

RELATED CORRESPONDENCE

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONOFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCHBefore the Atomic Safety and Licensing Board

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

MOTION TO STRIKE OR FOR  
RECONSIDERATION WITH RESPECT TO  
SUFFOLK COUNTY'S SUPPLEMENTING ITS  
QA WITNESS PANEL

Motions of this sort should not be made lightly. This one is not. It is compelled by the depositions of Mr. William Bland and Mr. George Inskeep. Their testimony demonstrates that:

- (1) they have not adopted and cannot adopt Mr. Hubbard's prefiled direct testimony;
- (2) they have no knowledge or expertise regarding the facts relied on and the conclusions stated in Mr. Hubbard's testimony;
- (3) they are not qualified to testify on quality assurance and quality control programs for the nuclear power industry; and therefore
- (4) they cannot testify in the broad manner represented by County, nor in the narrower manner envisioned by the Board in permitting the County to add them to the panel.

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Suffolk County filed its QA testimony on June 29, 1982. This testimony was authored by Richard B. Hubbard. On October 2, 1982, LILCO received a Suffolk County Motion "to supplement sponsorship of the County's QA/QC testimony by adding Mr. George W. Inskeep, Jr. and Mr. William M. Bland, Jr. to the County's QA/QC witness panel." Suffolk County Motion to Supplement Witness Panel on Suffolk County Contentions 12-15, Quality Assurance/Quality Control, at 1 (hereinafter "SC Motion"). The County represented that Messrs. Bland and Inskeep "have reviewed QA/QC materials for the County, with particular emphasis on matters which are being addressed in the NRC QA/QC hearing," that they "have substantial experience in quality assurance and quality control matters," and that they will bring "substantial, relevant expertise to this proceeding." SC Motion at 1-2. LILCO opposed this motion, setting forth the reasons for its opposition in a pleading dated October 14, 1982.

On October 15, 1982, after hearing argument from the parties (Tr. at 11,886-11,992), the Board granted the SC Motion with certain "conditions and limitations," noting that "we would limit these additional witnesses to testifying to the facts already relied on in the testimony in support of their conclusions." Tr. at 11,914-15.

The Board also ordered that these witnesses be made available for deposition. Tr. at 11,917. LILCO deposed Mr. Bland on Wednesday, October 20, 1982, and Mr. Inskeep on Thursday, October 21, 1982. Mr. Inskeep, citing travel plans, left prior to completion of his deposition. The County has agreed to produce Mr. Inskeep to complete the deposition on the condition that LILCO pay for all travel costs. LILCO agreed to pay travel expenses for the initial session but does not believe it should be responsible for any additional travel expenses because the deposition was adjourned at the County's request. In any event, this dispute need not be resolved if the Board grants this motion.

By focusing on germane portions of the depositions,<sup>1/</sup> this motion vividly demonstrates that Messrs. Bland and Inskeep do not possess the knowledge or expertise necessary "to testify to the facts already relied on in the testimony in support of their conclusions." Tr. at 11,915. LILCO therefore requests that the Board reconsider its decision allowing the County to supplement its witness panel, and that the Board deny the County's request.<sup>2/</sup>

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<sup>1/</sup> Copies of the complete deposition transcripts are attached for the convenience of the Board.

<sup>2/</sup> This motion may be considered as one for reconsideration (because of the more detailed information now available), or as a motion to strike Messrs. Bland and Inskeep as QA/QC witnesses

(footnote continued)

I.

Messrs. Bland and Inskeep  
Have Not Adopted and Cannot Adopt  
Mr. Hubbard's Prefiled Direct Testimony

In its motion to supplement, the County stated that Messrs. Bland and Inskeep "have reviewed Mr. Hubbard's prefiled testimony and agree to adopt it as their own." SC Motion at 2. This notion was repeated during oral argument before the Board: the witnesses "are to adopt Mr. Hubbard's testimony. They are not providing supplemental testimony." Tr. at 11,912, lines 13-15.

In granting the County's motion to supplement, the Board stated the following:

We apply the definition of a fact witness a little more broadly [when looking at an intervenor's fact witness] in the sense of somebody who has taken it upon themselves to become knowledgeable of facts pertinent to the information and the contention for purposes of the hearing.

Tr. at 11,918, lines 19-23 (emphasis added). By no stretch of the imagination can it be said that Messrs. Bland and Inskeep have "taken it upon themselves to become knowledgeable of facts pertinent to the information and the contention" sufficient to

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(footnote continued)

for lack of qualifications and knowledge of the subject matter. In either event, the relief sought is the same.



"adopt as their own" Mr. Hubbard's prefiled direct testimony. On the contrary, their testimony shows that all they did "to adopt" the testimony was to read it and assume that Mr. Hubbard's statements and conclusions were true and correct. They repeatedly admitted their lack of knowledge and familiarity with the substance and underpinnings of the testimony. The deposition transcripts provide the most persuasive material on this point, and are therefore quoted below for both Messrs. Bland and Inskip at sufficient length to illustrate it.

A. Mr. Bland

Mr. Bland's deposition clearly reveals the totally derivative nature of his knowledge on Shoreham QA/QA matters:

MR. ELLIS: Mr. Bland, what did you do with Mr. Hubbard's testimony?

A. Well --

. . . .

A. I reviewed this testimony which I think was prefiled material. That is the one we are talking about; right?

Q. That's right, yes.

A. I reviewed it to see if I had any comments about its contents and did I see where he had, from my point of view in my knowledge, which was limited, did I find where he might have done something that I thought was not correct.

Q. You said your knowledge was limited. What did you mean by that?

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A. Well, I didn't have specific knowledge of the materials that were being referenced in the testimony. I didn't have any years of background into what had gone on before.

Bland Tr. at 69, line 9, through page 70, line 6.<sup>3/</sup>

Q. Earlier on, I asked you about your agreement to adopt Mr. Hubbard's testimony. What do you understand by adopt? What do you mean by adopt his testimony?

A. As I understand that term -- and what I have gone by is that I believe Mr. Hubbard has done a very fair job of assessing the information, QA/QC information, about the plant and its activities. And I would probably, if I had used the same information, probably come up with much the same kind of answers.

I mean, it may not have been in the same format, but the same general substance.

. . . .

Q. Would you go through that, if you would please, Mr. Bland, and tell me on a section or page by page or paragraph, any way you want to do it, tell me those sections which you agree to adopt in the sense that you have stated -- namely, that you understand, support and agree with the accuracy of the statements?

. . . .

A. Well, I can generally adopt everything he says there [on pages 17-40 regarding the CAT inspection] with the reservation that you need to find out -- I think you need to find out -- what NRC says about these violations that LILCO says aren't violations.

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<sup>3/</sup> Emphasis added throughout unless otherwise noted.

I don't think it is time to put them in here yet. . . .

Q. Do you think you understand the significance, the engineering significance, of these matters that are raised in the CAT portion of Mr. Hubbard's testimony, pages 16 through 44?

A. Yes, I think I do.

Q. And you would agree, wouldn't you, that it is important for you to understand the engineering significance of these . . . in order for you to be able to adopt this testimony?

A. Sure.

Bland Tr. at 85, line 12, through page 88, line 18. But Mr. Bland's testimony on the CAT inspections later shows he does not understand the engineering significance of the CAT inspection, and therefore he does not meet even his own standards for adopting testimony. (See part II of this motion at page 18 .)

Further, while Mr. Bland testified that he supported Mr. Hubbard's testimony, he later indicated that he had not received the materials upon which he might base such support:

Q. When you indicated that you adopted Mr. Hubbard's testimony, I take it whenever there was a footnote referring to a document, you obtained and reviewed that document.

A. No, sir.

Q. Well, then, there are some documents that are referenced in Mr. Hubbard's testimony with which you are not familiar?

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A. Yes, sir.

Q. And, therefore, some of his attachments with which you are not familiar?

A. Most likely.

Bland Tr. at 124, lines 11-21.

Q. So you were not able to review all of these [ANSI QA/QC Standards in the table on page 13 of Mr. Hubbard's testimony] in connection with your adoption of Mr. Hubbard's testimony?

A. That's right.

Q. Do you have any substantial familiarity with any of these?

A. No, sir.

Bland Tr. at 144, lines 1-6.

Q. I . . . was referring to [whether you had reviewed] the safety evaluation report.

A. No, sir.

Q. And so you did not take into account anything concerning the safety evaluation report in connection with deciding whether to adopt or not to adopt Mr. Hubbard's testimony?

A. That's correct, sir.

Q. If I made statements about the SER, which is the safety evaluation report, in his testimony, you simply accepted those at face value?

A. Yes, sir.

Q. Do you know whether the LILCO quality assurance/quality control program

for construction has undergone any review by the staff or any arm of the NRC?

A. No, sir.

. . . .

Q. Do you know whether any arm of the NRC has reviewed Stone and Webster's or General Electric's quality assurance program with respect to the construction phase of Shoreham?

A. I don't believe they have.

Q. What is the basis of your belief?

. . . .

A. From his testimony.

Q. You have made no independent . . . investigation?

A. No.

Bland Tr. at 145, line 1, through page 146, line 22.

Q. There is a reference on page 14 to an Appeal Board decision, In the Matter of Consumers Power Company. Have you read that entire decision?

A. No, sir.

Q. What you know about it, then, is what you have read in Mr. Hubbard's testimony?

A. Yes, sir.

Bland Tr. at 150, lines 1-10.

Q. On page 16 there is a reference to a paper Mr. Hubbard says is a

description of LILCO's QA program for design and construction of Shoreham. Do you know what that paper is?

. . . .

A. I interpret that to mean that [LILCO has] written on paper, documented in the FSAR [a] description of this program.

Q. Did you ask Mr. Hubbard whether that is what he meant?

A. No, sir.

Bland Tr. at 157, lines 2-20.

Ultimately, Mr. Bland agrees that even his derivative knowledge on Shoreham is inferior to that of the testimony's author, Mr. Hubbard:

Q. With respect to all of Mr. Hubbard's testimony, would it be fair to say -- all of the testimony that you have adopted, would it be fair to say that you don't have knowledge of any facts or details that Mr. Hubbard doesn't have [relative to his testimony on Shoreham]?

. . . .

A. Yes, sir.

Q. And you all haven't divided up portions of his testimony to become more familiar with, you and Mr. Hubbard, you haven't made any division of testimony to divide up so you would be more familiar with certain pages than he is?

A. I'm not aware of any such division.

Q. On the basis of your conversation with Mr. Hubbard, would you say that



you know as much as Mr. Hubbard concerning his testimony on Shoreham as reflected as QA testimony on Shoreham?

. . . .

A. I do not know as much.

Bland Tr., page 224, lines 3-22, and page 225, lines 1-7. Thus, while Mr. Bland "believe[s] Mr. Hubbard has done a very fair job of assessing the [QA/QC] information," Mr. Bland did not review documents referenced in footnotes in the testimony, attachments to the testimony, QA standards discussed in the testimony, or the SER. In addition, Mr. Bland is adopting certain statements in the testimony -- about which he stated he has "limited knowledge" -- without any independent review of the materials and by simply relying upon Mr. Hubbard's statements. Mr. Bland's lack of knowledge on various topics discussed in the prefiled testimony is explored in part II of this motion.

B. Mr. Inskeep

Mr. Inskeep's testimony repeatedly establishes that he merely read and agreed with Mr. Hubbard's testimony, without inquiring into the basis for Mr. Hubbard's statements:

Q. [Mr. Earley] With respect to Mr. Hubbard's testimony, would you say that you are very familiar with his testimony and attachments?

A. Familiar from the sense that I have read them. If I were asked to quote

any one thing, I would have to go back and look at it because, again, it doesn't go into the computer. I read it, and I accepted it and so on.

But I would be very happy to answer any questions regarding any part of it if you tell me what parts you want me to look and quote, whatever.

Q. You are willing to adopt and you are willing to adopt Mr. Hubbard's testimony as stated?

A. That is correct.

Q. What is your understanding of what the term "adopt his testimony" means?

A. My understanding is do I agree with the statements he has made in here. And I would have to say yes, I agree with the statements he has made.

There are a few places that he has made statements that I would have to go back and look at that it might include more than what I thought. I would have to look at it and see what it said and tell you.

Q. Are there any places in the testimony that you disagree with Mr. Hubbard?

. . . .

A. There might be some places in there where he mentioned some things I didn't really look at. And I think that I would have to say a couple areas if they are not in the attachments, if they are not available for me to read, those areas, I might not be familiar with.

Q. Can we go through the testimony? And would you please identify those areas for me?

A. You mean you want me to go through the whole thing?

Q. Yes, sir.

A. Here is an example here. He speaks about -- on page 7, he talks about the, or mentions it as a footnote in there, Donald A. Brand, Vice President Engineering, PG&E testimony. I had no knowledge of that; I haven't read it. I don't know anything about it.

. . . .

Q. Given the quote that Mr. Hubbard has used, assuming that he has accurately transcribed the material from Mr. Brand's testimony into this Shoreham testimony, do you believe that then it was appropriate to include that material, given the purpose that Mr. Hubbard used it or stated it on seven?

A. Let me say that I have read this testimony in its entirety probably four or five times. And in reading this, the rest of the testimony in relation to this, I could find no areas of disagreement.

Q. Again, you don't know whether the quote was taken out of context or not?

A. That's right.

Inskeep Tr. at 94, line 1, through page 98, line 1.

Similarly, Mr. Inskeep admitted a total dearth of knowledge as to the content of any document cited in the testimony unless that document had been directly fed to him:

Q. Are you familiar with NUREG-0774?

A. Only insofar as it is mentioned in here. I don't have a copy of it -- that is, to the best of my knowledge. If I have, I have read it. And if I have read it, I'm familiar with it. But again, the computer don't compute.

Q. You have no recollection of that?

A. I have to say that any of these footnotes are referenced in here, if that information wasn't given to me -- and a lot of things weren't given to me -- I can't say whether or not -- I have to assume that what is on the page, if it is a quote from that document, is correct. And I went on that assumption.

Q. But you didn't look at the material in the footnotes?

A. Not if it wasn't furnished to me, no.

Inskeep Tr. at 99, lines 8-22.

Indeed, Mr. Inskeep was not even conversant with the name or QA/QC-related function of the Staff's Safety Evaluation Report:

Q. Turn, if you would, Mr. Inskeep, to page 12 of Mr. Hubbard's testimony. There, in the first paragraph of the text, it says that the Staff's SER is totally devoid of analysis conclusions concerning the compliance of the design, construction, or installation of QA/QC activities.

Do you know what the SER is?

A. Oh, just off the top of my head, I can't think of what those initials are.

Q. If I told you it is the Staff Safety Evaluation Report --

. . . . .

A. I don't believe I have ever read it.

Q. So then, you don't know of your own knowledge whether it is totally devoid of analysis referred to in that sentence?

A. No. I accept Mr. Hubbard's statement there.

Q. Do you know whether any part of the NRC Staff has reviewed the QA/QC program for Shoreham's construction?

. . . . .

A. No.

Q. Do you know whether Shoreham's construction QA/QC program was ever approved by an Atomic Safety and Licensing Board?

A. No. I have no idea.

Inskeep Tr. at 152, line 14, through page 153, line 1.

Nor did Mr. Inskeep attempt to verify independently the non-documentary facts asserted in the testimony:

Q. Further down on that page, there is a reference to a meeting with Harold Denton. Do you have any knowledge of that meeting?

A. None other than what it says here.

Q. Do you know whether what is stated there is correct or do you believe what Mr. Hubbard has put down?

A. That's correct.

Q. Did you ever inquire into the facts concerning that meeting?

A. I had no reason.

Q. When you were looking at this testimony, trying to make a decision whether or not to adopt it, you didn't think it was necessary to determine whether that sentence there was true or not?

A. No.

Inskeep Tr. at 163, lines 6-20.

Nor was Mr. Inskeep familiar with the significance of various QA/QC violation classifications:

Q. Let me ask this question: are you familiar with the severity levels of NRC violations?

A. No, not that I could quote them to you.

. . . .

Q. I take it you wouldn't know whether Shoreham has ever had a class one violation.

A. Unless I read it in the documentation someplace. And even then, unless I was looking for that. I have to say again that I have been reviewing, and I specified the documents I reviewed. Over the period of time that I have had to review those documents, I have been busy. I haven't been able to go out in the boondocks after some of these other things.



Inskeep Tr. at 176, line 9, through page 177, line 10.

Thus, Mr. Inskeep has stated he will adopt Mr. Hubbard's testimony simply because he accepts the statements made in it, without having verified the accuracy of those statements or having asserted any independent basis for inferring their accuracy.

## II.

### Messrs. Bland and Inskeep Have No Knowledge or Expertise Regarding the Facts Relied on and the Conclusions Stated in the Testimony

In the County's motion to supplement, the County represented that Messrs. Bland and Inskeep will bring "substantial, relevant expertise to this proceeding." SC Motion at 2. In oral argument before the Board, the County stated that while "Mr. Hubbard is fully capable of sponsoring the entire testimony" (Tr. at 11,892, lines 8-9), he would "be assisted and assisted materially by having persons that we think are eminently qualified to support him in this effort, and support him on the stand." Tr. at 11,895, lines 20-22. In discussing its decision to grant the County's motion, the Board stated "we would limit these additional witnesses to testifying to the facts already relied on in the testimony in support of their conclusions . . . [Messrs. Bland and Inskeep] are to assist [Mr. Hubbard] with the detailed knowledge of the facts already

relied on in the testimony." Tr., 11,916, lines 3-6; 11,917, lines 12-14.

The depositions shows vividly that Messrs. Bland and Inskeep have neither the knowledge nor expertise to testify to the conclusions reached in Mr. Hubbard's testimony, nor to testify to the facts relied upon in reaching those conclusions. Some of the topics upon which Messrs. Bland and Inskeep are unqualified are listed below, followed by excerpts from the depositions illustrating the witnesses' lack of knowledge.

#### A. Review of the CAT Inspection

In its motion to supplement and in argument before the Board, the County stated that Mr. Bland had spent considerable time reviewing the CAT inspection report, which is Attachment 4 to Mr. Hubbard's testimony. SC Motion at 2; Tr. at 11,896, line 25, through page 11,897, line 5. And as noted previously, Messrs. Bland and Inskeep both have stated they agreed to adopt Mr. Hubbard's testimony. In allowing the County to supplement its witness panel, the Board stated that, as it understood the County's representations, both witnesses would, "as a result of their study, have a reasonably detailed knowledge of the NRC inspections, including the CAT inspection report, and would respond in that area" (Tr. at 11,907, lines 10-12), and that

Messrs. Bland and Inskip "would essentially be [supporting the County's testimony] in the area of the CAT inspections, . . . [allowing] Mr. Hubbard to have the help up there of people who also know the details of the inspections that he once knew and which he may not recall at the moment he is asked a question." Tr. at 11,916, lines 9-14.

The following excerpts from the depositions indicate Messrs. Bland and Inskip are not knowledgeable in the details of the CAT inspection and, thus, cannot support Mr. Hubbard's discussion of the CAT inspection.

1. Mr. Bland

Mr. Bland stated, at the outset, that he had reservations about Mr. Hubbard's testimony on the CAT inspection.

Q. Would you go through [Mr. Hubbard's testimony], if you would please, Mr. Bland, and tell me on a section or page by page or paragraph, any way you want to do it, tell me those sections which you agree to adopt in the sense that you have stated -- namely, that you understand, support and agree with the accuracy of the statements? And tell me whether or not there is any part in there that you don't adopt and any part in there that you think has to be modified . . . or changed in any way.

. . . .

A. [I am looking at the] CAT inspection items. I guess that is page 17 through 40.

. . . . .

Q. Right. Well, what portions do you adopt?

A. Well, I can generally adopt everything he says there with the reservation that you need to find out -- I think you need to find out -- what NRC says about these violations that LILCO says aren't violations. I don't think it is time to put them in here yet. It may very well be time. And that doesn't necessarily lessen it as a problem; it is just a matter of how you treat it because in my opinion, it is going to be the kind of a thing where you got a violation or you have got in hardware or you have got a breakdown -- I don't know whether you use that kind of word, but a lapse in paper control systems, drawings, or whatever. I don't know what it is yet, and I want to find out.

. . . . .

Q. Let me ask you this about the reservations before you go on and designate others: You say that you have some reservations about those items that LILCO says are not violations because you think it would be important to know what the NRC response is before they are included?

A. That's right. And it could probably change the categorization of the criterion that it was charged to.

. . . . .

Q. Do you adopt the Hubbard testimony on the CAT inspection with respect to the violations found by the NRC or also to other observations?

A. Well, I think there are two of the violations which don't have an NRC

response to. And there may be something else I have forgotten, an observation where there is no response -- I'm sorry, where LILCO said, "No, you're cuckoo; it is not a violation of something." I haven't seen the NRC response to that.

So there are two or three things I can't remember exactly.

Bland Tr. at 86, line 11, through page 92, line 7.

Mr. Bland's review of the CAT inspection was not extensive enough for him to understand how the CAT inspection was conducted:

Q. Do you know whether the CA' team made any examination or review of design documents relating to Shoreham?

A. No, I don't. May I add to that, please?

Q. Go ahead.

A. They obviously used the FSAR which is supposed to represent the design. They used that as a comparison to see how the as built plant reflected that design. When you said "design documents" at first, I merely thought of the drawings and specifications.

Q. So you believe they use the FSAR, but you don't know whether they use the design documents in terms of specifications and drawings?

A. That's correct.

Q. All right. Turning next to the CAT inspection, is it fair to say this is what you have spent the bulk of your time on as the consultant for the county -- that is the CAT inspection?

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A. It is fair to say that I have spent the estimated time that I quoted earlier.

. . . .

Q. You said you had spent about 300 hours, total, 50 of which was --

A. Related to this. That's why I said that was the best guess I could make at the time.

Bland Tr. at 166, line 2, through 167, line 9.

Similarly:

Q. [At page 21 of Mr. Hubbard's testimony] . . . it says: "All MOVs are AC unless otherwise noted." That's what note 3 says. And the CAT inspection, as reported by Mr. Hubbard, was that at least three MOVs are DC and not so noted.

Do you know how the NRC knew that three of the MOVs were DC, though not noted?

A. No, sir.

Bland Tr. at 191, lines 8-16.

Despite Mr. Bland's admission that it is important to understand the engineering significance of CAT inspection findings, his only knowledge of those findings comes from Mr. Hubbard's testimony and the LILCO response. He does not understand the engineering significance of the inspection, and has made no effort to investigate the issue:

Q. Mr. Bland, look at page 21 of Mr. Hubbard's testimony, and let me see if I can't substantially shorten some of the interrogation.



With regard to (a) through (h), would I be correct to say that apart from what is stated in the CAT inspection document and Mr. Hubbard's testimony here on (a) through (h) and the LILCO response, if there is one, with respect to these, that is the limit of your knowledge with respect to items (a) through (h)?

A. Yes.

Q. And you have not done any research or investigation to understanding the engineering significance of items (a) through (h)?

A. I have not.

Bland Tr. at 189, lines 9-22.

Again:

Q. Mr. Bland, to conserve time, let me see if I can shorten by asking you questions applied to the remainder of the CAT findings referred to in Mr. Hubbard's testimony from page 23 to page 41.

Is it fair to say that your knowledge of the CAT findings is limited to the information contained in the CAT report and the LILCO response, and that you have not examined other documentation relating to the CAT findings, and at the LILCO response? So it is the CAT reports, the LILCO response, and other, and that you have examined no other documents or back-up material relating to the CAT findings?

A. Sir, the answer is that that is a correct statement.

Q. Have you discussed the CAT findings with Mr. Hubbard?

A. Yes, sir.

Q. As far as you know, are there any details of which you are aware that Mr. Hubbard is not aware of, relating to the CAT findings?

A. No, sir.

Q. Is it also fair to say, with respect to the remaining CAT findings, beginning on page 23 and going to 41, that you have not conducted or performed any engineering evaluation or analysis of the significance of these CAT findings?

A. Yes, sir.

Bland Tr. at 212, line 8, through 213, line 12.

2. Mr. Inskeep

Mr. Inskeep's scope of review of the CAT inspection is similarly limited. After stating first that he reviewed the CAT inspection report (Inskeep Tr. at 93. lines 11-22), Mr. Inskeep later describes the background of his review in terms of time:

Q. About how many hours have you spent, roughly, reviewing the CAT inspection report and LILCO's responses?

A. That is a very difficult question because I read it. I read the summaries of it. I went back and read it again. I read this testimony and went back and read the CAT again. And I would say that probably all told, reading these things, I spent a fairly good portion of a week on it.

Inskeep Tr. at 164, lines 8-15.

He also described the extent of his review of materials related to the CAT inspection report:

Q. Have you reviewed anything else in conjunction with [the CAT inspection] report?

A. There was a letter that LILCO wrote in response to that that I read. . . . That was part of the material that I was furnished.

. . . .

Q. Anything else?

A. What else do you want to know about it?

Q. Whatever you reviewed that related to the CAT inspection.

A. I reviewed the CAT inspection and the LILCO response to it.

Inskeep Tr. at 172, line 12, through page 124, line 3.

Mr. Inskeep has not made any attempt to assess the significance of the CAT items:

Q. Starting on page 19 of Mr. Hubbard's testimony, and I think it goes through approximately page 41, Mr. Hubbard discusses the CAT inspection findings. Do you agree with his conclusions stated in that section of the testimony?

. . . .

A. I would say yes, I agree with this.

Q. Take a look at item (a) on page 19 of the CAT inspection report.

A. Okay.

Q. Are you familiar with the dry-well spray nozzles?

A. I really don't feel that I should have to be. The answer is no.

Q. Have you reviewed FSAR Chapter 6.2 or the figure that is referenced in paragraph (a)?

A. No, I haven't.

Q. You don't know what commitment is included in that portion of the FSAR with respect to the dry-well spray nozzles?

A. No.

Q. And you also wouldn't be able to tell me what level of detail is included in that chapter, that section 6.2 or that figure, would you?

A. That's correct.

Q. Would it be fair to say that your only knowledge of that particular finding is what is included here in the testimony and in the CAT inspection report and LILCO's response to the CAT report?

A. That would be a fair statement.

Q. Have you analyzed LILCO's response to this particular item?

A. When I was given this document to look at, the person that performed this CAT inspection, I feel was well qualified to perform that inspection or he wouldn't have been there. When he

quotes FSAR Chapter 6.2 and so on, it shows that he has familiarity with that. He made a statement that there was a criteria or a requirement violated there. And I accept that.

. . . . .

Q. Do you know whether it takes any interpretation to determine whether or not FSAR shows any spray nozzles blocked or not?

A. That was his problem, not mine. I can't answer that; I don't know.

. . . . .

Q. Have you reviewed the LILCO response to this finding?

A. Not as far as each individual one was concerned to go back and say yes, the finding was valid, no, it wasn't valid. No, I didn't. I just didn't do it. And to my knowledge, that information hasn't been requested.

Q. So then, your conclusions, your statement, that you agree with this particular portion of Mr. Hubbard's testimony is not based on a review of the LILCO response; it is just based on your assessment of the CAT inspection report.

Are you aware that LILCO's response indicates that various findings in the CAT inspection report were in fact no violations?

. . . . .

A. I am aware that in LILCO's response, they stated that they thought they weren't violations, but whether or not they were violations still has to be determined.

. . . . .

Q. Have you determined whether they are violations?

A. I haven't been asked to. .

Q. Do you feel you are qualified to?

A. Maybe that is why I haven't been asked. I don't know.

I would have to take these things one at a time, and then I would have to really go into this kind of a thing and do a lot of homework. I could do it. It might take some time, but I would do it.

Inskeep Tr. at 170, line 6, through page 175, line 5.

Mr. Inskeep has no feel for the scope of the CAT inspection, against which he could assess the significance of the findings:

Q. What is the population of observations that these findings came from?

A. I have no idea.

Q. You have no idea how many attributes the CAT inspection looked at?

A. I have no figures for that, no.

. . . . .

Q. Going back to a previous question I had, I gathered that you would not know, then, how many distinct attributes were looked at by the CAT team.

A. This is a very -- to answer your question, no. No, you wouldn't.



Q. Thank you. You don't know how many components are in that system?

A. No.

Q. You don't know how many valves are in that system?

A. I haven't done that kind of a study of it, no.

Q. You don't know how many miles of wire are in that system, do you?

A. No.

Inskeep Tr. at 182, line 2, through page 183, line 19.

Mr. Inskeep, in reviewing the inspection, made no attempt to evaluate LILCO's responses:

Q. On page 2 of Mr. Hubbard's prefiled testimony, that allegedly lists item (a) through (h), and I think characterizes them in the title as QA/QC breakdowns. Correct?

A. I believe so.

Q. Have you evaluated LILCO's response with respect to any of these items?

A. I read LILCO's response. I didn't evaluate it against each item in turn, no.

Q. Take a look at item (g) on that page if you could, please.

A. Okay.

Q. Have you done any assessment or analysis of the significance of that particular finding?

A. No.

Q. Do you know whether the vent and drain valve lines were supposed to have their caps in place at the time the CAT inspection was done?

A. No.

Q. Wouldn't that be important to know in drawing the conclusion as to whether this was a QA/QC breakdown?

A. It would be important to know if I wrote the item. I didn't write the item so I have to assume that the person that wrote this item was writing something that he observed and that in his estimation it was a discrepancy.

Inskeep Tr. at 190, line 18, through 191, line 20.

Mr. Inskeep again disclaimed even any interest in evaluating LILCO's response to CAT inspection findings:

Q. Mr. Inskeep, am I correct in assuming that if I asked you for each CAT finding response in LILCO's response to the CAT report, if I asked you whether you had evaluated that finding, the answer would be no; is that correct?

A. That's correct.

. . . .

Q. Mr. Inskeep, am I correct in assuming that your knowledge of the CAT inspection item discussed in Mr. Hubbard's testimony is limited to the CAT report that is -- the discussion of the CAT report contained in Mr. Hubbard's testimony and LILCO's response to that report and no other documents?

A. That's correct.

Q. And as you previously stated, you haven't evaluated LILCO's response to the CAT report?

A. That's correct.

Q. And is it also true that you have conducted no engineering evaluation or analysis of the significance of any of the findings, CAT findings, listed in Mr. Hubbard's testimony?

A. I don't think it is a position of a quality person to perform an engineering evaluation or an engineering analysis. It isn't that -- isn't their job.

Q. Is your answer to that question no?

A. The answer is no.

Q. If I asked you to explain each of the findings in the CAT report and how that finding relates to the function of the component, you would not be able to do that for any of the CAT inspection items, would you?

A. I wouldn't do it.

Q. Would you be able to do it?

A. I might in some instances, but I wouldn't.

Q. Do you have any instances in mind?

A. No.

Inskeep Tr. at 214, line 14, through page 216, line 14.

The preceding passages from Messrs. Bland and Inskeep's

depositions show that although Messrs. Bland and Inskeep are offered as "experts" on the CAT inspection, their knowledge is extremely limited. Their agreement to adopt the provision of the testimony, dealing with CAT inspections, is based solely on a review of the testimony and the CAT Inspection Report. Mr. Inskeep has not even analyzed LILCO's CAT response, while Mr. Bland wants to wait until the NRC responds to LILCO before reaching conclusions regarding it. Moreover, neither witness has any knowledge or understanding of the matters reported on in the inspection. Thus, the proposition that they can provide facts relating to the report borders on the illusive.

B. Review of Attachments to Mr. Hubbard's Testimony

During argument before the Board, the County represented the following:

Attachment 4 is the CAT inspection. I have addressed that already. Attachment 5 is the summary of the I&E violations, and as I indicated, these are violations that form the basis for Contention 12. Both of them have reviewed those I&E reports, and the summaries thereof.

Attachment 6 is the staff report of the President's Commission, and again, they both have very direct personal experience related to that. They have reviewed Attachments 7 and 8 and 9 and 10, and those relate to -- well, 7 relates to the utility assessment of LILCO. They both reviewed that, particularly from the whole QA point of view. And 8, 9, and 10 relate to the physical inspection aspect which I addressed earlier.

Messrs. Bland and Inskip made it clear, however, that their knowledge of the attachments to Mr. Hubbard's testimony was not what the County had represented.

1. Mr. Bland

As previously noted (p. 8 above), Mr. Bland admitted at the outset that he had not reviewed all of the attachments to Mr. Hubbard's testimony in determining whether to adopt it. The actual extent of his review is revealed more fully here:

Q. Which ones have you not reviewed?

A. By "review," I will indicate which ones I have read. It doesn't mean I have analyzed them completely. he had not

I have read one. I glanced at three. I reviewed four. I examined five. I didn't pay much attention to six. I have glanced at seven and scanned really, zipped through, eight, and read nine and ten. I have not read all the enclosures or attachments to those or references, I have not.

Q. I take it you distinguish between glancing and reading. You said some you read and glanced at.

A. If I glanced, I wanted to see what was in it. If I read, to see what the concept was. And if I reviewed it, I came back again to hopefully do better.

Q. So in glancing at something, you would not review it in the same way that you would review something to determine whether you agreed with the correctness or incorrectness of the statements in it?

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A. Yes, that's correct.

Bland Tr. at 125, line 7, through 126, line 3.

2. Mr. Inskeep

Mr. Inskeep had conducted no more of an in-depth review than Mr. Bland:

Q. With respect to Mr. Hubbard's testimony, would you say that you are very familiar with his testimony and attachments?

A. Familiar from the sense that I have read them. If I were asked to quote any one thing, I would have to go back and look at it because, again, it doesn't go into the computer. I read it, and I accepted it and so on.

Thus, the witnesses' familiarity with attachments they are prepared to swear to is superficial.

C. NRC Staff Review

In the County's motion to supplement, the County states that both Messrs. Bland and Inskeep have reviewed "the NRC inspection program for Shoreham." SC Motion at 2. The County also stated the following during argument before the Board:

Section 5 of Mr. Hubbard's testimony is that concerning the NRC staff review. Both Messrs. Inskeep and Bland would be prepared to address that, and they have particular views if inquired into regarding the Three Mile Island experience and what that indicates regarding the NRC Region 1 program. And if you look at Page 58 of the prefiled testimony, in fact, we footnoted an article by Mr. Inskeep about the Three Mile Island matter, and they worked on that

Commission task force which is quoted at Page 59, a portion of that. I believe, and don't hold me to this forever, that Mr. Bland in fact wrote those portions that are quoted there.

And so, in this NRC section, the particular area that they would be best able to supply views on is the President's Commission review, but there were on -- the Kemeny Commission report gives some reviews relating to that.

Tr. at 11,897, lines 6-22.

But Messrs. Bland's and Inskeep's limited knowledge of the NRC staff's review of Shoreham's QA/QC programs, as indicated in their depositions, leaves them unqualified to assess the NRC's program.

1. Mr. Bland

Mr. Bland sharply qualified his own familiarity with the basic substance of the NRC regulatory structure for QA:

Q. Are you familiar with or aware of any authoritative texts relating to quality assurance in the nuclear industry?

A. Other than the 10 CFR 50 documentation and all the stuff that supports it, reg guides, the ANSI documents, Standard Review Plan. I'm aware of that kind of material.

Q. Well, you indicated that you are aware of those. Are you also familiar with the Standard Review Plan?

A. I have read large globs of it.

Q. Are you also familiar with the reg guides pertaining to quality assurance or quality control?



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A. I have read a number of them.

. . . .

Q. Can you remember what their subjects were?

A. Well, they generally referred to plans and programs, special topics, but almost all of them had very little meat in them. They referred you to some other documents for the specifics. That's the thing I remember about them.

Q. Can you give me some examples of specific subjects within QA that are covered by the reg guides?

A. Quality Assurance Manual, I think, quality assurance definitions. There must be one for every other subject in the manual. One on conformance reporting, document control.

Q. Any others?

A. I'm sure there are others.

. . . .

Q. How many are there? How many reg guides are there approximately?

. . . .

In the QA area?

A. Well, if I remember, the numbering system would start like 1.1 or 01, something like that. I have seen numbers 1. over the 100. I don't know if that means they are all filled in or not.

. . . .

Q. You mentioned the Standard Review Plan that you had reviewed portions of that. What portions did you

review of the Standard Review Plan or are you familiar with?

A. Back at the time of Three Mile Island, I read quite a bit of it, probably thumbed through seventy percent of it. More recently, I have glanced at the beginning, introduction, and parts of the -- anything related to quality assurance.

Q. Parts of the Standard Review Plan relating to quality assurance?

A. Right.

Q. Reviewed it, you say, thoroughly at the time of your TMI involvement?

A. I didn't say thoroughly. I have reviewed it. I don't know what thoroughly means.

Q. Well, would you --

A. I reviewed it enough to obtain the information I needed. I'm no expert on Standard Review Plan.

Bland Tr. at 47, line 14, through page 51, line 3.

Mr. Bland displayed distinctly limited knowledge of the scope of NRC review of QA activities as related to Shoreham or other power plants. At the outset, the only source claimed by Mr. Bland for his knowledge of the NRC's review of GE and Stone & Webster QA programs was Mr. Hubbard's testimony:

Q. Well, the previous question I asked was any arm of the NRC. Let me ask it that way. Do you know whether any arm of the NRC has reviewed Stone and Webster's or General Electric's quality assurance program with respect to the construction phase of Shoreham?

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A. I don't believe they have.

Q. What is the basis of your belief?

A. I believe I have formed that basis from Mr. Hubbard's report.

Q. From his report?

A. From his testimony.

Q. You have made no independent --

A. I have not.

Q. -- investigation?

A. No.

Bland Tr. at 145, line 19, through 146, line 22.

He also indicated ignorance of basic aspects of the Commission's organizational structure and of their application to QA at Shoreham:

Q. Do you know what NRR stands for?

A. I did at one time. Let's see. The answer is no. I don't now today.

Q. Do you have any knowledge concerning I&E review of Shoreham construction QA?

A. As I said, no, sir.

Bland Tr. at 148, lines 4-9.

It also became clear that Mr. Bland's closest approach to an independent basis for adopting those portions of Mr. Hubbard's testimony characterizing the history of I&E

activity at Shoreham was Attachment 5 to that testimony -- a series of excerpts from I&E filings, itself prepared by Mr. Hubbard:

Q. Am I correct that the extent of your knowledge relating to the I&E findings in Attachment 5 is limited to what appears in Attachment 5?

A. No, sir.

Q. What else do you have knowledge of?

A. I believe I had seen -- it is possible I have seen some of the inspection reports from which these were excerpted.

. . . . .

Q. Would these be I&E reports from Region 4?

A. Not if it was what I am thinking of. It would be Region 1. I may not have recalled those in the earlier part of the testimony.

Q. Do you specifically recall that in your review of Attachment 5, in connection with adoption of Mr. Hubbard's testimony, that you relied on any information other than that contained in Attachment 5?

A. No, sir.

Q. So what you are relying on in terms of adopting Mr. Hubbard's testimony is what is in Attachment 5?

. . . . .

A. When I reviewed the material in Mr. Hubbard's testimony, I used the

material in Attachment 5. Now, I have looked at those materials several times, but when I reviewed it and looked at numbers and things, I used this material. Sometime subsequent to that, and I can't tell you when, I don't know, I may have read an I&E Region 1 report on Shoreham that may have been, you know, from which these were excerpted from. I feel that way; I just can't put my finger on it.

Q. You think that may have been, but in terms of your adopting Mr. Hubbard's testimony, you are relying only on the information contained in Attachment 5; is that correct?

A. Yes, sir.

Bland Tr. at 245, line 13, through page 247, line 14.

Mr. Bland also demonstrated his unfamiliarity with the mechanics of the NRC's QA review process:

Q. Also on page 56 [of Mr. Hubbard's testimony], there is a reference to -- on the last sentence in the paragraph that ends immediately before the new section, which says, "The few times that the [NRC] program has examined how LILCO actually implemented QA such as the CAT inspection." Do you see that?

A. Yes, sir.

Q. Do you know how many times the program has examined LILCO's actual implementation of QA?

A. In studying the CAT report, it appeared to be the first time that I&E had done that kind of inspection.

Q. What do you mean by "that kind of inspection?"

A. Where they go in and inspect a plant through FSAR, a segment of the plant, where all of the work was supposed to have been completed, finished, ready for inspection.

Q. Do you know how many times I&E has inspected Shoreham during the construction process?

A. You can count how many inspection reports they made.

Q. Do you know how many?

A. No, sir. I haven't tried to count them.

. . . .

Q. In fact, you don't even have them, do you?

A. No, sir. Correct, sir. I may have some. When we talked about it earlier, I may have some inspection reports, I&E inspection.

Q. Do you know how often I&E goes to Shoreham?

A. No, sir.

Q. Do you know whether there is anybody from I&E who is in residence at Shoreham?

A. There is something I have read, or been told, that there is a resident inspector there, principally as a result of Three Mile Island.

Q. Do you know how long he has been there?

A. No, sir.

Bland Tr. at 250, line 14, through page 252, line 5.

Q. There is a statement on page 56 [of Mr. Hubbard's testimony], and I quote:

"Thus at Shoreham, as noted previously, the I&E effort has been too limited to permit I&E from reaching an informed conclusion that LILCO has complied with Appendix B."

Other than what Mr. Hubbard has in his testimony, are you able to point to anything that, in your opinion, would lend basis to that conclusion?

A. Only what's in the testimony.

Q. I believe that you were questioned by Mr. Ellis regarding the so-called SALP report. Perhaps you weren't. Do you know what the so-called SALP Report is?

A. I'm aware of it, yes.

Q. Systematic Analysis on Licensee Performance?

A. I've heard of it, and I think I have read a copy.

Q. For Shoreham?

So you have read a copy. Are you referring to the SALP Report for Shoreham?

A. No.

Q. Is it your testimony then that you are not familiar with the NRC Staff's SALP Report for Shoreham?

A. I must have it. I must be confusing it with another report.

. . . .



Q. So it's your testimony that you have not reviewed the NRC Staff SALP Reports for Shoreham?

A. From your description of that report, I don't know the identifiers of these reports. It's very difficult to sort one from another.

Q. Do you know what a SALP report would look like for plants such as Shoreham?

A. I thought I did. I must have the acronym referring to something else. I have not seen a report specifically on the performance at Shoreham.

Q. Are you familiar with the NRC Staff's NDT or nondestructive testing?

A. No, sir.

Q. I take it you're not able to state whether or not that van includes a site visit to Shoreham? If that's confusing, let me rephrase it.

A. No. Let me correct. I had heard somewhere about the van. I didn't understand the word "van" when you said it. I did not know that they had been to Shoreham.

Q. Your answer is you have heard of such a van, but you are unable to state whether or not it has been to Shoreham?

A. I don't have any knowledge whether it has been, ever.

Bland Tr. at 338, line 22, through page 341, line 8.

In short, Mr. Bland displayed a basic ignorance of the fundamental structure and mechanics of the NRC's QA review process.

2. Mr. Inskeep

Mr. Inskeep was similarly uninformed about the NRC's QA program at Shoreham, as illustrated by the following passage covering a variety of topics:

Q. Turn, if you would, Mr. Inskeep, to page 12 of Mr. Hubbard's testimony. There, in the first paragraph of the text, it says that the Staff's SER is totally devoid of analysis conclusions concerning the compliance of the design, construction, or installation of QA/ QC activities.

Do you know what the SER is?

A. Oh, just off the top of my head, I can't think of what those initials are.

Q. If I told you it is the Staff Safety Evaluation Report --

A. I would say that that is --

Q. Are you familiar with the Safety Evaluation Report for Shoreham?

A. That is the NRC Safety Evaluation Report; is that correct?

Q. Yes, sir.

A. I don't believe I have ever read it.

Q. So then, you don't know of your own knowledge whether it is totally devoid of analysis referred to in that sentence?

A. No. I accept Mr. Hubbard's statement there.

Q. Do you know whether any part of the NRC Staff has reviewed the QA/QC program for Shoreham's construction?

. . . .

A. No.

Q. Do you know whether Shoreham's construction QA/QC program was ever approved by an Atomic Safety and Licensing Board?

A. No. I have no idea.

Q. I take it that it is fair to say that the paragraph at the bottom of page 12, you have no independent knowledge of the facts stated therein other than that you believe in what Mr. Hubbard says.

A. That's correct.

Q. Are you familiar with the General Electric or Stone and Webster topical reports on quality assurance?

A. I have never read them.

. . . .

Q. You don't know whether the NRC has reviewed and approved the topical reports for Stone and Webster or General Electric?

A. I do not.

Q. Mr. Inskeep, on page 14 of Mr. Hubbard's testimony, the top of the page, he mentions the NRC's defense-in-depth approach. Would you please explain to me your understanding of the defense-indepth approach?

A. I don't really -- defense-in is a kind of a -- I don't really understand what really is meant there. But I know that the NRC does have emphasis upon the QA/QC and design-construction operation in the power plant. And I agree that this is what they do.

Defense-in-depth is -- I really couldn't explain that adequately. I would have to do a little research into that.

Q. So other than your feeling that QA/QC is an important part of design, construction, and operation of a nuclear power plant, you don't know how it fits into the defense-in-depth approach?

A. Not without a little research to go back and do some more reading.

Inskeep Tr. at 151, line 14, through page 155, line 9.

Nor has he attempted to understand in any detail Mr. Hubbard's assertions regarding LILCO's noncompliances with QA regulatory requirements.

Q. In that same sentence that we have been discussing [at page 17 of Mr. Hubbard's testimony], he also mentions that there have been non-compliances with NRC regulatory requirements. It says that they have not been identified and corrected. Can you tell me what non-compliances with regulatory requirements haven't been identified and corrected?

A. No because I can't read his mind. I don't know which ones he had in mind when he wrote that.

Q. What is your understanding of that testimony?

A. That there were non-compliances and that they didn't identify and correct them.

Q. Can you enumerate the ones in your mind that exist?

A. In particular, no. Like I said,  
I can't read his mind.

Inskeep Tr. at 159, line 17, through page 160, line 9.

Thus, contrary to the County's assertions, its new QA/QC witnesses are not qualified to comment on the nature and extent of the Staff review. Their lack of familiarity with such basic information as the SER and the I&E program for Shoreham indicates they have nothing relevant to add to the hearings on QA/QC.

D. Review of LILCO's QA Program

In the County's motion to supplement, the County represents that Mr. Bland has reviewed LILCO's engineering assurance audits and LILCO's OQA program, and that Mr. Inskeep has reviewed LILCO's field quality control audits and LILCO's OQA program. SC Motion at 2. In argument before the Board, the County added the following:

Turning to Section 6 of the prefilled testimony about the operational QA program, both gentlemen have reviewed or maybe I should say are in the process of reviewing LILCO's whole QA program, and have views relating to that.

Tr. at 11,897, line 23, through 11,898, line 2.

But both witnesses lacked knowledge of basic elements of the LILCO QA and related programs.

1. Mr. Bland

Mr. Bland revealed his unawareness of each of several basic aspects of LILCO's QA program starting with its audit program:

Q. Have you reviewed the LILCO audit program, program for conducting audits, QA for LILCO?

A. No, sir.

Q. So you would be unable to tell me whether the program for LILCO QA audits is adequate or defective in any particular ways?

A. I think that is a fair statement.

Bland Tr. at 235, lines 14-20.

Next, as-built verification:

Q. And I think you indicated you weren't aware of or familiar with any as built verification program or inspection to verify conformance with drawings [at Shoreham]?

. . . . .

A. Yes, sir. I know of some plans, but I don't have any, I don't think I said -- maybe we'd better run through that again.

Q. All right. I thought your earlier testimony was you were not aware of our familiarity with any as built verification programs or inspections or tests that have or are being conducted to verify conformance with drawings at Shoreham.

A. And that is correct. I am aware of some that are being contemplated or in process, but I don't know any.

Bland Tr. at 192, line 10, through page 193, line 6.

Next, the start-up program:

Q. Are you familiar with the start-up program?

A. I have heard of it.

Q. Are you familiar with it? I have heard of the Apollo program, but I'm not sure that I am as familiar with it as you are.

A. In that context, I am not familiar with it.

Bland Tr. at 207, lines 17-22.

Next, the LILCO construction QA organization and its functioning:

Q. All right. Have you made any study or investigation to determine what size the QA staff should be for a construction project during the construction phase of Shoreham?

A. No, sir.

A. All right. So we are agreed that inspecting the work during the construction phase is an activity that you would say falls under the -- within the category of "construction QA/QC activity;" is that right?

A. I would expect it to.

Q. And you don't know, do you, whether LILCO performed that function or not?



A. No, sir.

. . . .

Q. Do you know whether LILCO performed this activity during the construction phase of inspection activity?

A. No, sir.

Q. Would another "QA/QC construction" or construction QA/QC activity being auditing of the work going on at Shoreham, construction work going on?

. . . .

A. Yes. I would expect it to be audited.

Q. And do you know whether LILCO personnel performed any of that during the construction phase of Shoreham?

A. No, sir, I don't know.

Q. Would another QA or construction QA/QC activity include inspection of components or materials that arrive on the site?

A. I think I understand what you are asking. Yes, another inspection activity or inspection activity from somewhere for LILCO would normally be expected to inspect incoming material and components.

Q. Do you know whether LILCO personnel performed any of these inspections?

A. No, sir.

Q. It would be fair to say, wouldn't it, that you would need to know the extent to which LILCO personnel performed these construction QA/QC

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activities before you could make a decisions or reach a judgment as to whether any substantial construction QA/QC activities were performed by LILCO?

. . . .

A. Yes, I'd have to know what they did.

Bland Tr. at 259, line 9, through page 262, line 1.

The LILCO Operational Quality Assurance (OQA) program:

Q. [A]m I correct that your familiarity with the LILCO operations QA/QC program is based upon what is stated in Mr. Hubbard's testimony on that subject, and the manual -- that is the OQA manual -- which is an attachment to the LILCO testimony; is that right?

A. Yes. That, plus I have read portions of some of the procedures. I don't recall names of them right now, but I have read some of them, looked through them. Of course, I have read part of what is in the FSAR, went back to Appendix B.

Q. So that is part of the 17.2 in the FSAR; is that correct?

A. Yes, sir.

Q. And Mr. Hubbard's testimony, and did you also review the LILCO manual?

A. I wouldn't say I have reviewed it, but I have read parts of it. But I have not been through it all.

Q. Would you say you have been through roughly half of it?

A. Approximately.

. . . .

Q. I think you indicated that you believe the OQA program has been implemented based on the dates on the manual, but you don't know what functions or tasks it is performing. I take it, then, you are not in a position to make any judgments as to whether, as implemented, the LILCO OQA program is adequate.

. . . .

A. I believe you can make a judgment before it is implemented.

Q. And have you done that? Have you made an assessment of the LILCO OQA program, as reflected in the documents of the FSAR, the OQA manual and the procedures?

A. No.

Bland Tr. at 265, line 14, through 268, line 18.

Similarly with respect to the LILCO special processes control program:

Q. Have you reviewed the LILCO program control special processes?

A. I don't believe I have, sir.

Q. I take it then you cannot tell me in what respects the LILCO program for controlling special process is deficient in any way, and how it might be fixed?

A. Not specifically, sir.

Bland Tr. at 286, lines 8-13.

Similarly, with respect to QA staffing qualifications:

Q. On page 77, there is a reference to limited staffing and qualifications of LILCO's operating QA/QC staff.

Have you made any review or study of the qualifications of LILCO's operating QA/QC staff?

A. No, sir.

. . . .

Q. You don't have any information concerning qualifications of the LILCO operating QA/QC staff?

A. No, sir.

Bland Tr. at 292, lines 5-9, through 293, lines 7-9.

Q. In order to make some judgment or assessment about the number of people that should be on an OQA staff, I take it you would have to have some substantial familiarity with operating nuclear power plants. Is that correct?

A. That would help.

Q. And you don't have that, do you?

A. No, sir. You'd need other things.

Q. What else would you need?

A. You'd need to know functions, the scope of the work, what you expected them to do, the management arrangement, the organizational management arrangement, and you'd have to know the capabilities of the people on the staff.

Q. And you haven't assessed all of those factors, have you?

A. Of course not, sir.

Bland Tr. at 294, line 19, through 295, line 11.

Similarly, with respect to the scope of authority of QA personnel and organizations:

Q. Back to the beginning where you read [from Appendix B, Criterion 1]:

"Persons and organizations performing quality assurance functions shall have . . . authority . . . ."

Do you see that?

A. Yes, sir.

Q. The persons there are the quality assurance managers and persons in the quality assurance department? Is that right?

A. That's what I understand.

Q. Do you know -- Have you made any assessment or do you know what their authority is?

A. No, sir.

Q. So you don't know whether it's sufficient or insufficient, do you?

A. No, sir.

Bland Tr. at 297, line 11, through 298, line 5.

Similarly, with respect to replacement parts and materials:

Q. Have you reviewed the portion of the LILCO Operating QA/QC Manual relating to replacement parts and materials, or is that one of the portions you haven't reviewed yet.

A. I think I have glanced at that one but I don't remember much in the way of detail.

Q. You didn't reach any conclusion or judgments concerning whether it was adequate or not, did you?

A. No.

Q. And you can't tell me now whether it's adequate or inadequate?

A. That's right.

Bland Tr. at 302, line 13, through page 303, line 1.

2. Mr. Inskeep

Mr. Inskeep was also unfamiliar with the LILCO QA program, as the following brief passages illustrate:

Q. Do you recall reviewing Chapter 17 of the FSAR?

A. No, I wouldn't.

Q. The chapter that deals with quality assurance.

A. Oh, I'm sure I did.

Q. But you don't recall?

A. No. I would have to look at it. If I looked at it and read it, I would say, yes I have read that. But numbers and that, they don't compute.

Inskeep Tr. at 126, lines 2-9.

Again:

Q. So where Mr. Hubbard says, "Thus, the NRC QA/QC regulations have been in place for nearly three years at the time construction activities for

safety features were authorized for Shoreham," you don't know whether that is true or not; you just assume Mr. Hubbard is correct?

A. I don't know what they mean by the statement; I really don't. I don't know who they are talking about.

Inskeep Tr. at 141, line 19 through 142, line 3.

Again:

Q. Do you know whether [workmanship standards] exist [for Shoreham]?

A. I have no idea. If they exist, they should be called out.

Inskeep Tr. at 48, lines 17-19.

Again:

Q. Do you know whether there is any program at Shoreham that would look at whether the as-built configuration of the plant was in conformance with the FSAR?

A. No, I don't.

Inskeep Tr. at 188, lines 6-9.

Mr. Bland does not have the requisite knowledge of the subject, scope, procedures, organization, or staff qualifications of Shoreham's QA programs to testify as an expert on their adequacy, although he agrees that those issues should be considered in reviewing a QA program. Bland Tr. at 295, lines 5-11 (quoted above ). And although Mr. Inskeep's deposition adjourned, at Suffolk County's instance, before questioning could be completed, he also demonstrated that he was far from



adequately knowledgeable to be considered an expert on Shoreham's QA programs.

E. Full Physical Inspection

In argument before the Board, the County stated the following:

Finally, Section 7 [of Mr. Hubbard's testimony], the need for a complete physical inspection, as I indicated in earlier comments, these gentlemen were initially retained by the County for the purpose of assisting in a physical inspection effort, and thus have views on what should be in a physical inspection and on the need for -- Mr. Bland particularly has views relating to the design oriented portions of a physical inspection program, while Mr. Inskeep more on the construction aspects.

Tr. at 11,898, lines 3-11.

In his deposition, however, Mr. Bland admitted that his knowledge regarding a physical inspection was limited:

Q. Have you ever had any experience concerning independent design reviews of nuclear power plants?

A. No actual experience, no.

Q. I am puzzled by your use of the word "actual."

A. I have thought of how some may be done.

Q. In connection with this particular retention, your consulting with Suffolk County?

A. No.

Q. Have you ever had occasion to be retained prior to this retention to consider independent design reviews of nuclear power plants?

A. No.

Bland Tr. at 55, lines 5-16.

Again:

Q. Have you developed or participated in developing independent design and construction verification programs for Shoreham?

A. No.

Q. I take it you haven't done it for any particular power plant, have you?

A. Like I mentioned earlier -- I think it is related to this statement -- I have had some thoughts on how to go about having the Company do its own design review. That is the closest I have come.

Bland Tr. at 128, line 22, through 129, line 9.

The County indicated Mr. Inskeep focused on construction aspects of a full physical inspection. Yet his knowledge of construction of major industrial facilities is limited, as illustrated by the following excerpts from his deposition. Indeed, he admitted that he was not qualified to discuss physical inspections.

Q. You mentioned that one of the things you did for the TMI-2 Task force was a walk-through of the plants. I take it that was the TMI-1 plant and portions of the TMI-2 plant.

!

A. That's right.

Q. Have you ever walked through any other nuclear plant?

A. No.

Q. So then, you have never walked through a nuclear plant under construction?

A. No.

Q. Have you ever designed or been involved in the construction of a nuclear or fossil electric generating plant?

A. No.

Q. Have you ever been involved in the construction of any industrial facility or building?

A. I was involved in the construction of the deep space antenna at Goldstone, California. This is a structure that is -- the antenna itself is 210 feet in diameter. The concrete structure rests on bedrock. And to give you some idea of the size and weight of this thing, the bull ring on the antenna that supports the rotatable part of the antenna is stressed for forty million pounds, and the steel construction, the concrete construction and all that, has to be the highest caliber.

Q. I am trying to understand the scope and magnitude of the project. Did this antenna have a control building --

A. Yes.

Q. -- associated with it?

And were you involved in that construction?

A. I was involved not so much in the construction of that building, but in the equipment that went into that building.

Inskeep Tr. at 65, line 14, through 66, line 3.

Indeed, Mr. Inskeep disavowed that he had sufficient qualifications to structure a design or construction verification program for Shoreham:

Q. [Where Mr. Hubbard states in his testimony] . . . that the breakdowns demonstrate the need for independent design and construction verification programs at these facilities and at Shoreham, you have no personal or independent knowledge of whether that is a fact or not?

A. I can make no comment about any other place besides Shoreham. I feel that there are a number of questions about Shoreham that should be answered.

. . . .

Q. What would be the scope of that design and construction verification program?

A. I don't think I am qualified to answer that. I think that that is something that would have to be answered by someone besides myself. I could tell you whether or not the inspection program that went along with that verification was adequate, but I am not going to state what the program should be.

Inskeep Tr. at 135, line 18, through page 136, line 20.

Thus, contrary to the County's representation, Messrs.

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A. I was involved not so much in the construction of that building, but in the equipment that went into that building.

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Inskeep Tr. at 135, line 18, through page 136, line 20.

Thus, contrary to the County's representation, Messrs.

Bland and Inskip are not qualified to address the issue of a physical inspection, and have no views to offer regarding a physical inspection that would be worthy of the weight customarily given expert testimony.

### III.

Messrs. Bland and Inskip Are Not Experienced  
in Quality Assurance/Quality Control  
Matters as They Relate to the Nuclear Industry

The County stated during argument before the Board on the motion to supplement that:

[i]n terms of qualifications, both gentlemen have, aside from -- let me address their general QA background -- both have had years of experience in the aerospace related industry, which I am informed is probably the closest parallel to the disciplined kind of QA requirements which are required in the nuclear power plant field since 1979.

Tr. at 11,900, lines 9-15 (Mr. Lanpher). The depositions of Messrs. Bland and Inskip show that their aerospace-industry experience loses much in translation into QA/QC expertise for nuclear power plants. Further, as will also be apparent from the excerpts included below, they have done very little to become knowledgeable on the QA standards and QA programs in the nuclear industry so that they can fruitfully apply what QA knowledge they have.

Mr. Bland demonstrates, in the following passages, that he is not familiar with the details of regulatory guides or the Standard Review Plan; that he has had no formal QA or nuclear engineering training; and that he is not an expert in the nuclear power industry:

Q. Prior to your involvement with the TMI Commission in 1979, had you had any prior experience or work with the requirements of 10 CFR 50, Appendix B?

A. No. Not that I recall.

Bland Tr. at 38, lines 9-12.

Again:

Q. Up to the present time, including your TMI involvement, have you ever conducted an audit or review of a nuclear power plant under construction?

. . . .

A. No.

Bland Tr. at 43, lines 4-11.

Again:

Q. Have you had any formal training in connection with nuclear engineering?

A. No.

Q. Have you had any formal training -- by that, I mean other than on the job, relating to QA/QC matters?

A. No.

Q. Are you familiar with or aware of any authoritative texts relating to quality assurance in the nuclear industry?



A. Other than the 10 CFR 50 documentation and all the stuff that supports it, reg guides, the ANSI documents, Standard Review Plan. I'm aware of that kind of material.

. . . . .

Q. Are you also familiar with the reg guides pertaining to quality assurance or quality control?

A. I have read a number of them.

Q. Can you remember their designations?

A. No, sir.

. . . . .

Q. Can you remember what their subjects were?

A. Well, they generally referred to plans and programs, special topics, but almost all of them had very little meat in them. They referred you to some other documents for the specifics. That's the thing I remember about them.

Q. Can you give me some examples of specific subjects within QA that are covered by the reg guides?

A. Quality Assurance Manual, I think, quality assurance definitions. There must be one for every other subject in the manual. One on conformance reporting, document control.

Q. Any others?

A. I'm sure there are others.

. . . . .

Q. How many are there? How many reg guides are there approximately?

. . . .

Q. In the QA area.

A. Well, if I remember, the numbering system would start like 1.1 or 01, something like that. I have seen numbers 1. over the 100. I don't know if that means they are all filled in or not.

Q. Well, of the ones that you have looked at, approximately how many?

A. I have probably looked at probably half a dozen to a dozen, somewhere in that range.

Q. You mentioned the Standard Review Plan that you had reviewed portions of that. What portions did you review of the Standard Review Plan or are you familiar with?

A. Back at the time of Three Mile Island, I read quite a bit of it, probably thumbed through seventy percent of it. More recently, I have glanced at the beginning, introduction, and parts of the -- anything related to quality assurance.

. . . .

Q. Reviewed it, you say, thoroughly at the time of your TMI involvement?

A. I didn't say thoroughly. I have reviewed it. I don't know what thoroughly means. . . . I reviewed it enough to obtain the information I needed. I'm no expert on Standard Review Plan.

Q. You say that you are not an expert on Standard Review Plan. Are you an expert on nuclear industry QA/QC?

A. I guess I really don't know what an expert is.

Q. You used the term. You don't have an understanding of what it means?

A. No. I guess I just used it loosely.

Q. Well, using it loosely in the sense that you intended it, are you an expert on nuclear industry QA/QC?

A. Well, like I say, I don't really know what an expert is. It is difficult to answer your question. I have got some qualifications in the field of quality assurance.

Q. You would consider yourself an expert in the aerospace industry, wouldn't you, Mr. Bland?

A. I don't really know what the word "expert" means. I don't like the word. I'm sorry I used it.

. . . .

Q. Mr. Bland, earlier, we had some discussion concerning the use of the term "expert." Would you regard yourself as very skillful in having substantial training and knowledge in the field of aerospace engineering?

A. I think I am experienced and qualified in certain aspects of engineering and assurance functions in aerospace . . . aerospace engineering has been the principal focus in the last fifteen, twenty, years. I guess aerospace, aerospace-aerodynamics before that.

Q. And your exposure to the nuclear [power] industry began with your appointment to the TMI matter, TMI commission?

. . . .

A. Oh. The answer is yes.

Q. Now, if the definition of expert is someone who has much skill and substantial training and knowledge in the nuclear power industry, if that is the definition of an expert in the nuclear power industry -- . . . . Are you an expert as I have defined it in the nuclear power industry?

A. No, sir.

Bland Tr. at 47, line 8, through 51, line 19; 83, line 16, through 85, line 4.

Mr. Inskeep's deposition, though prematurely terminated, also indicates he does not have the knowledge or expertise to discuss the particulars of quality assurance/quality control at nuclear power plants. He has no formal training in nuclear engineering (Inskeep Tr. at 88, line 20 - 89 line 1); indeed, this first and, before Shoreham, sole contact with the nuclear industry was in the extraordinary circumstances of the Kemeny Commission, prior to which his primary experience lay in the aerospace industry:

Q. Had you had any experience with the nuclear industry prior to July third, 1979?

A. I wasn't sent back to TMI for any other reason than the experience I had in quality assurance. Quality assurance is a discipline that stands by itself. You don't have to be an aircraft engineer to become a quality engineer in the aircraft industry. You don't have to -- my feeling -- don't have to be a nuclear engineer to become a quality engineer in the nuclear industry.

And I will say that for any.

Some experience in the field would be of assistance, but as far as investigating quality systems, quality programs, I feel that any experienced quality engineer could fill the bill.

Q. So you feel your qualifications allow you to investigate quality systems and programs no matter what discipline they fall in?

A. During the seventeen years that I worked for JPL, one of the main tasks that I had was to investigate quality systems, quality programs, for companies that were engaged in building hardware for the Jet Propulsion Laboratory. In many cases, these were multimillion dollar contracts that I was responsible for from prior to the award of contract to delivery of hardware to the network. And this covered a variety of hardware that went from computers to emergency power generation systems to antennas to radio communication equipment, just a great broad gamut of hardware, in an atmosphere technically more complex than the nuclear industry, and certainly as far as quality assurance and quality control was concerned, a much more stringent requirement than the nuclear industry has.

Q. So I take it, then, you did not have any nuclear industry experience prior to the TMI investigation.

A. That's correct.

Q. And other than this case, have you had any nuclear industry experience since that participation on the TMI Task Force?

A. The answer is no.

Inskeep Tr. at 21, line 15, through 23, line 8.

Even as a member of the Kemeny Commission, he did not review the QA program for construction of TMI:

Q. And you didn't review the implementation of the QA program for construction . . . for Metropolitan Edison?

A. No.

Inskeep Tr. at 92, lines 8-11.

And, while Mr. Inskeep's conclusion that quality assurance programs in the aerospace industry are superior to those in the nuclear industry (or at least to TMI and Shoreham) is adamant, he is unable to point to any specific inferior QA requirement or precept used in the nuclear industry to give credibility to those conclusions:

Q. Your conclusion that the aerospace industry QA programs are better run than the nuclear industry is just based on your knowledge of TMI for your investigation; is that correct?

A. I can't say that, no. I have spent August, September, and most of October now reviewing documentation, inspection reports, audit reports, testimony, reams of paperwork involving Shoreham. And I don't feel that -- I don't feel that that place, qualitywise, is run the way it should be run.

Q. So your conclusion, then, is just based on a review of Three Mile Island and Shoreham?



A. That's correct.

Q. No other nuclear plants?

A. And my experience in the past.

Q. What experience is that that you are referring to?

A. I have been in the quality business for thirty-four years. I have seen quality rise out of the ashes and attain the pinnacle that it has today in some industries, in some places. And I know the reasons that a lot of the failures took place because of lacks of the various things.

And this all builds up to experience. You base your findings on past experience. If a certain thing has proven true for the majority of times you have seen that happen, then you can pretty well bank that it is going to cause the same thing to happen again.

. . . .

Q. Earlier in discussing your comparison, your conclusions, with respect to the nuclear industry and the aerospace industry, you stated that you thought that the requirements in the nuclear industry were less stringent. What requirements were you referring to in the nuclear industry?

A. Well, let me say this: That I am not a nuclear person. I am not a nuclear engineer. I don't pretend to be. I am a quality man.

Just in walking through a nuclear plant, the requirements there are less than they are in the majority of manufacturing plants in the United States. For example, in walking through TMI, going through their auxiliary



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building, the requirements for that building are much less than they are in the refinery industry. I have been through both. And there is no comparison.

Inskeep Tr. at 27, line 3, through page 32, line 2.

Mr. Inskeep's admiration for the refining industry, indeed, seems based more on cosmetics than on the substance or observance of specific (or even general) technical QA procedures or other QA requirements:

Q. Are you familiar with the quality systems requirements for the refinery industry?

A. They have to be awfully good because they are awfully good.

Q. Are you familiar with them?

A. No, I am not. But you base your observation on -- you have to make certain assumptions when you are going through places. If a place is very well kept, it has all the necessary ingredients, for example, for piping -- well, say just for piping. If all the pipes in that plant are identified as to what is in them, direction of flow, valves are all identified, everything is identified where you can just glance at it, you know that the requirements for that are there or they wouldn't be there, those indications wouldn't be there.

The requirements are there. So the requirements then are good, the place is clean. The requirement has to be there or they wouldn't keep it clean.

I go into a place where those requirements aren't there, you don't find those kind of things. The place is

dirty. There is graffiti all over the walls, and there isn't that feeling of quality that gives you a good, down-to-earth, feeling that the quality is there.

So the requirement is not there. You can tell that. It is something that when you walk through plants, and if you have walked through as many plants as I have -- and it has been hundreds -- where you have to make a decision right now is this the kind of a place where I want my company to spend \$100 million in -- you have to make that kind of a decision in that kind of an assumption.

Inskeep Tr. at 33, line 12, through 34, line 19.

Indeed, Mr. Inskeep appears unfamiliar with the substance or purpose of basic QA/QC standards for the industry of which he is prepared, apparently, to be so critical in testimony:

Q. Earlier, you made a comparison between the nuclear industry and the aerospace industry, the quality standards applied. Were the conclusions you stated based in any part on your knowledge of the ASME codes?

A. No.

Q. You also mentioned as a code in the nuclear industry the ANSI standards. Are you familiar with any ANSI standards?

A. I have read a few of them.

Q. Do you recall which ones?

A. Not offhand, no.

Q. Do you recall the subject matter areas of any of the ANSI standards?

A. Not offhand.

. . . .

Q. Would it be a fair characterization, Mr. Inskip, of your testimony that you have looked at some of these standards, the ASME codes, ANSI standards, IEEE standards, and you mentioned other nuclear standards, but that you are not familiar with the details of any of those standards?

A. That's right.

Inskip Tr. at 55, line 11, through 56, line 2, 57, line 18, through 58, line 1.

Mr. Inskip has no firsthand familiarity with the physical appearance of any nuclear power plant other than TMI, nor any experience with the design or construction of any power plant, either nuclear or fossil:

Q. You mentioned that one of the things you did for the TMI-2 Task Force was a walk-through of the plants. I take it that was the TMI-1 plant and portions of the TMI-2 plant.

A. That's right.

Q. Have you ever walked through any other nuclear plant?

A. No.

Q. So then, you have never walked through a nuclear plant under construction?

A. No.

Q. Have you ever designed or been involved in the construction of a nuclear or fossil electric generating plant?

A. No.

Inskeep Tr. at 65, lines 3-17.

#### IV.

##### Conclusion

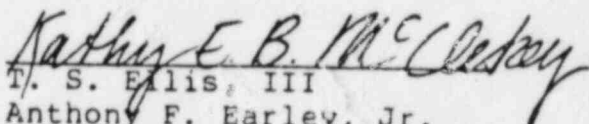
The depositions of Messrs. Bland and Inskeep illustrate their fundamental unfamiliarity with quality assurance for the nuclear power industry and their lack of qualifications to give expert testimony on QA/QC related to Shoreham. These witnesses are not familiar with many facts relied upon in Mr. Hubbard's testimony and therefore are unable to support the conclusions based on those facts. Nor have they the independent bases of relevant experience necessary to corroborate factual assertions or place them into perspective. And these witnesses have in many cases made no effort to determine whether the facts asserted in Mr. Hubbard's testimony are true and correct, or to analyze the facts as stated to determine whether the facts support the conclusions reached. They merely assumed that the testimony was correct. As a result, they cannot be said to be capable of adopting Mr. Hubbard's testimony in any meaningful sense of that word.

Further, Messrs. Bland and Inskeep can add nothing to Mr. Hubbard's knowledge of QA matters at Shoreham. Thus, they cannot fulfill the role envisioned for them by the Board when it permitted the County to supplement its QA panel. Moreover, their depositions demonstrate that they are not experts in nuclear industry quality assurance matters; that they are not experts in LILCO's QA program and that they are not experts in the NRC's quality assurance activity related to Shoreham. In short, they are not experts on the matters for which the Board admitted them to the County's QA panel.

For the reasons stated, LILCO respectfully requests that the Board reconsider and deny Suffolk County's motion to supplement its QA witness panel, or, alternatively, that the Board strike Messrs. Bland and Inskeep from the County's QA panel.

Respectfully submitted,

LONG ISLAND LIGHTING COMPANY

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DATED: November 3, 1982

CERTIFICATE OF SERVICE

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

I hereby certify that copies of MOTION TO STRIKE OR FOR RECONSIDERATION WITH RESPECT TO SUFFOLK COUNTY'S SUPPLEMENTING ITS QA WITNESS PANEL were served upon the following by first-class mail, postage prepaid, by Federal Express (as indicated by an asterisk), or by hand (as indicated by two asterisks):

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