UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

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

SUFFOLK COUNTY OPPOSITION TO LILCO
MOTION TO ADMIT INTO EVIDENCE
PORTIONS OF BUDNITZ DEPOSITION

On January 6, 1983, LILCO filed a "Motion to Admit Portions of Deposition of Robert J. Budnitz as Evidence." LILCO wants the designated portions admitted as evidence on Contention 7B. Suffolk County hereby opposes LILCO's Motion on the following grounds:

1. Federal Rule 32(a)(3)(B) does not provide a basis for granting the Motion.

2. The Motion is grossly out-of-time and LILCO provides no justification for its late filing.

3. The portions of Dr. Budnitz's deposition that are the subject of LILCO's Motion are taken out of context. In fact, his deposition testimony does not address the matters in dispute in the 7B Contention, and therefore is neither relevant nor probative.

Each of the grounds is addressed below.

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I. Federal Rule 32(a)(3)(B) Provides No Basis for Granting LILCO's Motion

LILCO relies on Rule 32(a)(3)(B) of the Federal Rules of Civil Procedure as its basis for admission of the Budnitz deposition extracts into evidence.1/ That Rule provides for use of a deposition as evidence when the deponent "is at a greater distance than 100 miles from the place of trial or hearing, or is out of the United States, unless it appears that the absence of the witness was procured by the party offering the deposition ...."

Clearly, Rule 32(a)(3)(B), and indeed all of Rule 32(a)(3),2/ focuses on use of a deposition where the witness is unavailable and cannot be brought to testify before the court. Subpart B, relied upon by LILCO, concerns witnesses beyond a court's subpoena power. Since a district court's

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1/ LILCO notes that the NRC rules do not address admission of depositions into evidence but suggests that under NRC practice, it is appropriate to rely upon available guidance from the Federal Rules. LILCO Motion, p. 1, fn. 1. The County agrees with such reliance on the Federal Rules, provided they are interpreted in a manner consistent with NRC practice. LILCO has failed to do so in this instance.

2/ Rule 32(a)(3)(A) concerns a witness who is absent because he is dead; subpart C concerns witnesses unable to attend because of "age, illness, infirmity, or imprisonment;" Subpart D concerns a witness within the court's subpoena power but who has evaded service or has been served but refuses to come and has left the court's jurisdiction (4A Moore's Federal Practice ¶ 32.05, at 32-29 (1982)); Subpart E concerns exceptional circumstances (id., at 32-30 & 31) which are not suggested at all in LILCO's Motion.

subpoena power generally is 100 miles, a 100 mile limit is specified in the Rule. 4A Moore's Federal Practice, ¶ 32.05, at pp. 32-27 and 32-28. The Licensing Board's subpoena power, however, is not limited to 100 miles but, rather, appears to be nationwide. See 10 C.F.R. § 2.720. Therefore, Dr. Budnitz is within the Board's subpoena power and, accordingly, Rule 32(a)(3)(B) has no application in NRC practice.

If Dr. Budnitz's testimony was in fact necessary to LILCO's presentation of its position, it was within LILCO's power to have him brought before the Board to testify. LILCO failed to attempt to have Dr. Budnitz testify and given the imminent filing of Findings, such testimony is now impossible. LILCO should not now be permitted to circumvent the established procedures for presentation of evidence by relying on the deposition of an available witness.

II. LILCO's Motion is Grossly Untimely

Some background data demonstrate how out-of-time LILCO's Motion really is. The hearing on Contention 7B went from May 4, 1982 until July 25, 1982, with several weeks off for recess and several weeks devoted to other issues. During this time, the Atomic Safety and Licensing Board on a number of occasions suggested that parties commence work on proposed findings.

Dr. Budnitz's deposition was held on August 27, 1982, and concerned Phase I emergency planning issues. The deposition was conducted for LILCO by the same counsel (Mr. Ellis) who conducted examination for LILCO on Contention 7B. The deposition transcript was available within two or three days. If LILCO believed Dr. Budnitz's deposition was important to Contention 7B, it certainly should have known that fact by very early September 1982.

Moreover, LILCO cannot justify its inaction on the basis of an assumption that the County would offer Dr. Budnitz as a witness on Phase I emergency planning and that the PRA-related statements might be reiterated when he appeared. During his deposition, Dr. Budnitz stated that he had not been asked by the County to testify or to prepare testimony for this proceeding. Budnitz Depo. Tr. at 167. Indeed, on October 12, 1982, the County filed its testimony on Phase I issues and Dr. Budnitz was not a witness.

Accordingly, by August 27, 1982, as reiterated on October 12, 1982, it was abundantly clear that Dr. Budnitz was not going to be a County witness. Therefore, it was incumbent on LILCO at that time to ask the Board to issue a subpoena for Dr. Budnitz to appear to testify, either for purposes of emergency planning or to provide additional Contention 7B testimony. Even under LILCO's theory that

the Budnitz deposition may be used in lieu of his appearance because he is more than 100 miles from Long Island, the LILCO Motion should have been filed no later than sometime in October, 1982. However, LILCO took no action to advise the parties that it was even considering the use of the Budnitz deposition.

On November 30, 1982, the Board announced its findings schedule for Contention 7B and other issues litigated prior to QA/QC. Tr. 14,789-92. This called for LILCO to submit findings on January 10, 1983, a date which was revised to January 17 by Board Order on January 5. On January 6, 1983, only four days before its findings originally were to have been due, LILCO filed the instant Motion.

LILCO has offered no excuse for its late filing except counsel's statement on January 10 that he had been busy and wished he had gotten to it sooner. Tr. 17552. However, LILCO certainly has had more than one attorney working on Contention 7B. Further, LILCO's written Motion is devoid of <u>any</u> justification for its lateness.

The County submits that it is improper, at this late date, for LILCO to surprise the other parties by proposing to expand the 7B record with selected extracts from the deposition. Dr. Budnitz's deposition was taken as part of discovery on Phase I emergency planning. Even LILCO's interrogation of Dr. Budnitz was directed to emergency

planning issues. LILCO never advised the County in August, 1982 or, indeed, at any time prior to January 6, 1983,[3] that it contemplated use of the Budnitz deposition in its 7B findings. As a result and since this was purely a discovery deposition, the County did not conduct any redirect examination of Dr. Budnitz on 7B-related issues.[4] If the County had known that LILCO intended to attempt to add Dr. Budnitz's testimony to the 7B record, it certainly would have conducted such examination. It would be most unfair if, at this time, Dr. Budnitz's testimony were to be admitted into evidence on 7B without the County having had the opportunity to interrogate him on the matters LILCO now believes are relevant to 7B.

III. Dr. Budnitz's Deposition Testimony is Not Relevant to Matters in Dispute in Contention 7B

There is no question that the Shoreham PRA was discussed during the Budnitz deposition. Contrary to LILCO's apparent

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3/ The County received the LILCO Motion on January 6, 1983, without any prior warning. Given the lateness of the Motion and the daily contact between lawyers for LILCO and the County, the County would have expected some prior notification by LILCO. This failure to provide such notification is particularly unjustified in this case given the combined findings preparation and pursuit of the ongoing QA/QC trial, which together have created a very tight schedule.

4/ The Staff was not in attendance at the Budnitz deposition. Accordingly, the Staff conducted no examination of Dr. Budnitz on 7B issues.

argument, however, that fact standing alone does not render portions of his deposition relevant to 7B. Indeed, Dr. Budnitz's deposition would constitute misleading information which would add nothing probative to the record.

The portions of Dr. Budnitz's deposition testimony that are the subject of LILCO's Motion were carefully selected to imply a direct relevance to 7B. However, they are out of context and fail to present an accurate picture of his testimony as a whole. Attached hereto are additional portions of the transcript which, when read together with the LILCO-selected portions, provide a more acccurate presentation of Dr. Budnitz's opinions.5/

With respect to the first excerpt cited by LILCO -- concerning Dr. Budnitz's opinion of the thoroughness and quality of the PRA (pp. 52-53) -- Dr. Budnitz makes clear in that excerpt that his opinions at the time of his deposition were preliminary only, since he had not completed his review of the Shoreham PRA (p. 53, line 15). In addition,

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5/ Should the Board grant LILCO's Motion, the County submits, pursuant to Rule 32(a)(4), that the attached additional excerpts must be considered with the excerpts noted by LILCO and also be admitted into evidence. Further, if the Board grants LILCO's Motion, the County must have an opportunity to review all of the Budnitz deposition, as well as all the other Phase I depositions, to determine if there are other extracts that the County wishes to use either in connection with 7B or other contentions, such as SC 27, Post-Accident Monitoring. The County recognizes this may cause delay, but that delay is only occasioned by LILCO's own failure to address this matter in a timely manner.

the opinion referenced by LILCO was a "general" one, not based on an item-by-item review (p. 52, line 28; p. 53, line 2). In fact, other portions of his testimony contain certain additional opinions, on specific items, that differ from his general opinion on the quality of the PRA's technical analysis. See, for example, p. 73, line 28 to p. 75, line 27; p. 80, line 26 to p. 82, line 17; p. 85, lines 22 to 25.

The County notes that there is already considerable testimony in the 7B record concerning the overall quality of the Shoreham PRA. In fact, the County did not dispute the general quality of that study. The PRA issues in dispute on 7B were: (a) whether the methodology used was adequate to identify potential adverse systems interactions; (b) whether the scope of the PRA was adequate to permit the identification of such interactions; and (c) whether the results of the PRA were properly utilized by LILCO. The portions of the Budnitz transcript cited by LILCO on the general quality of the PRA do not address in any probative way the matters at issue in 7B.

Similarly, the second excerpt identified by LILCO --concerning systems interaction (p. 89) -- is even more out of context. The attached additional portions of the transcript provide some background and insight into what Dr. Budnitz meant by the statement selected by LILCO. See p. 82, line 18 to p. 89, line 6.

Moreover, standing alone, the mere fact that some systems interactions were considered in the PRA, as stated

in the Budnitz excerpt selected by LILCO, is not relevant to the 7B issues in dispute. Dr. Budnitz's testimony -- even in its full context -- does not address the methodology question, whether potential adverse interactions were identified, or LILCO's use of the results. Accordingly, the Budnitz testimony selected by LILCO has no probative valve with respect to the issues in dispute in 7B.

Finally, LILCO argues that Dr. Budnitz's testimony on systems interaction is "particularly probative" because it supposedly contradicts testimony by the County's 7B witness panel. (LILCO Motion, p. 4). To support this assertion, LILCO carefully selected a portion of one sentence of the County's pre-filed 7B testimony and quoted it out of context. The statement in its entirety follows:

> Unfortunately, the PRA currently being done at Shoreham excludes system interactions, as stated on page 1-18:
>
> > [T]he results of this analysis are valid to the extent that the systems have been successfully designed as independent and redundant. Externalities and other internal initiators such as sabotage, seismic events, or fire have not been postulated as initiators.
>
> Interactions were excluded because they have not been systematically identified at Shoreham -- by commonality diagrams, by dependency matricies, or by FMEAs. County 7B Testimony, p. 66.

The referenced portion of the County's pre-filed 7B testimony, combined with the County's testimony on cross-examination, clearly deals with one of the questions at

issue in that contention -- whether LILCO has a systematic methodology for identifying potential adverse systems interactions. There is no basis for LILCO's attempt to use it in support of its argument that Dr. Budnitz's testimony is relevant to 7B.

Conclusion

For the foregoing reasons, LILCO's Motion must be denied.

Respectfully submitted,

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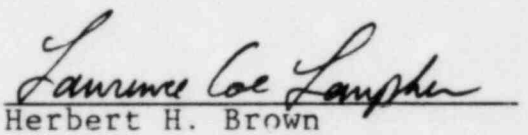

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January 14, 1983

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CERTIFICATE OF SERVICE

I hereby certify that copies of SUFFOLK COUNTY OPPOSITION TO LILCO MOTION TO ADMIT INTO EVIDENCE PORTIONS OF BUDNITZ DEPOSITION, were served to the following this 14th day of January, 1983, by U.S. Mail, first class, except as otherwise noted.

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I mean, those are precisely the issues that underlie their plan. If they intend to protect certain people against certain dose sizes, they need to have a feeling about whether we think they're going to be as big as that and where, with what probability, and so on.

So I hasten to say -- I just want to repeat. This is very important. I hasten to say that a smaller source term is, of course, useful for protecting the public, but it doesn't necessarily reduce smaller doses for everybody, and that's a crucial point because it is often a clouded point.

Q Let's come back to that. As I said, I wanted to go back to Page 10.

A Sure, sure, sure, sure, sure.

Q I think you've already explained to me adequately that you have not completed any of this work. You expect to do so by the 15th. As I go through this, if you have preliminary conclusions or any opinions --

A I'll be happy to offer them.

Q -- I'd like to have those.

A Where I think that they are sufficiently mature that they would be, you know, unlikely to change in the course of the next month or even it's really the next two or three weeks.

Q Fair enough. Of course, as to some, you may not have or maybe some of them won't have an opinion in the final analysis. How about 1.1.1?

A There's a very important point here in the

context of emergency preparedness, and that is that the SAI report and the PLG report only deal with what we call the internal accident initiators. That is, there is no analysis of seismic and external floods and hurricanes and tornadoes and the like.

Now, that means that the County's and LILCO's plans to prepare emergency preparedness, you know, documents for those accidents cannot be based on the level of technical rigor that they are here. They can't be.

Q I don't follow what you mean there.

A That is, there has not been a PRA on, let's say, seismic for this plant and therefore, we don't have reactor-specific source terms for seismic events for this plant, nor probabilities.

We have them for Indian Point now, and we have them for Zion, and there's some work at Diablo, and there are only a very few plants that have really done anything useful here, which the Indian Point and the Zion are the most mature, and there's never been a BWR that has had a seismic analysis of the quality that's done now at Indian Point.

I'm aware of that now because I'm reviewing it for Indian Point, as I told you.

Now, what I've been trying to do here and which is a tricky job is to try to see, based on judgment but not -- based on judgment whether or not I think that seismic at Shoreham could produce qualitatively or, in a major way, quantitatively different source terms than those we are dealing with.

Let me tell you that I end up believing that seismic -- once it gets started is just another accident, you know. It might produce a classic large LOCA.

Well, once it gets started, it looks like any other large LOCA, but I'm not quite there yet, and the reason I'm not there yet is because it's tricky.

Q Why is it tricky?

A Because all the seismic studies done to date on specific reactors -- and Indian Point and Zion are examples. Oyster Creek is another which I know only a little -- have found that the accident sequences that are important to seismic risks are really fluky.

That is, they cannot be generalized to reactors.

At Indian Point, there's this funny interaction between Unit 1, which is now closed down and some structures there, and the Unit 2 reactor, which is the one at issue. It's one of the ones at issue, and there's a seismic interaction in which a failure of a Unit 1 structure causes one of the larger sequences at Indian Point, too, and there's no way on earth that such an analysis -- that that accident sequence is going to be true even if -- even at another reactor that was just like Indian Point, too, otherwise, because it's just this funny thing.

Another example is that at Diablo, seismic input is so very different from Eastern earthquakes that it's of little use to try to take the Diablo seismic issues and deal with them at Shoreham.

Q What seismic are you using at Shoreham?

sequence not already examined?

A Phenomena or release categories that aren't encompassed by the present group. I would like to phrase it more fully.

Now, there is also the question about whether internal initiators have been adequately considered, and we're looking at that. We haven't found anything of an initiator category internally that we think needs attention that hasn't yet.

Q Does that then take care of 1.1.1?

A More or less.

Q Well, have we omitted anything?

A Well, I could give you two hours on everything here, so, you know, no. That's fine.

Q Okay. Let's move to 1.1.2. Do you have any views at this time on 1.1.2?

A We've looked at a bunch of entries, found a lot of them that are not worth looking at because they're just -- we didn't take exception to them, and there are two or three that we're messing with, including some questions about how the event tree was constructed on internal flooding.

Q And are those some of the questions that are in Deposition Exhibit 3?

A Yeah, yeah.

Q Okay. So you've looked at a number of event trees. Most of them you find --

A Unobjectionable, but we have some open

questions that we may close in our own mind involving human factors, which I am still --

Q Do you know what those are?

A Not completely. That is, I've discussed them in part with Lambert and some with Pete Davis, and we haven't -- haven't even formulated them yet, but we've got to do that in the next few days.

Q Can you give me some ideas of what those human factors are?

A Just to give one specific example, we have a significant question about the way some of the internal flooding accident sequences were quantified, and we've talked that over with Burns, and he's given us a response here, and it isn't adequate yet, but part of the quantification involves whether they have used the correct human factors failure probabilities.

I don't intend here to challenge that they should have used something else instead of Al Swain's work, although we might end up saying that, you know, they might; but that they turned to the wrong page in Swain's book or that they didn't seem to understand the way we understand what Al was talking about in terms of a certain stressful environment. We're talking to them about that, I suppose, one more round, and we'll see what we've learned.

That's covered in Appendix G of the report, and part of -- it's also, of course, in the main report in a summary fashion.

Q So one of the human factors things that you're

still concerned about is whether the human factors on the internal flood sequence was correctly quantified?

A Yes.

Q Anything else?

A Well, there are two or three other places where we think they may have used what I'll say is -- you know, that we would have used a different number. A couple of them, you know, don't matter much. You know how it is.

You're running through one of these things, and there's 46 numbers, and you look up some of them, and some of them you don't have to look, but you know they're right, but you come to a few that you say gee, I wouldn't have used that one. That seems too high or too low.

We're still in the process of -- we've got a lot of things to pin down in the next couple of weeks, and we're going to do them. So I wouldn't be willing to go much further there.

Now, treatment of common-cause issues. That is, of course, the cause celebre of an event tree definition. It's the place where event trees -- where the definition of event trees can trap you if you're not skilled. We've looked at a lot of these things.

I mean, these guys seem to have done a good job of taking into account --

Q I'm sorry. Who is "these guys"?

A "These guys," the SAI analysts seem to have done a good job of taking into account the crucial question of support system interactions. Let me describe

what I mean.

That is, you know, D.C. power or instrument air or cooling water, component cool water support systems can fail and then bring down a whole collection of valves, pumps, instruments together, and the way they have gone about the logic seems to be --

Well, first, I mean, it's almost trite to say that it's an improvement over WASH-1400 because WASH-1400 was the pioneer here, but it is an improvement. It's an important improvement the way the logic has been set down, and we think that the method has some merit to it, but we're still looking at a couple of them in detail, trying to calculate them the other way.

You see, you can either put some of that stuff in the event trees or some of it in the fault trees. There's a choice here, and we're trying to make sure in a couple of cases that that's okay, and I'm not sure how far we'll get before we run out of time.

Q How about the justification for level of detail?

A I'm not sure what we're going to say about that. I'm not sure. A lot of that has to do with the question I just mentioned about where -- where the thing is quantified and so on.

Q I'm sorry. I missed that, Dr. Budnitz. Where the what is quantified?

A The level of detail involves, in part, questions about in which part of the calculation certain

things are quantified; whether they're quantified in the fault trees or they're approximated -- said to be small and ignored and so on.

Q And so that you have not made up your mind yet on justification for level of detail?

A Yeah.

Q Are any of the questions in Exhibit 3 related to that?

A No. I don't -- no. I don't think so.

Q Is there anything else on 1.1.2?

A No.

Q Do you at this point in time think there have been any event trees omitted?

A Besides the external events?

Q Well, the seismic is the only one you're going to analyze.

A Well, obviously, there are other external events that are omitted, so I have to answer there are. Besides external events, no.

Q Let me rephrase the question -- no. Okay. Let me ask it again this way: Are there any event trees that have been omitted that, in your opinion, at this time should have been included?

A No.

Q Okay. Let's look at 1.1.3. My notes indicate Mr. Lambert was doing this under your supervision.

A Uh-huh.

Q And that's not yet complete.

A That's right. A lot of what I just said about event trees is covered here. There's this interaction. There's the whole question about -- the whole question -- which I know there's liable to be a bone of contention in this business in detail for a long while because it's a very hard job to analyze.

Q The remarks then you made with respect to level of detail and so forth on event trees are also true in the fault tree?

A Yes, sir. I would -- if I had lumped those discussions together, it would have been fully appropriate. Now, I need to say that the report contains no fault trees essentially within it, and we haven't done much of that in detail, but Lambert and, to a lesser extent, I, myself, have seen a lot of this stuff, and we've got a feeling for the sort of answers that we expect from something like this, and if somebody has gone through a fault tree, let's say, for a component and he comes up with a, you know, an unavailability on demand or whatever, that is in the range that we will say, well, that's about how they are. We've been comfortable with that generally.

Q Well, have you seen anything in the numbers that SAI came up with so far that you're uncomfortable with?

A Well, in the same areas that I mentioned before. We're a little uncomfortable with some questions on internal flooding, and we have some questions on human factors, and there are a couple of other things.

Q What are the couple of other things?

A Well, I'm not sure quite where something like this falls. We're looking at ATWS, and we're comfortable with it, but we haven't quite completed looking at it.

There's the question about the liability of the SLC, of the, you know --

Q Standby liquid control?

A Yeah, the thing you use after -- the thing you've got to use to get you out of it if you -- if you can't get the rods in.

Q What is the issue on the reliability of the SLC?

A I'm not really sure yet. Howard's looking at that.

Q Howard Lambert?

A Lambert.

Q Anything else other than ATWS and the internal flooding question that had the human factors? I think that was associated with the internal flooding, wasn't it?

A Uh-huh. I can't answer that. I'm just not quite sure where he is in some of the other things.

Q Now, there is one bullet on 1.1.3 that is not under 1.1.2 relating to the special attention to control systems issues and support systems issues.

A Yeah. I had commented on that before.

Q Oh, I see. That's the interaction between the two that you think is well covered?

A Well, yeah. It's a substantial advance over some stuff that's been done before. It's a tricky question,

but they've done some nice work.

Q Excuse me?

A I don't know what else to say about it. We're probably -- you know, we're probably not going to be saying too much more.

Q How about 1.1.1?

A Oh, now, here, this thing is quantification.

Q I see. So the discussions we've had with respect to --

A That have to do with sequence definition to date. I mean, there's 1.1, and now this is quantification. The quantification questions go to questions about how either numerical values were assigned to failures or unavailabilities or the like or how they were combined or how uncertainties were propagated.

That's further down the list, but it's very much related to this whole question. I've tried to go through some of the analysis to follow the way the numbers were propagated and understand how uncertainty -- what uncertainty I would assign were I doing it, you know, separately from theirs, and in that way I gained some measure of confidence in the way they did it.

Q What have you concluded to date?

A Well, I don't have any conclusions to date. I must say that they had this very interesting way of looking at the uncertainty in these classes of -- for each class they picked an accident or, you know, a kind of accident and tried to do through kind of a Monte Carlo approach.

They tried to discover what the range-of-error factor would be in these normal distributions, and there's a table in there that tells you what they did, and I've been trying to see whether that fits well with what my understanding of the way these uncertainties roughly lie, and I don't have a conclusion yet.

It's not all bad, though. I mean, there isn't anything that I found that is just completely out of whack or anything like that, but I'm still. . .

Q You're also, I take it, assessing whether the quantification with respect to systems interactions was properly done.

A Well, it's one of the -- one in a long list.

Q That's the same one up here that you've got with treatment of common cause and special attention to control systems issues? That's all related?

A It's related, yeah. It's not the same, but it's related. Unfortunately, the phrase "systems interaction" has taken on a life of its own because of -- because the idiotic bureaucrats designated it A-17, and it's been contended ever since. I think that that's dumb; that it has caused unending confusion; that it should be promptly stopped and redefined, but when I made that view known when I was a senior NRC staff member, it did not prevail.

Q What does it mean here?

A It means what I decide it means. Excuse me. It means I'm going to look, and Howard has actually already looked at a couple of them, you know.

Q How the SAI assessed systems --

A Okay. I mean, it's eclectic. That little comment was intended to tell you that I think that the phrase "systems interaction," which now has a life of its own, has become -- has encompassed too many specific issues for its own good.

Okay. Witness some June, July discussions in which people in this room were all swearing to tell the truth and so on and cross-examining each other somewhere in Long Island in which so many issues were brought into -- so many issues were brought in, you know, that I can't possibly even think about covering all of them here, and I'm not going to cover them all. I can't.

It's unbelievable what went on.

Q You don't have any doubt, though, do you, that systems interactions were considered in the SAI work?

A No, none whatsoever. In fact, in conversations with Erdmann, Burns, and colleagues a month ago, we had some questions about some of the stuff they did that they resolved just by answering, you know, what it was that they had done, and I could state here my tentative conclusion that, you know, they did a good job, and there are some good insights, and I learned a lot more on that stuff just by reading that long transcript in which Burns and Joksimovich said more on some of that than was in the report.

Q You're referring to the transcript of the hearing?

A Of the hearing, yeah, June or July, whenever