, or are they stuck with
- 7 GDC-17 as written?
- 8 MR. ELLIS: I do not believe that they could -- that
- 9 they could construe GDC-17 to require accommodation of the
- 10 single worst case operator error load, because in that event,
- 11 they would be going beyond the single failure. They would be
- 12 requiring a double additional failure.
- The diesel generators, the Shoreham diesel
- 14 generators -- and I will mention in a minute that that's not
- 15 entirely all that's there -- but the TDI diesel generators are
- 16 single-failure-proof, in the sense that if you add -- if an
- 17 operator were to erroneously or inadvertently add a single
- 18 worst case error, and in the unlikely event that happened, and
- 19 in the unlikely event that that caused a failure at the
- 20 diesel, two diesels are sufficient to shut down the plant, and
- 21 therefore there is a single failure for the Staff to construe,
- 22 if that each diesel has to do that -- would be well beyond the
- 23 single-failure criterion in GDC-17 and elsewhere.
- 24 May I inquire how much time I have?
- 25 JUDGE ROSENTHAL: Yes. I'm sorry that clock is not

- 1 quite functioning. You have about twelve minutes.
- MR. ELLIS: Thank you.
- 3 The County's contention that GDC-17 has been
- 4 interpreted to involve a standard for reliable EDGs that is
- 5 more than 20 times higher than the standard applied to the
- 6 Shoreham EDGs, I think that amounts to a sleight-of-hand,
- 7 because what they have done is taken data for selected plants,
- 8 which may or may not be defined on a consistent basis --
- 9 there's not any indication whether peak load, as reflected on
- 10 that table, is uniformly defined for all of the plants.
- 11 The County takes the average value of this data,
- 12 which, in our view, is meaningless, as we point out in our
- 13 brief, and therefore we think the use of averages is totally
- 14 meaningless.
- 15 It also disregards conservatisms. Now Mr. Palomino
- 16 makes the point, where is the margin of safety? Well, I'll
- 17 tell him where the margin of safety is.
- 18 As the Licensing Board found, the IETs are a better
- 19 -- the integrated electrical test measurements are a better
- 20 measure of what the design loads are.
- 21 JUDGE WILBER: Dr. Berlinger, he may have said they
- 22 are better, but he also had a statement on the accuracy of
- 23 them, didn't he?
- 24 MR. ELLIS: Yes, sir. There is nothing that's
- 25 exact. I think that's his --

- 1 JUDGE WILBER: I thought it was because of the
- 2 conditions of the plant.
- MR. ELLIS: Yes, sir. There was a very substantial
- 4 amount of testimony. Judge Brenner required LILCO to bring
- 5 back its witnesses -- I have forgotten; it was over a weekend
- 6 -- and spent an additional day on that subject. And the
- 7 County and the Board cross-examined LILCO's witnesses
- 8 vigorously on the conditions under the IET, and you can never
- 9 replicate with every last jot and tittle what's going to
- 10 happen right after a loop LOCA, but the IET, as the LILCO
- 11 witnesses pointed out, does a pretty good job, and ultimately
- 12 the Licensing Board was persuaded and noted in its findings
- 13 that it is a more accurate estimate of the MESLs than the
- 14 conservative methods used by LILCO in calculating and
- 15 measuring the individual loads.
- 16 So there is plenty of margin already there, on the
- 17 order of -- as you will recall from our figures and the
- 18 findings in the PID -- they are in the range of two to three
- 19 to four hundred kilowatts.
- 20 What more is there? Well, there is 10 to the 7th
- 21 testing. That is a very rigorous requirement. And after the
- 22 DRQR, after the additional preoperational testing, then it was
- 23 run 10 to the 7th cycles, and then it was looked at again, the
- 24 crankshaft was looked at again, and some other components were
- 25 examined again, and there were more inspections -- a very

- l rigorous standard.
- 2 And therefore, there is that, that other plants
- 3 around the country do not have. These are the actual engines
- 4 tested. And, of course, as Mr. Palomino knows or should know,
- 5 we also have the EMD diesels on site. In fact, by my
- 6 calculation, there's 108 megawatts of fossil power at Shoreham
- 7 for an 890 megawatt reactor. There are Colts in the gas
- 8 turbines in the EMDs.
- 9 In any event, there is little doubt that there is
- 10 ample protection for the people of New York State, contrary to
- 11 Mr. Palomino's remarks.
- 12 We also pointed out that the irrelevancy of the
- 13 excluded evidence and its collateral nature is quite apart
- 14 from its reliability, and we think that there is a threshold
- 15 requirement on reliability that was not made under 2.743,
- 16 which I have mentioned.
- On the collateral point, we think that some of the
- 18 points we raised in our brief on collateral matters actually
- 19 also helps to underscore the irrelevancy of it -- namely, the
- 20 comparison of apples and oranges, or at least the uncertainty
- 21 of that. And we think that just hints, begins to hint at the
- 22 kind of scope of additional litigation you are talking about,
- 23 about whether that plant is really equivalent to this one,
- 24 about whether it was imposed, about whether the utility may
- 25 have put the extra margin in there for load growth.

- 1 Again, I bring out the fact that we don't agree with
- 2 some of the figures that are stated there.
- Finally, as addressed in LILCO's brief, the excluded
- 4 evidence, we do not believe would have substantially affected
- 5 the outcome, even it had been admitted. The requirements of
- 6 GDC-167, as I reviewed it, are clear on its face.
- 7 Mr. Palomino said here and the County said in its
- 8 brief that it is subjective, that there aren't any standards.
- 9 We disagree with that. We think GDC-17 does give a clear
- 10 standard. Namely, it tells you, you must satisfy -- have
- 11 equipment operate that satisfies certain functions. That
- 12 equipment can be identified. The loads on that equipment can
- 13 be either measured or the use of nameplate loads to satisfy
- 14 those functions following a loop LOCA, they can be aggregated,
- 15 and that's what your diesel generators must accommodate, and
- 16 that's what was done at Shoreham.
- JUDGE EDLES: As a layman, explain to me, how come
- 18 all these other plants have these wide margins?
- 19 MR. ELLIS: It would be speculation on my part, but
- 20 I can give you some idea of that.
- In the first place, the FSAR information is often
- 22 updated. That is one of the reasons why I think we disagree
- 23 with lots of what is on the County's table. When you begin to
- 24 design a plant, at the outset you may want to have a lot of
- 25 margin to anticipate load growth, and indeed that happens at

- l every plant. There is a substantial amount of load growth in
- 2 the construction process, particularly if you began the
- 3 construction process prior to TMI and are completing it
- 4 post-TMI. There is a very substantial amount of load growth.
- 5 So that is one reason why some of those might be in
- 6 there, in addition to which, we really don't know what is
- 7 meant by peak load. We don't know whether they are talking
- 8 about an arithmetic addition of the loads, whether they are
- 9 talking about sequencing these loads. There is a great deal
- 10 we don't know about those.
- 11 But what we do know is that if a loop LOCA occurs at
- 12 Shoreham, we know what the loads are, both from the IET and
- 13 from the measurement and the nameplate, and we know from a 10
- 14 million cycle test that those diesels can handle that with
- 15 adequate assurance, more than reasonable assurance.
- I think, as I was saying, that the excluded table,
- 17 even if admitted, would not have affected the outcome, for the
- 18 reasons that I've stated. It would have been entitled to
- 19 little or no weight, particularly given the Staff's
- 20 reaffirmation of its position in testimony and findings, and
- 21 the absence of any -- there were no County witnesses or
- 22 testimony with specific knowledge of all the listed plants.
- We think ample conservatism has been demonstrated n
- 24 the Shoreham MESL and the qualified load determinations.
- I think it is telling that, following this complex

- 1 litigation, the 42 days of hearings, the 32 witnesses, and
- 2 there was discovery beforehand, that the County and the State
- 3 have appealed the exclusion of just this single piece of
- 4 evidence.
- No one present during all of these days of hearings
- 6 -- and as I said, I may be the only one with that dubious
- 7 distinction; I'm not sure -- could fail to conclude that the
- 8 Licensing Board conducted a thorough and thoroughly fair
- 9 hearing, and that it found the Shoreham diesels suitable for
- 10 nuclear service for the first fuel cycle, only after holding
- 11 the Applicant to a rigorously high standard which the Staff
- 12 had held it to through all of the Owners Group activities and
- 13 through this extensive DRQR and additional testing.
- 14 Accordingly, for all the reasons I have stated here
- 15 and for the reasons that are contained in the Applicant's
- 16 brief, we respectfully submit that the Appeal should be
- 17 denied.
- 18 JUDGE ROSENTHAL: Thank you, Mr. Ellis.
- 19 Mr. Goddard?
- 20 MR. GODDARD: Yes. Judge Rosenthal, the Staff
- 21 would respectfully request a brief break prior to the
- 22 presentation of its argument.
- 23 JUDGE ROSENTHAL: Five minutes. Is that sufficient?
- 24 MR. GODDARD: Five minutes will suffice.
- 25 JUDGE ROSENTHAL: We will recess for five minutes.

- 1 I will request Counsel to be back at the end of that five
- 2 minutes.
- 3 [Brief recess.]
- JUDGE ROSENTHAL: Mr. Goddard, you may proceed.
- 5 ORAL ARGUMENT ON BEHALF OF
- 6 THE NUCLEAR REGULATORY COMMISSION STAFF
- 7 BY RICHARD J. GODDARD
- 8 MR. GODDARD: Thank you.
- 9 JUDGE EDLES: Mr. Goddard, before you proceed, or at
- 10 the beginning of your talk, explain to me why the Staff
- 11 decided on a somewhat different methodology for testing the
- 12 diesels at Shoreham.
- 13 MR. GODDARD: Yes, Judge Edles.
- 14 The Staff evaluated a different methodology which
- 15 was submitted to it by the Applicant, Long Island Lighting
- 16 Company, as the Applicant is permitted to do under the
- 17 provisions of Regulatory Guide 1.9.
- The engines are required to meet the standard, the
- 19 regulatory standard set forth in GDC-17 as to capacity and
- 20 capability to perform certain functional requirements.
- One of the methods of meeting that regulatory
- 22 standard which has past acceptance by the Staff, is that which
- 23 is set forth in the IEEE Standard 387-1977, which is
- 24 incorporated in Reg Guide 1.9 Revision 2.
- The Applicants proposed, as result in part, of Staff

- 1 dissatisfaction with the acceptance of these engines without
- 2 significant testing, to use the methodology which we refer to
- 3 herein as the qualified load. And the Staff evaluated the
- 4 engines based upon that methodology which was proposed by the
- 5 Applicant.
- 6 JUDGE EDLES: Do I understand then that the reason
- 7 for not using the 1.9 methodology is that there hadn't been
- 8 adequate testing of the diesels under that methodology? Is
- 9 that what you are saying? That there wasn't time available to
- 10 do the testing?
- 11 MR. GODDARD: I would say there was time available
- 12 to do the testing. The Applicant chose to avail itself of the
- 13 Reg Guide provisions which allowed for an alternate
- 14 methodology for acceptance of the engine. This was part of
- 15 the TDI Owners' Group Program Plan recommendation which was
- 16 worked out conjointly between the Staff and a number of
- 17 TDI-owning applicants.
- JUDGE EDLES: Then why did the Staff earlier feel
- 19 that the 1.9 methodology was insufficient?
- 20 MR. GODDARD: I don't know that the Staff ever took
- 21 the approach the 1.9 methodology itself was insufficient.
- We did insist on testing which would have taken the
- 23 specific engines at Shoreham station, and I believe a number
- 24 of the other TDI engines beyond the limited testing required
- 25 under the Reg Guide methodology.

- 1 This being the case --
- JUDGE EDLES: Is Mr. Ellis's characterization
- 3 accurate, when he says there was some Staff skepticism about
- 4 the reliability of the diesel so you wanted some testing above
- 5 and beyond that which otherwise had been required under 1.9?
- 6 MR. GODDARD: That is correct.
- 7 JUDGE ROSENTHAL: All right, Mr. Goddard, let me ask
- 8 you this.
- 9 Was there any endeavor of either the County or the
- 10 State to obtain discovery of the Staff which was rebuffed
- 11 successfully by the Staff?
- 12 MR. GODDARD: No, there was not.
- 13 The Staff made available for deposition or other
- 14 discovery means, all witnesses who they were proposing to have
- 15 testify as witnesses at the hearing.
- 16 JUDGE ROSENTHAL: Supposing that the Intervenors, in
- 17 their desire to ascertain precisely what the Staff practice
- 18 was, had sought in the discovery process or to get at Staff
- 19 officials or employees who would have been intimately familiar
- 20 with that practice under GDC-17 -- first, was that endeavor
- 21 made, and second of all, had it been made, would there have
- 22 been a problem about their getting those witnesses?
- MR. GODDARD: No endeavor was made, certainly to the
- 24 best of my knowledge, other than beyond the fact that the
- 25 County did in fact depose Dr. Berlinger and Mr. Knox.

- JUDGE ROSENTHAL: And these are knowledgeable people
- 2 as to the practice?
- 3 MR. GODDARD: Mr. Knox is in the branch which
- 4 normally performs this analysis.
- 5 Dr. Berlinger was in charge of the entire TDI
- 6 Owners' Group licensing project, for want of a more specific
- 7 term.
- 8 JUDGE WILBER: So Dr. Berlinger might or might not
- 9 be familiar with general practices by the NRC as far as these
- 10 are concerned?
- 11 MR. GODDARD: I think it would be fair to say that
- 12 he would be, insofar as this was concerned, by the nature of
- 13 the duties he was performing at the time.
- Mr. Knox would be, and was, the more appropriate
- 15 witness.
- 16 JUDGE ROSENTHAL: In any case, if I understand you
- 17 correctly, the Staff interposed no obstacle to the Intervenors
- 18 reaching Staff witnesses who would have been knowledgeable on
- 19 the subjects of what the Staff practice was with respect to
- 20 the interpretation and application of GDC-17 in this respect?
- 21 MR. GODDARD: That is correct.
- 22 And, in fact, I only mentioned Dr. Berlinger and
- 23 Mr. Knox. The County did, in fact, depose other Staff
- 24 witnesses, but not directly on this point, as it affected the
- 25 application of GDC-17.

- JUDGE ROSENTHAL: All right.
- Now let me ask you if I may, a further question, the
- 3 question that I asked Mr. Ellis. And that is, do you think
- 4 that consistent with GDC-17 as written, the Staff could have
- 5 adopted the practice which the Intervenors claim their
- 6 excluded evidence suggested that the Staff had adopted?
- 7 AR. GODDARD: By that I trust from your earlier
- 8 question, Judge Rosenthal, you mean could the Staff have
- 9 required a margin over and above the capability to meet the
- 10 essential loads, to meet the functional tests of GDC-17?
- 11 My answer to that would be, as an attorney, no.
- 12 As an engineer, there is no showing that the Staff has at any
- 13 time required a margin.
- 14 The table, Suffolk County Exhibit 85, is only
- 15 indicative if you accept it as face value -- and as pointed
- 16 out by LILCO in detail in a brief and in Mr. Ellis's oral
- 17 argument, is subject to at least certain facial discrepancies.
- 18 By accepting that table at face value, it only purports to
- 19 show the existence of margins at certain facilities, and in no
- 20 way demonstrates any evidence of Staff requirements or
- 21 practices.
- JUDGE ROSENTHAL: But you are telling me that in
- 23 your judgment as a lawyer, that the Staff could not have
- 24 imposed that kind of requirement without an amendment to
- 25 GDC-17?

- 1 MR. GODDARD: Or, at the very least, without an
- 2 interpretation of GDC-17 to show that a margin was required to
- 3 specifically meet a valid engineering standard.
- JUDGE ROSENTHAL: So it could have been done on the
- 5 latter basis without having undertaken to amend the terms of
- 6 GDC-17 itself?
- 7 MR. GODDARD: If GDC-17 were interpreted to require
- 8 a margin. However, the testimony was that no margin was
- 9 required. And in fact, the Reg Guide 1.9, which was cited by
- 10 Mr. Ellis, I believe, Section 5.3.9 indicates no requirement
- 11 for a margin, and authorizes utilization of the engines to the
- 12 stated loads.
- 13 JUDGE ROSENTHAL: I understand you are telling us
- 14 that there wasn't this requirement.
- 15 What I'm getting at is whether, within the terms of
- 16 GDC-17 as currently on the books, there was room for the Staff
- 17 to impose that kind of requirement if it felt that as a matter
- 18 of safety or engineering or whatever you want to call it, it
- 19 was warranted.
- 20 MR. GODDARD: I guess I have to answer that it has
- 21 not been so interpreted, and I do not see any room for an
- 22 interpretation to require margin.
- JUDGE ROSENTHAL: You say they would have to amend
- 24 GDC-17 to accomplish that.
- 25 Well, I take it there is some uncertainty as to

- 1 whether your opinion is the legal opinion of the Office of the
- 2 Executive Legal Director in toto. You may, if you wish,
- 3 supply within one business week, a short statement of the
- 4 Staff's position on that.
- 5 Do you understand the question?
- 6 MR. GODDARD: Yes.
- JUDGE ROSENTHAL: My question is, we have a lot of
- 8 conversation here about practice -- what might or might not
- 9 have been the Staff's practice in this regard. Whether this
- 10 particular exhibit was illustrative, or might have been
- 11 relevant in the matter of Staff practice.
- 12 And my question is, whether taking the GDC-17 as
- 13 written, there could have in the Staff's view, lawfully been
- 14 the kind of practice that the Intervenors claim their table
- 15 establishes?
- 16 MR. GODDARD: I believe I can answer the question as
- 17 you have amplified it, Judge Rosenthal.
- 18 The interpretations to date, and the Staff practice
- 19 -- NRC Staff practice as testified to, do not require such
- 20 margin. GDC-17, although qualitative and not quantitative, is
- 21 clear on its face that it requires only the satisfaction of
- 22 certain functional requirements.
- 23 Such satisfaction, as most regulations, is only a
- 24 minimum test. The fact that a greater -- that a margin may
- 25 exist does not mean that such a margin may be required. The

- 1 regulation only requires that the standard be met, and by
- 2 definition that would appear to include no requirements for a
- 3 margin.
- JUDGE ROSENTHAL: All right, that says enough.
- 5 MR. GODDARD: The Staff would summarize its position
- 6 as being that the exclusion of Suffolk County Exhibit 85 and
- 7 the corresponding testimony was in no way erroneous, as it was
- 8 irrelevant for the Applicant's chosen method of demonstrating
- 9 satisfaction of GDC-17 regulatory requirements, using the
- 10 qualified load methodology. That methodology was developed as
- 11 part of the TDI Owners' Group program plan in 1984 for all TDI
- 12 engines, plant specific safety evaluation reports for
- 13 Shoreham. And the other plants did issue.
- 14 And it would appear from the brief filed by Suffolk
- 15 County, and as amplified by the argument of counsel for New
- 16 York State today, that the objection which the County and
- 17 State have is to a failure to demonstrate compliance with the
- 18 regulatory guide.
- 19 As this Appeal Board and the Commission have held
- 20 previously in several opinions, regulatory guides are not the
- 21 sole means of satisfying regulatory requirements. Staff would
- 22 submit that the argument of the Appellant would appear to
- 23 confuse regulatory requirements with regulatory guide guidance
- 24 or advisory language as to a method by which the regulation
- 25 can be satisfied.

- I think it is necessary to look at the history of
- 2 these engines, and the significant deficiencies which occurred
- 3 during the preoperational testing, the replacement of
- 4 components of those engines which is noted in the record, to
- 5 understand that the Staff had a valid basis for requiring
- 6 testing over and above that which would have been required if
- 7 the Applicant were to have chosen to follow Reg Guide 1.9 IEEE
- 8 87 methodology.
- 9 And accordingly, the Applicant chose to present a
- 10 demonstration of the capability and capacity of these engines
- 11 by a methodology which incorporated the results of actual
- 12 testing and measurement rather than incorporating a number of
- 13 conservatisms which are included in the regulatory guide
- 14 approach.
- JUDGE WILBER: In your brief, and I believe also
- 16 in the Licensing Board's decision, they referred to this
- 17 qualified load concept as an interim licensing basis.
- 18 What does "interim" mean? Are they sometime in the
- 19 future going to revert back to Reg Guide 1.9?
- 20 I don't understand the significance of "interim."
- 21 MR. GODDARD: The use of the term "interim licensing
- 22 basis" refers to the licensing of these -- or the
- 23 qualification and licensing of these diesel engines up through
- 24 the first refueling outage, at which time by commitments of
- 25 LILCO and the --

- JUDGE WILBER: No. I think the interim refers to
- 2 the generic safety evaluation report which are all Licensees
- 3 that have these diesels. In fact, I believe your footnote
- 4 mentions that, Footnote 6, the last sentence in your Footnote
- 5 6.
- 6 MR. GODDARD: It is my understanding, Judge Wilber,
- 7 that that is a reference to the idea that these engines would
- 8 be inspected and that they would not be simply licensed for
- 9 the life of the plant. If that is not the case, then I am in
- 10 error. That is my understanding
- 11 JUDGE EDLES: Mr. Goddard, is the Staff still
- 12 reviewing the training procedures in connection with loads to
- 13 the diesel?
- MR. GODDARD: The Staff was reviewing the training
- 15 procedures subsequent to the issuance of the Partial Initial
- 16 Decision.
- 17 JUDGE EDLES: What is the status now of that review.
- 18 MR. GODDARD: May I con ... ith --
- 19 JUDGE EDLES: Bring an expert into the booth with
- 20 you.
- 21 MR. GODDARD: May I bring an expert into the booth?
- 22 Thank you.
- 23 JUDGE EDLES: Go right ahead and identify yourself
- 24 for the reporter.
- 25 MR. CARUSO: I am Ralph Caruso. I am the Shoreham

- 1 Project Manager.
- 2 The Staff has completed its review of the training
- 3 and procedures, and has found them to be acceptable, subject
- 4 to the modification of certain of those procedures by the
- 5 utility. The Staff is in the process of publishing the Safety
- 6 Evaluation Report, and expects to do that within the next,
- 7 approximately, two weeks.
- 8 JUDGE EDLES: Thank you very much.
- 9 JUDGE WILBER: Perhaps one more question on that
- 10 same line.
- 11 The Applicant, I believe said -- assured us -- that
- 12 there was no single failure where two diesels could be
- 13 impacted.
- 14 Has the Staff reviewed this? Has the Staff looked
- 15 at interactions?
- 16 MR. CARUSO: Yes. The Staff looked at the
- 17 procedures and determined that with the implementation of the
- 18 procedural changes that the Staff determined should be made,
- 19 with the installation of a distinctive alarm in the control
- 20 room to warn the operators when the engines exceeded 3300 kw,
- 21 if that were to occur for some reason, and with the training
- 22 that had been proposed by the Licensee, that there were no
- 23 single operator actions which could occur, which could cause
- 24 more than one engine to be overloaded.
- 25 Essentially, the way the Staff -- the Staff

- 1 conclusion says; with the implementation of these three
- 2 factors, the alarm, the training and the upgrading of the
- 3 procedures, the possibility of more than one diesel being
- 4 overloaded is reduced to an acceptable level to the Staff.
- JUDGE ROSENTHAL: You have about one more minute,
- 6 Mr. Goddard.
- 7 MR. GODDARD: Thank you.
- 8 Based upon the Staff's emphasis on the
- 9 differentiation, which the Appellant is apparently not
- 10 making between regulatory requirements and regulatory
- 11 guidance, I will only turn briefly to the question of whether
- 12 or not this error, if it were such, would have impacted the
- 13 outcome of the proceeding.
- 14 It is the Staff's position that error, if there was
- 15 any, was harmless because of the fact that this showing of an
- 16 inability to meet the IEEE 387 standards, if it were in fact
- 17 to be demonstrated by virtue of the excluded evidence, or any
- 18 additional evidence which the Appellant might have produced
- 19 through cross examination or otherwise, and which was alluded
- 20 to in the oral argument here today, would not have bearing
- 21 upon whether or not the engines the qualified or were in
- 22 compliance with GDC-17 fur requirements under the
- 23 qualified load methodology.
- 24 There has at no time been any requirement that these
- 25 or any other engines be qualified under numerous

- 1 methodologies. It is sufficient if an Applicant chooses a
- 2 methodology by which it can be demonstrated to the
- 3 satisfaction of the Staff in the review process, that the
- 4 engines meet regulatory requirements, in the opinion of the
- 5 Staff this was amply done by the Applicant in its application
- 6 of the qualified load methodology to the Shoreham emergency
- 7 diesel generators.
- 8 JUDGE ROSENTHAL: Thank you, Mr. Goddard.
- 9 Mr. Palomino you have ten minutes for rebuttal.
- 10 REBUTTAL ARGUMENT ON BEHALF OF THE STATE OF NEW YORK
- 11 BY FABIAN PALOMINO
- MR. PALOMINO: To get something very straight right
- 13 at the beginning. Mr. Goddard said that there was no room for
- 14 interpretation because nothing mentions -- neither the
- 15 guidance nor the GDC mentions margins.
- Now, I have before me here your guidance, Regulatory
- 17 Guide 1.9, paragraph B, Discussion. Page 1.9-2, last
- 18 paragraph in B. It says:
- 19 "The uncertainties inherent in estimates of safety
- 20 loads at the construction permit stage of design are sometimes
- 21 of such magnitude that it is prudent to provide substantial
- 22 margin in selecting the load capabilities of the diesel
- 23 generating units.
- 24 JUDGE WILBER: And the last sentence in that
- 25 paragraph?

- 1 MR. PALOMINO: Then it goes on to the licensing
- 2 stage and it says you can be less conservative in the margins.
- 3 JUDGE WILBER: In fact, you can work up into the
- 4 short term --
- 5 MR. PALOMINO: So there is definitely room for the
- 6 engineers to provide the kind of margins we are saying that
- 7 these standards required as a standard practice. So that
- 8 legally there was nothing wrong with it, and it is our
- 9 contention they have done it.
- 10 There is also a sound reason even at the licensing
- 11 stage. As LILCO points out in its brief, that we don't show
- 12 the latest FSARs of these plants.
- 13 The reason you have margins is because they might
- 14 add loads. And that would impact on safety. So that you need
- 15 margins. And that is why the engineers' requirements --
- 16 undoubtedly why our contention is right, that they have been
- 17 applying them all along as a standard practice.
- Now, the second thing is Mr. Goddard talked about
- 19 the testing was a reason.
- 20 The reason the hearings were going to conclude --
- 21 and they were going to show that these engines were not safe.
- 22 The fact is, they had Colt diesels there. They could have put
- 23 them on line. The reason they wanted to do it is use this
- 24 Board to load these in the rate base, to get a double
- 25 recovery. And that is the reason they went for this design

- 1 basis load.
- 2 The fact is --
- 3 JUDGE EDLES: Mr. Palomino, I thought Mr. Goddard
- 4 said this was part of a more generic program that involved
- 5 these types of diesels at other plants as well, not because of
- 6 the loading of the rate base at Shoreham.
- 7 MR. PALOMINO: It may be.
- 8 But it may be that this one was under challenge and
- 9 they wouldn't have qualified it. And then they wouldn't have
- 10 gotten them in the rate base.
- 11 Turning to interim licensing as you inquired, Judge
- 12 Wilber, the fact is whether it is interim or not doesn't
- 13 escape compliance with GDC-17.
- 14 The only way they could do that is by a waiver, and
- 15 they couldn't get a waiver because we would show they had
- 16 Colts ready to go.
- As far as going into LILCO's testimony, he says the
- 18 table doesn't show that this was applied.
- 19 We said the combined table in the testimony. It
- 20 wasn't a thrust at just the table. We said the table showed
- 21 the results.
- 22 He went into the fact that the testing showed these
- 23 engines to be sufficient.
- 24 You know, we have heard that they are testing all
- 25 along. Before the crankshaft broke, there was sufficient.

- 1 After the crankshaft broke, before the piston bosses failed
- 2 they were sufficient.
- 3 You know this kind of puffing means nothing, you
- 4 know, except it just constantly proves you can't rely on what
- 5 they say with respect to adequacy.
- 6 Now he talked about the single failure rule. As I
- 7 pointed out before, the single failure rule presumes a
- 8 qualified engine, qualified units. You can't use that as a
- 9 basis for saying they are qualified.
- 10 They also talked about the integrated electrical
- 11 testing. That also presumes a qualified engine. It doesn't
- 12 prove -- doesn't make the engine qualified.
- 13 And he says -- which was very interesting -- and I'm
- 14 talking about Mr. Ellis -- you can never replicate what is
- 15 going to happen after a loop LOCA. That's right. That's why
- 16 you need margins.
- 17 I don't have anything further to say.
- 18 JUDGE EDLES: My recollection -- just let me clarify
- 19 with you. My recollection is you couldn't replicate, but at
- 20 least they knew all the loads that would be applied to the
- 21 diesel in the event of a loop LOCA.
- 22 MR. PALOMINO: Yes. You know all the loads, but
- 23 that doesn't replicate what could happen, and that is why
- 24 safety margins are required, have been required.
- 25 The fact is, we think we didn't get a fair hearing.

- 1 That we should have been able to admit evidence. There is no
- 2 legal inhibition why the Staff could not have applied this
- 3 standard.
- 4 If they did, it would have resulted in either a
- 5 safety margin sufficient for the people of New York as to
- 6 everybody else, or it would have resulted in these engines not
- 7 being qualified and them having to put the Colts on line.
- 3 JUDGE EDLES: Mr. Palomino, do you have a view with
- 9 regard to Mr. Goddard's statement that the testing program for
- 10 these diesels is more rigorous than the one that would have
- 11 been imposed under 1.9, under Reg Guide 1.9?
- 12 MR. PALOMINO: Let me say this. These engines are
- 13 troubled. The Board set a standard for testing they didn't
- 14 want to comply with, which might have proved otherwise.
- I don't know about whether they would have qualified
- 16 them or not. But they are not ordinary, presumably good,
- 17 engines. They have rebutted that presumption, and they should
- 18 have gone through the testing that the Board required. They
- 19 sought to avoid it by this qualified load standard, and at
- 20 least to a lesser margin of safety.
- 21 Thank you.
- JUDGE ROSENTHAL: I want to thank on behalf --
- 23 Mr. Ellis?
- 24 MR. ELLIS: Judge Rosenthal, I am reluctant to get
- 25 up, but I know of no standard of testing by the Board, by the

Licensing Board, that the Applicant has not complied with. JUDGE ROSENTHAL: Thank you. We will note that for the record. On behalf of the entire Board, I would like to thank counsel for their helpful presentations this afternoon. The appeal of the State and County stand submitted. Before, however, we adjourn, it is my understanding that Mr. Kelley has a matter he wishes to raise in connection with the briefing of the County's appeal from a portion of the Licensing Board's Emergency Planning Decision of last spring. So, we will leave diesel generators and, Mr. Kelley, you may tell us what your problem is. This will be off the record. The record can be regarded as concluded before I got into this matter. (Whereupon, at 4:15 p.m., the hearing in the above-entitled matter was concluded.)

| 1 | CERTIFICATE OF OFFICIAL REPORTER |
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| 3 | |
| 4 | |
| 5 | This is to certify that the attached proceedings |
| 5 | before the United States Nuclear Regulatory Commission in the |
| 7 | matter of LONG ISLAND LIGHTING COMPANY (Shoreham Nuclear Power Station Unit 1.) |
| 8 | Scatton onite 1.7 |
| 9 | Name of Proceeding: Oral Argument |
| 10 | |
| 11 | Docket No. 50-322 OL |
| 12 | Place: Bethesda, Maryland |
| 13 | Date: Thursday, September 26, 1985 |
| 14 | |
| 15 | were held as herein appears and that this is the original |
| 16 | transcript thereof for the file of the United States Nuclear |
| 17 | Regulatory Commission. |
| 13 | |
| 19 | (Signature) |
| 20 | (Typed Name of Reporter) Mimie Mel*zer |
| 21 | |
| 22 | |
| 23 | Ann Riley & Associates, Ltd. |