ORISINAL

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency:

Nuclear Regulatory Commission

Tide:

Alabama Power Company (Joseph M. Farley Nuclear Plant, Units 1 and 2)

Docket No.

#0-348-CivP. 50-364-CivP ASLBP No. 91-626-03-Civ1

LOCATION

Bethesda, Maryland

DATE

Wednesdry, February 12, 1992

PACES 226 - 443

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| 1 | UNITED STATES OF AMERICA |
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| 2 | NUCLEAR REGULATORY COMMISSION |
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| 4 | In the Matter of: : Docket No. 50-348-CivP |
| 5 | ALABAMA POWER COMPANY : 50-364-CivP |
| 6 | [Joseph M. Farley Nuclear Plant, : ASLBP No 91-626-02-Civl |
| 7 | Units 1 and 2] : |
| 8 | X |
| 9 | Nuclear Regulatory Commission |
| 10 | 5th Floor Hearing Room |
| 11 | East-West Towers |
| 12 | 4350 East West Highway |
| 13 | Bethesda, Maryland |
| 1.4 | Wednesday, February 12, 1992 |
| 15 | |
| 16 | The above-entitled matter came on for hearing |
| 17 | pursuant to notice, at 9:01 o'clock a.m. |
| 18 | |
| 15 | BEFORE: THE HONORABLE G. PAUL BOLLWERK III, Chairman of |
| 20 | Atomic Safety and Licensing Board |
| 21 | THE HONORABLE DR. JAMES H. CARPENTER, Member of |
| 22 | Atomic Safety and Licensing Board |
| 23 | THE HONORABLE DR. PETER A. MORRIS, Member of the |
| 24 | Atomic Safety and Licensing Board |
| 25 | |

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| 1 | PROCEEDINGS |
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| 2 | JUDGE BOLLWERK: On the record. |
| 3 | Whereupon, |
| 4 | JAMES LUEHMAN, |
| 5 | ULDIS POTAPOVS |
| 6 | and |
| 7 | HAROLD WALKER |
| 8 | resumed the stand as witnesses on behalf of the Nuclear |
| 9 | Regulatory Commission and, having been previously duly |
| 10 | sworn, were further examined and testified as follows: |
| 11 | CONTINUED CROSS-EXAMINATION |
| 12 | BY MR. MILLER: |
| 13 | Q All right. When we left off yesterday, we were |
| 14 | talking about the modified enforcement policy, and |
| 15 | particularly its implementation. And let's take a moment |
| 16 | and see if we can go through how the modified enforcement |
| 17 | policy is supposed to work. |
| 18 | Will you get a copy of 88-07 in front of you, |
| 19 | which is Staff Exhibit who knows? Staff Exhibit 4. And |
| 20 | just get that I'll see if we can create some kind of |
| 21 | chart. |
| 22 | Now the first one will be the inspection, that's |
| 23 | the first one. |
| 24 | You have to say so, Mr. Luehman. |

[Witness Luehman] Yes.

- 1 Q And then I take it we get some kind of alleged
- 2 deficiency, right?
- 3 A [Witness Walker] May I ask a question here, sir?
- 4 Q You sure may.
- 5 A [Witness Walker] The inspection is actually the
- 6 second aspect of this.

- 7 Q And what is the first?
 - A [Witness Walker] The Staff SER, I believe.
- 9 Q All right. So the SER -- this is the one -- wait,
- 10 hand me the orange one.
- 11 The Staff SER, at least in this case, is the one
- 12 that says: We have complied with the EQ -- our program
- 13 complies with 50.49?
- 14 A [Witness Walker] I believe that's the one.
- 15 A [Witness Potapovs] Just to complete the record
- 16 for the first bullet that you have.
- 17 Q All right.
- 18 A (Witness Walker) Inspection would identify items
- 19 subject to enforcement. Another way these can be, and have
- 20 been, identified is through self-identification by the
- 21 licensee. And if those are identified as unqualified
- 22 equipment, then those items may also be subject to
- 23 enforcement.
- 24 Q All right. So, but in any event, we come up with
- 25 our alleged deficiencies. I see. Right?

- 1 A [Witness Luehman] Yes.
- 2 Q All right. Then the next thing we decide is, is
- 3 this a 50.49 violation? It sounds simple, but that's sort
- 4 of what we are here to talk about, right?
- 5 A [Witness Luehman] That's correct.
- Q You then find your way to the modified enforcement policy, if you have met all of these.
- 8 And now we get to timing. Did the violation exist
- 9 before November 30, 1985? How am I doing, Mr. Luehman?
- 10 A [Witness Luehman] So far so good.
- 11 Q All right. Now the importance of that, of course,
- 12 is that even though the inspection occurs in '87, you go
- 13 back to 1985 for purposes of the modified enforcement
- 14 policy, true?
- 15 A [Witness Luehman] That's correct.
- 16 Q It would be improper to have an '87 inspection,
- 17 and use '87 standards, and '87 knowledge, and '87 learning
- 18 that occurred since '85, and backdate them or retroactively
- 19 apply them to a licensee if they existed in November of '85?
- 20 A [Witness Luehman] That was one of the purposes of
- 21 the Board.
- 22 Q That's right. Improper to do that, no question
- 23 about it. You're onboard with that, aren't you?
- 24 A [Witness Luehman] Yes.
- 25 Q Okay. If we meet all those milestones, then we go

- to the next one, which is Section 2, did the licensee clearly know, or should have known. Everybody agree?
- 3 A (Witness Luehman) Yes.

- Q Okay. Just to focus on that. It's not did they
 know, or should they have known; but did they clearly know,
 based on pre-'85 knowledge. Are we right so far?
 - A [Witness Luehman] That's correct.
 - Q And with that -- we probably ought to put that in. Based on pre-11/30/85 knowledge. Right so far?
 - A [Witness Luehman] I guess the only thing I would quibble with is, I guess, the word "knowledge." I mean, I would rather use the word "information" rather than knowledge. Because whether -- we didn't have to decide whether somebody had the knowledge or not, we just had to decide whether the information, which is information that somebody should have clearly known about, was there.
 - I mean, if a licensee -- if there was 10 documents out there that said you had to do something, but a licensee wasn't -- didn't have that knowledge, that doesn't excuse the fact that they d.in't read the documents, if that was the case.
- So I guess I want to make sure what the word "knowledge" means is clear.
- Q Well, if you'll forgive me, but I'm going off what 88-07 says, and it uses "knowledge." It doesn't say

1 "information," does it?

12

- 2 A [Witness Luehman] I'm just saying -- I'm just 3 telling you how that's applied. I mean --
- Q Oh, I understand. Make no mistake about it. We contend that you misapplied. Which is why we have to go back to see what it says, instead of how you used it against us.
- But you said what you had to say. And let's focus
 on this: If the determination is made, that based on preto '85 knowledge the licensee didn't clearly know, or should
 have known -- no violation. Right?
 - A [Witness Luehman] That's correct.
 - Q All right. Let's take a timeout.
- How many of the licensee enforcement actions that
 this panel reviewed, when it sat as an enforcement, an FO
 enforcement review panel, on how many occasions did you
 conclude that the opposed notice of violation should be
 rejected in total or in part because the licensee didn't
 clearly know, or should have known, of the proposed
 violations?
- We'll take you, Mr. Luehman.
- A [Witness Luehman] I can recall a number of occasions, I can't quantify them, where it actually got to the panel. I can also recall discussions that were held, even prior to one getting to the panel where, in concert

- 1 with the Plant Systems Branch which Mr. Walker is a member
- of, and the Office of Enforcement, and the Region, where
- 3 Regions were considering actions. And even before it got to
- 4 the panel, they were dropped because the licensee --
- 5 Q How many times did the panel reject a proposed NOV
- 6 on the basis of the absence of meeting the clearly knew or
- 7 should have known standard?
- 8 A [Witness Luehman] I cannot quantify it, but I
- 9 know that it happened.
- 10 Q The best you can say is you know it happened in
- 11 the panels that you sat on?
- 12 A [Witness Luehman] That's right, because we
- 13 reviewed 23 different actions, and I don't have specific
- 14 memory of all of them.
- 15 Q We'll go to Mr. Potapovs. How many do you
- 16 remember that were rejected when you sat as a panel on the
- 17 basis of what we've been describing?
- 18 A [Witness Potapovs] I likewise cannot quantify
- 19 that, and I will second the statement that Mr. Luehman made
- 20 that when these --
- 21 Q I understand. You want to say that all that was
- 22 taken care of earlier.
- 23 A [Witness Potapovs] All of these things were
- 24 considered, and that was one of my personal responsibilities
- 25 in looking at and reviewing all proposed enforcement

1 actions. You have not prepared any type of, say, scoreboard 2 Q of --3 4 A [Witness Potapovs] No, I haven't. 5 0 -- of how many that got rejected on that basis? [Witness Potapovs] No, I have not. 6 A You have not prepared, Mr. Luehman, a scoreboard 7 Q got rejected on that basis? 8 of what 9 A [Witness Luehman] No, we have not. Mr. Walker? 10 0 [Witness Walker] No, I have not. 11 A Can you recall for us, despite the failings of the 12 0 13 other two witnesses and their memory, can you identify for us just one, just pick one, one licensee that came to you as 14 a member of your enforcement panel review board, this 15 16 consistency check, and identify for us one time that you 17 rejected a proposed NOV in whole or in part based on the 18 inability to meet the clearly knew standard? Can you just name us one? 19 20 A [Witness Walker] Perhaps. 21 0 Do the best you can. 22 [Witness conferring off the record.] 23 BY MR. MILLER: Okay, Mr. Walker, you have now conferred with the 24

other two members of the panel.

- 1 A [Witness Walker] Well, I was trying to make sure
- 2 I got the plant right.
- 3 Q Well, absolutely. No question about it. I ake
- 4 it you could not have done that on your own; you had to
- 5 confer with them.
 - A [Witness Walker] That's correct because --
- 7 Q All right.
- 8 A [Witness Walker] -- we went through many of these
- 9 things and --

- 10 Q Now that we have had this conference, can you
- 11 identify for us one?
- 12 A [Witness Walker] Perhaps Robinson.
- 13 Q The best you can say is perhaps Robinson.
- 14 A [Witness Walker] Yes. I remember the discussion,
- 15 the extensive discussion. It had to do with the instrument
- 16 loop accuracy. As a matter of fact, it was my opinion that
- 17 that was misunderstood from the beginning.
- 18 Q Tell us another one.
- 19 A [Witness Walker] I --
- 20 Q Can't do it.
- 21 A [Witness Walker] -- would probably get into the
- 22 area of speculation. I think I may know another one, but
- 23 I'm not absolutely sure about it.
- 24 Q Don't speculate. Can we say, though, that of the
- 25 23 times you sat as a panel, the best you can do besides

- this vague recollection is H.B. Robinson, perhaps? That's
- 2 the best you can do?
- 3 A [Witness Potapovs] Well, I think the rationale as
- 4 to why this is the case is important because all of these
- 5 things were considered before these items ever got to the
- 6 panel.
- 7 Q I'm sure they were. But my question stands, and
- 8 your answer is, "That's the best I can do."
- 9 A [Witness Luehman] Well, the reason that is, is
- 10 because it really had no relevance to us. We weren't
- 11 keeping score.
- 12 Q Isn't it true -- that's the best you can do? Just
- 13 answer the question. It's a simple yes/no.
- 14 A [Witness Luehman] Yes, that is the best we can
- 15 do, and it makes no difference.
- 16 Q To you. If we go to Section 3 and you decide that
- 17 clearly knew or should have known exists, then you make a
- 18 determination of whether or not it's significant or not, and
- 19 that's what we discussed yesterday, correct?
- 20 A [Witness Luehman] That's correct.
- 21 Q Okay. If it's not significant or meets the
- 22 requirements or the language of Section 3, you go to a
- 23 Severity Level 4 or 5, no civil penalty, okay? Do I have it
- 24 right so far?
- 25 A [Witness Luehman] That's not completely correct.

- Q All right. Make it right, then. 1 2 A A [Witness Luehman] Well, the part that's right is 3 the 4 or 5, but there is not an automatic exclusion of a 4 5 civil penalty. I see. I see. We'll just do 4 or 5. 6 What does the phrase mean "is not considered 7 sufficiently significant for assessment of civil penalties"? 8 9 That's what my Section 3 says. 10 A [Witness Luehman] Well, that's correct, but you have to read further on. I think that further on in the 11 policy, it says that if there is enough Severity Level 4 and 12 13 5 violations --14 Q You aggregate them. 15 A [Witness Luehman] You can make an aggregation for program breakdown. 16 17 Q So let's make this correct. No CP without 18 aggregation. [Witness Luehman] That's correct. 19 Okay. Once we worked our way through that, then 20 21 we go to Section 4, right? And that has the categorization and aggregation, right? Are you with me? 22
- Q And then you go through the mitigation and escalation.

A [Witness Luehman] Yes.

- 1 A [Witness Luehman] That's correct.
- Q And then you come up with the civil penalty? Is the chart right?
 - A [Witness Luehman] Yes.
- Q Okay. Let's go back and look at clearly knew or should have known. Wasn't there some guidance put out by the Office of Enforcement in 1988 about how to apply the clearly knew or should have known standard?
- 9 A Yes, there was.

13

14

15

- 20 And didn't that take the form of a memo of June
 21, 1988 from Mr. Lieberman to the various regional
 administrators?
 - A [Witness Luehman] I know that it was a memo, it was an enforcement guidance memo from Mr. Lieberman. I don't recall the specific date.
- 16 MR. MILLER: I will show you what we'll mark for
 17 identification purposes as Alabama Power Company Exhibit 86,
 10 and ask you to take a moment to look at that while we get
 19 assistance in marking it. And I'll call your attention
 20 particularly to page three. You can look on mine. You, of
 21 course, are always free to look at the entire part, but I'll
 22 ask you about that. Do you need six?
- [Document proffered to witness and the Board.]

 MR. MILLER: Tell me when you've had a chance to

25 look at it.

| 1 | JUDGE BOLLWERK: Could you go ahead and identify |
|----|--|
| 2 | that again? |
| 3 | MR. MILLER: Yes, sir. Would you mind if I use |
| 4 | this to identify that? Alabama Power Company Exhibit 86 is |
| 5 | a memorandum of June 21, 1988 from James Lieberman, |
| 6 | Director, Office of Enforcement, to the various regional |
| 7 | administrators for Regions I, II, III, IV and V. Subject: |
| 8 | Guidance for the preparation of enforcement cases related to |
| 9 | EQ violations. And we'll be discussing, particularly, this |
| 10 | morning, page three, the second full paragraph. |
| 11 | JUDGE BOLLWERK: Let the record reflect that APCo |
| 12 | Exhibit 86 has been marked for identification. |
| 13 | [APCo Exhibit No. 86 was marked |
| 14 | for identification. |
| 15 | MR. HOLLER: If opposing counsel isn't using this |
| 16 | chart right now, could we remove it? |
| 17 | MR. MILLER: I am going to use it. |
| 18 | MR. HOLLER: Oh, sorry. |
| 19 | WITNESS LUEHMAN: We're ready. |
| 20 | BY MR. MILLER: |
| 21 | Q As a general matter, why don't we ask Mr. |
| 22 | Lieberman I'm sorry, Mr. Luehman would you go ahead |
| 23 | and tell us what prompted the promulgation of this |
| 24 | particular memorandum? |
| 25 | A (Witness Luchman) Basically the promulgation |

the promulgation of the memorandum wa the -- was, in part, really the natural result of the fact that we had a new -- or we had the issuance of the modified enforcement policy under the Generic Letter in April of 1988.

The Office of Enforcement found it necessary to issue the Enforcement Guidance Memorandum to the regions because the -- the information contained in some of the early submittals to the Office of Enforcement -- the early cases considered under the modified policy -- in all cases, the discussion wasn't sufficient in the -- in the action, and some of the supplemental and supporting documentation that was being provided by the regions to allow headquarters personnel to evaluate whether the standards of the modified policy were being met was lacking.

And, therefore, the Office of Enforcement put this memorandum out to ensure that the regions prepare the packages properly and supported them with the documentation necessary so that the decisions could be made.

Q Okay. You had determined or had found, as a result of the inspection reports, that the inspectors were not providing enough information for the headquarters office to implement the clearly knew or should have known standard in 88-07?

A [Witness Luehman] That's not quite correct. The inspections had all been performed before Generic Letter 88-

- 1 07 went out. So the inspection reports, in and of 2 themselves, didn't necessarily contain that information.
- However, some of that information was contained in other places, such as if there was an applicable information notice or another piece of documentation. And, therefore, we had to make sure that the -- because -- in part, because
- 7 the inspection reports didn't -- weren't laid out in the
- 8 manner or didn't discuss all the information explicitly that
- 9 was in 88-07, we had to ensure that we got the documents
- 10 from the region that would allow these --
- 11 Q Okay.
- 12 A [Witness Luehman] -- determinations to be made.
- 13 Q Let me ask you one other thing while I've got you. 14 Let's turn to page two, paragraph four. It says the Region
- 15 should hold an Enforcement Conference?
- 16 A [Witness Luehman] That's correct.
- 17 Q In the Enforcement Conference -- I'll ask it to
 18 you this way:
- Is one of the purposes of the Enforcement
- 20 Conference to attempt to resolve the matter with the
- 21 licensee, have them agree and have the staff agree with
- 22 whatever the appropriate resolution of the proposed
- 23 deficiency is? Mitigate the civil penalty if one is being
- 24 considered, things of that nature?
- 25 A [Witness Luehman] No. The purpose of the

- 1 Enforcement Conference is to present -- for the staff to
- 2 present its position relative to the inspection findings,
- and to allow the licensee an opportunity to respond -- to
- 4 make its case for whether the violations existed; whether it
- 5 agrees that any violations existed; whether it agrees that
- 6 they're as significant as the staff is alleging them to be;
- 7 and, obviously, to address the -- address the potential
- 8 enforcement action that might result from that.
- 9 Q Would the staff encourage full and fair disclosure
- in an attempt to at least resolve the potential and for an
- 11 enforcement action at the enforcement conference? Is that a
- 12 fair statement?
- 13 A [Witness Luehman] Full and fair disclosure of
- 14 what?
- 15 Of whatever the licensee had to say? Its
- 16 positions on all points, and in an attempt to resolve the
- 17 matter then, so it would go no further.
- 18 A [Witness Luehman] If the licensee makes
- 19 persuasive arguments, the staff is not going to go forward
- 20 ---
- 21 Q Okay.
- 22 A [Witness Luehman] -- if it agrees with the
- 23 licensee's positions.
- 24 Q Okay. All right. We're back over now on page
- 25 three. And let's -- let's look at this paragraph that

- 1 begins: "In the same way, if an extensive (Category A) EQ
- 2 problem is identified..." Do you see that paragraph?
- 3 A [Witness Luehman] Yes.
- 4 Q It says here:
- 5 "Escalation for the lack of best efforts requires
- 6 more support than just being based on the number of
- 7 violations."
- 8 Did I read that correctly?
- 9 A [Witness Luehman] That's correct.
- 10 Q All right. As I understand that, and you correct
- 11 me if I'm wrong, that you can't just look at the violations
- 12 and say their mere existence means a lack of best efforts;
- 13 is that true?
- 14 A [Witness Luehmar.] That's not completely true. I
- 15 think if you look at the --
- 16 Q Well, it's partially true. And you'll tell me how
- 17 to make it completely true.
- 18 A [Witness Luehman] Yes. The bottom of the
- 19 paragraph states that if the licensee has a lot of
- 20 violations and those violations involve fundamental EQ
- 21 concerns -- in other words, there were very basic things
- 22 that a licensee in getting those violations missed -- then
- 23 clearly in the staff's mind, if they missed very basic
- 24 things, they obviously couldn't have demonstrated best
- 25 efforts.

- Q All right. Okay. But, that's under the heading of more support, is that true?
- The fact that they have a number of violations is
- 4 insufficient to base escalation for the lack of best efforts
- 5 on which to base escalation for the lack of best efforts. I
- 6 paraphrased a little bit, but didn't I say the sentence
- 7 right?
- 8 A [Witness Luehman] You said the sentence right,
- 9 but I'm -- I'm --
- 10 Q Okay.
- 11 A [Witness Luehman] I'm going to the end of the
- 12 paragraph to tell you that although, in most cases, that was
- 13 the case, I can recall a couple of cases where best efforts
- 14 was, in part -- or our consideration of best efforts on the
- 15 panel was, in part, considered on the nature of the
- 16 violations themselves.
- 17 Q I understand that, but you will agree with me that
- 18 the so-called double-counting would not be right. That is,
- 19 you have these violations, and accordingly, you are
- 20 escalated because of lack of best efforts. Said that way, I
- 21 said it right.
- 22 A [Witness Luehman] With the caveat, unless the
- 23 violations at a particular -- were -- were so fundamental to
- 24 the program that -- that their mere existence --
- 25 Q Okay.

- A [Witness Luehman] -- in and of themselves

 demonstrates best efforts.

 That's one caveat, the other being that -- and it

 appears in the next sentence -- other facts should be used
- appears in the next sentence -- other facts should be used to provide the basis that the licensee failed to exercise best effort --
- 7 A [Witness Luehman] That's correct.
- 8 Q -- such as prior NRC inspection or licensee
- 9 audits. Did I say it right?
- 10 [Pause.]
- 11 A [Witness Luehman] That's what it says.
- 12 Q All right. What does that mean? Or I'll strike
- 13 that and ask it to you this way: such as a prior NRC
- 14 inspection or audits of EQ requirements?
- 15 A [Witness Luehman] That's correct.
- 16 Q Such as a prior NRC inspection like Mr. Gibbons
- 17 did in 1980?
- 18 A [Witness Luehman] In my opinion, no.
- 19 Q Well, if that's not a prior NRC inspection of EQ
- 20 requirements, what is it?
- 21 A [Witness Luehman] It is, but I --
- 22 Q All right.
- 23 A [Witness Luehman] I don't think that I -- we
- 24 would have use! that one is what I'm saying.
- 25 Q How about the audit by the EQ branch of Unit 2 in

- 1 1980? Is that a licensee audit such as described here in
- 2 the --
- 3 A [Witness Luehman] It is a licensee audit as
- 4 described. However, the -- the depth of the information in
- 5 it would not have allowed the staff to -- to -- to use that
- 6 to -- in any significant way to make a determination of best
- 7 efforts.
- 8 Q I understand, but if you look at plant Farley and
- 9 you're looking for prior NRC inspections or licensee audits
- 10 of EQ requirements, you only have a limited number of
- 11 choices, and we talked about those, too, didn't we?
- 12 A [Witness Luehman] That's correct.
- 13 Q Can you identify for us a prior NRC inspection of
- 14 NRC requirements at Plant Farley that found a violation?
- 15 A [Witness Luehman] No.
- 16 Q How about a prior licensee audit at plant Farley
- 17 that found a violation or a deviation?
- 18 A [Witness Luehman] No.
- 19 Q So, what you're telling us is that this
- 20 fundamental EQ issues or components, the second area, is the
- 21 one where best efforts gets escalated.
- 22 A [Witness Luehman] No.
- 23 Q All right. Well, we're going to let somebody sort
- 24 that out for us, but you will agree with me that you can
- 25 identify -- strike that.

Are you telling us that the EQ violations at 1 Farley involved fundamental EO issues or components? 2 [Witness Luehman] I --3 A Yes or no? 0 4 5 A (Witness Tuehman) No. We -- it --0 All right. 6 7 [Witness Luehman] We did not find that the -- the violations at Farley were so fundamental in and of 8 therselves and so obvious that that would -- they would form 9 10 the basis of the escalation for best efforts. [Coursel for APCo conferring off the record.] 11 BY MR. MILLER: 12 One of the things that I do need to ask you about 13 -- and we're backing up just a little bit -- and that is on 14 15 the "clearly knew or should have known" standard. We have decided and talked about the fact that the standard is based 16 on pre-'85 knowledge. 17 I'm summarizing a little bit, but that's generally 18 what we have described. Is that so? 19 [Witness Luehman] That's correct. 20 21 0 All right. 22 There were, Mr. Luehman, in the Office of Enforcement. Dil you make any attempt to talk with those in 23 the EQ branch that existed back in the '80 and two or three 24 years thereon timeframe but were no longer at the NRC? 25

[Witness Luehman] No, that wasn't practical. 1 A Okay. You say it wasn't practical? 2 0 [Witness Luehman] That's correct. 3 A You couldn't have just called them up on the 4 Q 5 phone. [Witness Lushman] No, that's not -- it wasn't 6 necessary. We had enough people in the agency that had been 2 there pre-'85 -ä Okay. So, your answer is --9 0 10 A [Witness Luehman] -- plus documentation. Your answer is no. 11 0 [Witness Luehman] That's correct. 12 À I take it as that encompasses Mr. DiBenedetto and 13 14 Mr. Noonan. You didn't talk to them. 15 [Witness Luehman] I had no need to talk to them. 16 Incidentally, did you, by any chance, look at the 17 affidavit they filed in connection with Alabama Power 18 Company's response to the notice of proposed violation? [Witness Luehman] Yes, I did. 19 And in looking at that, did you prepare a response 20 0 to that affidavit? 21 [Witness Luehman] There was no response prepared 22 their affidavit explicitly. 23

Are you aware of anyone who prepared such a

response, whether or not it was ultimately sent to Alabama

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- Power Company? [Witness Luehman] No, I am not. 2 You will admit, though, that Mr. DiBenedetto was 3 Ö the first section chief of the EQ branch, won't you, sir? 4 5 (Witness Luehman) If you tell me he was. All right. Well, you can take it subject to 6 Ö 7 check. 8 MR. MILLER: This has disaster written all over it. Hold on a minute. 9 10 [Pause.] 11 BY MR. MILLER: Let's see what we can do. We've sort of worked 12 13 our way through the modified enforcement policy. Let me ask you something about training now, and I want to reference 14 particularly the training of the EQ inspectors. 15 16 Is anybody on the panel familiar with the training 17 the NRC did or the staff did for its EQ inspectors? 18 [Witness Potapovs] I am. Was there training -- well, let me strike that and 19 20 ask it to you this way: We heard yesterday that an inspector need not be 21 22 an engineer if he was properly qualified. Is that correct, 23 Mr. Potapovs?
- 25 Was it preferred that an inspector of electrical

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[Witness Potapovs] I would say that's correct.

- equipment be at least an engineer, if not an electrical engineer?
 - A [Witness Potapovs] Yes.
- 4 Q Was there some affirmative attempt made to recruit electrical engineers to be EQ inspectors?
 - A [Witness Potapovs] Are you talking now about what the total population of the EQ inspectors consisted of?

 That means the regional offices, the Office of Nuclear Reactor Regulation.
 - Q I'll ask you to define it in the best way that you can, please, sir. If your answer is yes, go ahead and explain your answer. If your answer is no, we'll move on.
 - A [Witness Potapovs] We generally requested that the regional offices nominate to us individuals that had the right background --
 - Q Okay.

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- A [Witness Potapovs] -- and then additional training was provided to those individuals.
- 19 Q Now I understand. When you say "the right
 20 background," can we agree that that is -- what you looked
 21 for was engineering degree and, better yet, an electrical
 22 engineer degree?
- 23 A [Witness Potapovs] That was preferred, plus 24 experience with equipment of that type.
- 25 Q Good. So experience in a power plant of some

1 type?

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- 2 A (Witness Potapovs) Yes.
- And why is it that you preferred electrical angineers to come to the EQ training program?
 - A [Witness Potapovs] Because of their background, they would be more readily trained in the areas, and it was not limited to electrical engineers. We also had some mechanical engineers because much of this equipment is electro-mechanical in nature.
 - Q I see. So the preference would extend to either an electrical engineer or a mechanical engineer?
 - A [Witness Potapovs] That would be the preserence.
 - Q And I think, and I'm not trying to put words in your mouth, but I think what you're telling us is that it's important to have that because you're basically dealing with electrical and mechanical equipment.
 - A [Witness Potapovs] That's correct.
- Q And you found over time that those with
 disciplines in the two areas we've described made the best
 EQ inspectors and could be trained in the most efficient
 manner?
- 22 A [Witness Potapovs] I can't say that.
- 23 2 All right. Well, we'll see what we can do. All right.
- 25 Was there from time to time seminars provided by

- the staff or one of the contractors to the staff to give EQ training?
- A [Witness Potapovs] There were seminars. There
 were meetings that covered either technical or policy issues
 regarding the inspection.
 - Q I see.

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- A [Witness Potapovs] And there were a number of those provided since the initiation of the EQ inspections.
- 9 Q All right. The EQ inspections were initiated in about what year?
- 11 A [Witness Potapovs] I believe it was '84.
- 12 Q Okay. And from '8 and thereafter, you say there
 13 were a number of seminars and training --
 - A [Witness Potapovs] On a reasonably regular basis for -- wall, a number of the inspections were going on. We had, I believe, yearly seminars, and then we had training that was not as formal, but in a meeting format.
 - Q Yearly seminars and meeting format of training connected with EQ inspections and technical matters?
 - A [Witness Potapovs] In addition to that, we also hosted a number of public meetings where we passed this information on to the utilities and other interested parties, including our inspectors that were doing the inspections.
 - Q Okay. And when were these public meetings held?

- [Witness Potapovs] In the same time frame.
- Q on up into '87?
- 3 A [Witness Potapovs] I can't be positive, but I
- 4 believe that there may have been some in '87.
- 5 Q Okay. We know we can go back and check and find
- 6 out exactly when those meetings were.
- 7 A [Witness Potapovs] Right.
- 8 ... Q Would it be fair to say that at these meetings,
- 9 and I guess we ought to reference those that are to train
- 10 the EQ inspectors, that the staff would promulgate
- 11 information that it was learning as it went through the
- 12 process of EQ inspections?
- 13 A [Witness Potapovs] The training covered technical
- 14 issues --
- 15 O I see.
- 16 A [Witness Potapovs] -- including such things as
- 17 evaluation of specific EQ requirements such as aging,
- 18 specific qualification techniques, testing requirements, and
- 19 it included also discussion of the enforcement policy and
- 20 how it was to be applied throughout its evolution, from the
- 21 generic letters to the one that promulgated the modified
- 22 enforcement policy.
- 23 Q I see what you're saying, and that is the -- or
- 24 I'll strike it and ask it to you this way:
- 25 Would it be fair to say that on the technical

- 1 side, these seminars had as one of their purposes to update
- 2 the participants on what the NRC was determining about
- 3 various items of electrical equipment?
- 4 A [Witness Potapovs] I don't believe that's
- 5 correct. On the technical side, it was primarily going
- 6 through qualification methodology --
 - Q I see.

- A [Witness Potapovs] -- and training inspectors in those skills to be able to review a test report for
- 10 compliance with the 50.49 rule.
- 11 Q I see. But when you say -- I thought you said
- 12 training in qualification methodology is not -- that at
- 13 Liese various seminars and training sessions, one of the
- 14 proposes was to report on recent findings and occurrences
- out in the field as the EQ inspections progressed.
- 16 A [Witness Potapovs] In some of these trainings,
- 17 that may have been an agenda item as case history discussion
- 18 of typical --
- 19 Q Okay.
- 20 A [Witness Potapovs] -- enforcement findings or
- 21 findings that were considered for enforcement or EQ
- 22 deficiencies in general, and then a connection was made
- 23 between those and the technical training format of the
- 24 seminar.
- 25 Q Was there such a seminar conducted by Sandia

- 1 National Laboratories in August of 1987?
- 2 A [Witness Potapovs] There was probably one
- 3 conducted in that time. I think there were about -- at
- 4 least three of those type of seminars conducted at Sandia
- 5 National Laboratories.
 - Q And did you --
- 7 A [Witness Potapovs] And that year may have been
- 8 one of the times.
- 9 Q And did you attend that seminar?
- 10 A [Witness Potapovs] I believe I attended every one
- 11 of them.

- 12 Q In fact, did you not have a role as a teacher or
- 13 trainer at this seminar?
- 14 A [Witness Potapovs] We were the group that
- 15 sponsored the seminar, and I had several presentations that
- 16 . I made during the course of that seminar and in the
- 17 discussions that were a part of that seminar.
- 18 Q Have you made any attempt prior to coming to
- 19 testify with us today to review your materials and handouts
- 20 and agenda from that seminar?
- 21 A [Witness Potapovs] I have not.
- 22 Q When was the last time you have done that?
- 23 A [Witness Potapovs] I can't recall, but I be eve
- 24 last year when the discovery for this --
- 25 Q Proceeding was --

| 1 | A | [Witness | Potapovs] | proceed | ing was in | effect | |
|---|-----------|-----------|------------|-------------|------------|--------|-----|
| 2 | I looked | at what I | had in my | notes on EQ | in genera | 1, and | I |
| 3 | believa I | went and | I submitte | ed whatever | documents | that I | had |
| 4 | that were | pertinent | | | | | |

Q I see.

I show you what we have marked as Alabama Power Company Exhibit 1 for identification purposes. It's entitled "Agenda, Equipment Qualification Seminar, Sandia National Laboratories, Albuquerque, New Mexico, August 26 through 28, 1987." I'll represent to you that we got it through discovery and ask you to look at that for a moment, please.

JUDGE BOLLWERK: Let the record reflect that APCo

Exhibit 1 has been marked for identification.

[APCo Exhibit No. 1 was marked for identification.]

WITNESS POTAPOVS: That is my copy of the agenda because I recognize my handwriting.

MR. MILLER: You know, that answers a long misunderstood question. All right.

BY MR. MILLER:

Q Well, that's interesting. That means you gave the opening remarks? Is that right?

A [Witness Potapovs] That's what the agenda would imply, and I believe that to be true. I have no personal

- 1 recollection whether I did or did not.
- 2 Q All right.
- 3 A [Witness Potapovs] But I probably did.
- 4 Q Let's make sure we can interpret this correctly.
- 5 see the "UP", and that's you.
- 6 A [Witness Potapovs] That's me.
- 7 Now, right underneath that, it's hard to read, but
- 8 I think that says "RW".
- 9 A [Witness Potapovs] That's orrect.
- 10 Q Who is RW?
- 11 A [Witness Potapovs] Richard Wilson.
- 12 Q Dick Wilson?
- 13 A [Witness Potapovs] Right.
- 14 Q The same person who came to the Farley plant to
- 15 inspect --
- 16 A [Witness Potapovs] Same individual.
- 17 Q A few months later, right?
- 18 A [Witness Potapovs] Right.
- 19 Q Of course, we know you came to the Farley plant a
- 20 few months later.
- 21 A [Witness Potapovs] Well, one of the inspections,
- 22 I was present for, I believe, two days.
- 23 Q Now, let's turn the page, and I see on the
- 24 lefthand side by Item 3 "NJ". Who is that?
- A [Witness Potapovs] That would be Mark Jacobus,

1 Sandia National Labs. 2 He came to the Farley plant for its inspection. 0 3 À [Witness Potapovs] Yes, he did. Well, let's go down to Thursday, August 27th, 4 0 5 under Item 4, "JJ". € [Witness Potapovs] I cannot be positive, but I 7 believe that would be Jeff Jacobsen. 8 0 Did he come to the Farley plant? [Witness Potapovs] I don't believe so, but I am 9 10 not sure. Next, we have "SA". Is that Steve Alexander? 11 0 12 Ā [Witness Potapovs] That is correct. 13 Q He came to the Farley plant to inspect? 14 [Witness Potapovs] Yes, he did. A 15 Q. Next, we have "MJ". Is that Mark Jacobus again? 16 [Witness Potapovs] That's correct. A 17 0 We know that he was there. "RW" is next, 18 A [Witness Potapovs] That's correct. We know that he was there. And then we have, next 19 0 to "terminal blocks", "Mark Jacobus" and "Steve Alexander". 20 21 [Witness Potapovs] That's correct. 22 Steve Alexander, the solenoid valves, on over to 0 2.3 the next page, the transmitters and limit switches, right? 24 A [Witness Potapovs] Your question was again?

I'm interpreting this correctly --

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- 1 A [Witness Potapovs] Yes. 2 -- that -- all those "SA"s. And then we have 3 "Mark Jacobus", "Mark Jacobus", and "Richard Wilson" finishing out that column. 4 5 [Witness Potapovs] Correct. 6 2 Regional perspective, I have an "AG". Who is AG? 7 A [Witness Potapovs] It would be Aneil Gautam.
- 8 Q And under that, I have -- I can't tell, is that a 9 PG or an RG?
- 10 A [Witness Potapovs] I'm sorry, I can't help you.
- 11 Q You are then shown, for three of the --
- 12 A [Witness Potapovs] Okay. I think Mr. Luehman
- 13 helped me --
- 14 Q All right.
- 15 A [Witness Potapovs] -- reconstruct that. That was 16 probably Ron Gardner, who is a regional section chief.
- 17 Q You had the next three items for Friday, August 18 28th, followed by HW for EQ enforcement policy.
- 19 A 'Witness Potapovs' That's correct.
- 20 Q Howard Wong.
- 21 A [Witness Potapovs] That's correct. We're doing
- 22 good.
- 23 Q All right.
- A [Witness Potapovs] Can I -- can I just interject
- 25 one thing?

- 1 Q I have found that, when one of you three start
 2 interjecting one thing, you typically don't stick to the
 3 guestion --
 - A [Witness Potapovs] It will be one thing --
 - Q -- and I never enjoy what you have to say --
 - A [Witness Potapovs] -- pertinent to the question.
 - Q -- but you go ahead.

- A [Witness Potapovs] You seem to make a point that
 all of those individuals were subsequently at Farley. The
 same individuals --
- 11 Q That's insightful of you, yes. Go ahead.
 - A [Witness Potapovs] The same individuals, if you will look at the major inspection reports of most utilities, will also appear on those inspections. They were the individuals that we considered best qualified to perform this type of training.
 - Actually, that does make my point, and my point is that as these people went throughout the country, they learned more about these items of electrical equipment, went to a seminar, talked about it to anybody that was there, and showed up at plant Farley and, miracle of miracles, found these deficiencies. Is that what you're trying to tell us?
- 23 A [Witness Potapovs] No. I'm saying these
 24 individuals had the most experience in doing EQ inspections
 25 and, therefore, made the best-qualified individuals to give

1 this type of training.

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- Q By "most experience," you mean the most number of hours in operating plants learning what licensees were doing in attempting to qualify their equipment. Is that true?
- A [Witness Potapovs] They had the largest knowledge of equipment qualification.
- Q And what they did was go from plant to plant and start sticking the licensees with things they learned at the last plant?
- A [Witness Potapovs] They went from plant to plant to do equipment-qualification inspections to a scope that was defined.
- Q And these are the same individuals, what you're telling us, who conducted these numerous EQ inspections up until the time they went to the Sandia seminar that we just finished discussing.
- A [Witness Potapovs] These are some of the individuals, and when we made up an inspection team, we tried to include at least one experienced individual in the role of the team leader or in a role of a supporting technical individual.
- A [Witness Luehman] The other thing I would add is that I think that your timelines are a little bit incorrect in regard to the inspections, Mr. Miller.
- Q Most -- or I should say, within the staff, these

- are the people who had the most knowledge about EQ?
- A [Witness Potapovs] These were the people that
- 3 were most qualified to perform this training.
- And they were qualified because of this evolving state of knowledge as they went through that --
 - A [Witness Potapovs] No, that is not correct.
- 7 Q Okay. Then they were not qualified because of
- 8 that.

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- 9 A [Witness Potapovs] It helped them to become more valuable inspectors.
- 11 Q I see exactly what you're saying.
- A [Witness Potapovs] But Mr. Wilson, for example,
 was selected for his role because he was involved with the
 NRR EQ branch at one time, which preceded the time that we
- 15 were discussing.
- He was also a very highly-qualified instrument and control engineer, and that's why he was selected as the most suitable individual to do some of the inspections, as well
- 19 as perform some of this training.
- 20 Q And that's why you sic'ed him and the others on 21 the various licenses out there. Is that what you're telling
- 22 us?

- MR. MILLER: I withdraw the question. There is no question pending.
 - JUDGE CARPENTER: Mr. Miller, may I interrupt,

l please?

MR. MILLER: Yes, sir.

JUDGE CARPENTER: As a technical member of this Board, I am very reluctant to ask for more paper, but I question how much weight we're going to be able to give to these three pages in Alabama Power Company's Exhibit 1.

I'd like to ask, in discovery, whether you were provided with the handouts that were associated specifically with the items discussed on Thursday, August the 27th, or not.

MR. MILLER: We were provided with a large number of documents. My memory on that -- and we can check it and have a more definitive answer for you -- is that there were big gaps in the pages.

If I recall right, we got some from Mr.

Merriweather, maybe some from Mr. Potapovs, but there were

-- 1 seem to recall that we'd go to page 23 and then we'd

skip to page 68, and I'm not trying to imply anything

sinister.

I don't think that at the time the discovery occurred, that all of those documents were bound together, but I would very interested, if it is within the power of those who attended this seminar, if they would ensure that there be a full and correct copy of the day you just described, of the materials on that day.

| 1 | JUDGE CARPENTER: Well, my point, if we are and |
|-----|--|
| 2 | these are things we're going to talk about for some days |
| 3 | now, and to have some of the tachnical perspective that |
| 4 | existed at that point in time available to this Board would |
| 5 | be very useful |
| 6 | MR. MILLER: I share that |
| 7 | JUDGE CARPENTER: not is a hunting list or not |
| 8 | a hunting list but simply what did the professior think at |
| 9 | that point in time? |
| 10 | MR. MILLER: I will represent to the Board we will |
| 11 | do our best to reconstruct what we have, and I would ask the |
| 12 | staff, to the extent there may be and again, I am not |
| 13 | suggesting anything sinister, but to the extent there may be |
| 1.4 | pockets of documents of some sort that haven't beer |
| 1.5 | JUDGE CARPENTER: Well, I'm just asking in the |
| 16 | sense of helping the Board have a better technical |
| 1.7 | perspective on these issues. These might be very useful. |
| 1.8 | MR. MILLER: We'll do the best we can, and if the |
| 19 | Board would permit us, we'll have it for you tomorrow. |
| 20 | We've got all our materials here. |
| 2.1 | JUDGE CARPENTER: Thank you very much. |
| 6.6 | AND THE STATE OF T |

MR. HOLLER: Judge Carpenter, what we will do is review the documents that we turned over in discovery and

make those available to the Board.

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JUDGE CARPENTER: We accept best efforts.

| 1 | MR. MILLER: Well, Judge, I can't resist saying |
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| 2 | that they clearly knew or should have known this was going |
| 3 | to be an issue. |
| 4 | Let me take one minute, please. |
| 5 | [Counsel for APCo conferring off the record.] |
| 6 | MR. MILLER: If you would be nice enough to look |
| 7 | at what we will mark for identification purposes as Alabama |
| 8 | Power Company Exhibit 87. |
| 9 | [Document proffered to witness.] |
| 10 | MR. MILLER: I will tell you in advance that the |
| 11 | purpose is to ask you to authenticate that exhibit as an NO |
| 12 | arising out of Indian Point 2. |
| 13 | And, for the record, while we're looking at it, I |
| 14 | will identify Alabama Power Company Exhibit No. 37 is a |
| 15 | November 3rd, 1988 Notice of Violation and Proposed |
| 16 | Imposition of Civil Penalty against Indian Point 2. |
| 17 | JUDGE BOLLWERK: Let the record note that it's |
| 18 | been Alabama Power Exhibit 87 has been marked for |
| 19 | ider Lilication. |
| 20 | [APCo Exhibit No. 87 was marked |
| 21 | for identification.) |
| 22 | MR. MILLER: And I will mark, for identification |
| 23 | purposes, Alabam: Power Company Exhibit 88, and describe it |
| 24 | as a September 21, 1988 Notice of Violation and Proposed |
| 25 | Imposition of Civil Penalty against Indian Point 3. |

| | JUDO | SE BOLLW | ERK: Le | t t | he r | ecord | reflect | that |
|---------|---------|----------|---------|-----|------|-------|---------|------|
| Alabama | Power | Company | Exhibit | 8.8 | has | been | marked | for |
| identif | ication | 1 | | | | | | |

[APCo Exhibit No. 88 was marked for identification.]

MR. MILLER: And, again, I'll mark for identification purposes Alabama Power Company Exhibit 89, and describe it as a September 19, 1988 Notice of Violation and Proposed Imposition of Civil Penalty related to Pennsylvania Power and Light Company, Susquehanna Units 1 and 2.

JUDGE BOLLWERK: Let the record reflect that Alabama Power Company Exhibit 89 has been marked for Identification.

[APCo Exhibit No. 89 was marked for identification.]

BY MR. MILLER:

Let me just tell you up front, the purpose of this is to ask you to authenticate these Novs, assure that they are true and accurate copies promulgated by the NRC to the best of your knowledge. And then I'll ask you whether any of you recall sitting as an EQ Review Board member for any of these three Novs. I'll represent to you I'm not going to ask you about the particulars of it.

A [Witness uehman] They appear to be the Novs and

- 1 civil penalty -- proposed civil penalties that were issued.
- 2 I have no reason to -- I don't think any of us have any
- 3 reason to not believe that.
- 4 And although I don't recall the specifics of
- 5 these, I think I recall that on at least two of them I was a
- 6 member of the EQ Review Panel when it reviewed these, and
- 7 maybe all three.
- 8 Q Okay. Can you tell us which two you recall being
- 9 a member of that panel?
- 10 A [Witness Luehman] Specifically, Susquehanna and
- 11 Indian Point 3.
- 12 Q I see.
- 13 Mr. Potapovs?
- 14 A [Witness Potapovs] I cannot specifically recall
- 15 being or not being on any of these panels. But, I sat in, I
- 16 would say, 90 percent of the panels, at least. So, the
- 17 chances are that I was present at probably all of them.
- 18 Q Mr. Walker?
- 19 A [Witness Walker] My answer is basically the same.
- 20 I assume I was at all of them. I may have missed one or
- 21 two, but I wouldn't be able to tell you which onc.
- 22 Q Just by way of inquiry, and relying purely on your
- 23 memory and your personal knowledge, can you tell us whether
- 24 or not you spent more than two lours on -- when you sat as a
- 25 panel for these two?

| 1 | I'll strike that and ask it to you this way: |
|----|---|
| 2 | With respect to the licensees identified in each |
| 3 | of the three Exhibits 87, 88 and 89, can you pick one of |
| 4 | those where you have a present recollection of spending mor |
| 5 | than two hours, when you sat as the EQ Review Panel? |
| 6 | A [Witness Potapovs] No. I cannot. |
| 7 | A [Witness Luehman] Neither can I. |
| 8 | A [Witness Walker] No. |
| 9 | Q Just you told us yesterday you sat on the |
| 0 | Farley NOV less than two hours. Is that normal or the |
| 1 | standard or about the average for each of your Review Board |
| 2 | activities? |
| 3 | A [Witness Luehman] I think that the Farley Panel |
| 4 | was probably one or the more extensive |
| 5 | Q I see. |
| 6 | A [Witness Luehman] longer ones. |
| 7 | Q I see. Okay. |
| .8 | So it would be the high end of the scale? |
| 9 | A [Witness Luehman] That's probably correct. |
| 0 | MR. MILLER: If we could have just a moment, |
| 1 | please. |
| 2 | [Counsel for APCo conferring off the record.] |
| 3 | MR. MILLER: If it please the Board, in order to |
| 4 | try and be more efficient, may we propose that we take our |
| F | morning break a little hit early, give us an enportunity to |

1 discuss with each other to determine if there is an

2 additional line of cross examination we need to pursue?

JUDGE BOLLWERK: All right. Why don't we take a

4 15-minute break at this point?

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[Brief recess.]

JUDGE BOLLWERK: Let's go back on the record.

Mr. Holler, you want to say something?

MR. HOLLER: Yes, sir, if I may, before Mr. Miller continues with his cross examination.

With reference to Judge Carpenter's request for the documentation associated with training, during the break we had an opportunity review the list of documents that we released, and in fact, all of the documents that were identified by the staff during discovery were released to the licensee.

There are approximately 14 of those. They range in size from 319 pages, a couple are 95 and 40 pages, down to a few pages.

I wanted to make the point that we could make those available to -- our originals -- to Mr. Miller, if he chooses to do any cross examination on those while the panel is still available here today, and the second point would be if the Board desires to have three copies of each of those documents or would like to review them first and pick the ones they want.

| 1 | [Board members conferring off the record.] |
|----|--|
| 2 | JUDGE BOLLWERK: Why don't you provide us with one |
| 3 | copy to start with, and if we need to make more, we'll do it |
| 4 | at that point. |
| 5 | MR. HOLLER: Yes, sir. Thank you, sir. |
| 6 | And Mr. Miller, I don't know whether you want |
| 7 | MR. MILLER: Yes. We'll take a look at it, and |
| 8 | since they are going to be here, what I would propose to do, |
| 9 | since I am right towards the end of what we have, is we'll |
| 10 | let Mr. Luehman is going to stay, but we'll let them go |
| 11 | for the moment. |
| 12 | If we want to do cross examination on them, we'll |
| 13 | just put them back in the box and wrap it up on that little |
| 14 | issue. |
| 15 | MR. HOLLER: And you would anticipate that within |
| 16 | a day or two? |
| 17 | MR. MILLER: Oh, yes, we'd do it either today or |
| 18 | tomorrow would be my guess, but we're down to the last thing |
| 19 | for this panel. |
| 20 | MR. HOLLER: Okay. |
| 21 | Thank you, sir. |
| 22 | MR. MILLER: While we're back on the record, we |
| 23 | are in the copying mode. |
| 24 | So, we only have one copy of this, but we'll |
| 25 | represent to you that we'll get it, and we'll mark it for |

identification purposes as Alabama Power Company Exhibit No.

90, and we'll identify it for the record as something called

the EQ scorewoard, and I will hand it to Mr. Luehman and ask

4 him if he can tell us what that is.

[Document proffered to witnesses.]

WITNESS LUEHMAN: Yes, T can.

BY MR. MILLER:

Q Will you tell us what the EQ scoreboard is, please, sir?

A [Witness Luehman] Yes.

originally by Howard Wong, who was then the deputy director of the Office of Enforcement, to be able to keep abreast of where the various -- at what stage the various civil penalties taken under the modified enforcement policy -- what stage of the process they were at, whether the civil penalty had been proposed, whether it had been proposed and then paid, whether it had been contested, and whether it had been an order issued based on a licensee's contesting the civil penalty, and whether, based on that order, the civil penalty had subsequently been paid after issuance of the order.

Q You make it sound so formal, Mr. Luehman. What you have before you is a handwritten copy. Surely there is a typed version of such a formal document.

- A [Witness Luehman] No.
- 2 Q Is that in your handwriting or Mr. Wong's
- 3 handwriting?
- 4 A [Witness Luehman] No. This -- this copy right
- 5 here was given to me, as indicated by the -- by the note in
- 6 the righthand top corner. The --
- 7 Q That note says "JSL, please keep current."
- 8 A [Witness Luehman] "JGL, please keep current," and
- 9 --
- 10 Q And you are that person.
- 11 A [Witness Luehman] And that's -- the initials
- 12 under that are "JL." That's Jim Lieberman, director of the
- 13 Office of Enforcement.
- 14 And the purpose of this document was -- from time
- 15 to time, we got inquiries from senior NRC staff management
- 16 as to, you know, where we were in the process of -- of
- 17 getting all the modified policy cases through the system and
- 18 when would we be able to basically stop using the modified
- 19 policy and go back to the regular enforcement policy.
- 20 Q Did you get inquiries from senior management of
- 21 the NRC how about the scoreboard is looking? Those are the
- 22 kind of inquiries you got?
- 23 A [Witness Luehman] No.
- 24 Q Did you say to the senior management of the NRC,
- 25 we're keeping a scoreboard down here in the Office of

- 1 Enforcement?
- 2 A [Witness Luehman] Those -- no, I did not, and
- 3 those were not words I chose.
- 4 Q Did anyone in the Office of Enforcement, you
- 5 included, look at the EQ scoreboard as a game, a point
- 6 system?
- 7 A [Witness Luehman] Absolutely not.
- g Have you even heard of something called an EQ
- 9 game?
- 10 A [Witness Luehman] Absolutely not.
- 11 Q You have never heard of that.
- 12 A [Witness Luehman] Yes, I have heard of that.
- 13 Q And tell me the context that you have heard of an
- 14 EQ game.
- 15 A [Witness Luehman] The context of the EQ game that
- 16 we were talking -- that you're talking about is, when Mr.
- 17 Howard Wong left the Office of Enforcement, I made -- I made
- 18 up a game for him that was called "EQ, The Game." It was a
- 19 practical joke.
- 20 "EQ, The Game," as a practical joke, Mr. Luehman?
- 21 A [Witness Luehman] That's correct.
- 22 Q EQ, the scoreboard, as a point system, Mr.
- 23 Luehman?
- 24 A [Witness Luehman] No.
- 25 Q It does say "EQ Scoreboard," does it not?

1 A [Witness Luehman] Like I said, those ware not my 2 words. 3 0 And who basides yourself worked on "LQ, The Game"? [Witness Luehman] Myself only. 4 A And what form did "EQ, The Game" take, Mr. 5 O. Luehman? 6 7 À [Witness Luehman] It was a --8 Ö. Game? 9 [Witness Luehman] It was a piece of paper that 10 had a bunch of blocks on it. 11 And those blocks were ones that you drew up for 0 12 the benefit of Mr. Wong. Is that so? 13 [Witness Luehman] That's correct. 14 0 Mr. Wong took that with him, I take it. 15 [Witness Luehman] I -- I guess he did. A 16 In the discovery request in this case, did you 0 call up Mr. Wong and ask him to return "EQ, The Game"? 17 18 A [Witness Luehman] Not specifically. Does "not specifically" mean you talked to him at 19 20 some other point? 21 A [Witness Luehman] No. We notified all the 22 regions that they had to provide all the necessary 23 documents. Since this was just on a piece of paper, I -- I

It doesn't have -- it really doesn't have any

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hadn't even though of it.

- relevance to what we're talking about. I don't even know if Mr. Wong kept it.
- 3 Q It has no relevance except that you treated EQ 4 with a scorecard or scoreboard and a game. True or false?
- 5 A [Witness Luehman] No.
- 6 Q You didn't do that, yet you see that document 7 before you, do you not?
- 8 A [Witness Luehman] As I stated, I did not make -- 9 make this up.
- 10 Q No, that's right. You took this and made up the 11 EQ game.
- 12 A [Witness Luehman] That's not correct.
- 13 Q So, you made up the EQ game with an entirely
 14 different set of information from what the scoreboard says.
- A [Witness Luehman] That's correct. It had nothing to do with any actual cases or anything to deal -- dealing with the -- the activities that were going on.
- 18 Q I am sure we would all agree, if we could all see 19 copies of the "EQ, The Game." You wouldn't mind getting us 20 a copy of it; would you?
- 21 A [Witness Luehman] I don't think I can re-invent 22 it.
- 23 MR. HOLLER: I object, Your Honor. If counsel has 24 a request for documents, I request that he address them
- 25 through --

| 1 | JUDGE BOLLWERK: Is it a problem with discovery? |
|-----|---|
| 2 | BY MR. MILLER: |
| 3 | Q Let me just point out that at one time it was a |
| 4 | document that you prepared and had in your control; is that |
| 5 | so? |
| 6 | A [Witness Luehman] That is correct. |
| 7 | Q And you gave that document away and you've made no |
| 8 | attempt to get it back? |
| 9 | A [Witness Luehman] That's correct, and I made no |
| 10 | secret of that because, in fact, the people two of the |
| 11 | people that probably got the biggest kick out of "EQ, The |
| 12 | Game," were at the party where I gave it to Mr. Wong, were |
| 13 | from Mr. Repka's firm. |
| 14 | Q I'm sure it was delightful, Mr. Luehman. |
| 15 | JUDGE BOLLWERK: Let the record reflect that APCo |
| 16 | Exhibit 90 is being marked for identification. |
| 17 | [APCo Exhibit No. 90 was |
| 1.8 | marked for identification.] |
| 19 | BY MR. MILLER: |
| 20 | Q Any other games, Mr. Luehman, for example, |
| 21 | Modified Enforcement Policy; was that a game? Have you |
| 22 | made up one of those? |
| 27 | A [Witness Luehman] [No response.] |
| 2 4 | Q Say yes or no, Mr. Luehman. |
| 25 | A [Witness Luehman] I have not made up any games. |

| 1 | Q "50.49, The Game"? |
|-----|---|
| 2 | MR. HOLLER: I object, Your Honor. The witness |
| 3 | has answered the question as to any more games. |
| 4 | BY MR. MILLER: |
| 5 | Q You've made up no other games related to EQ? |
| 6 | A [Witness Luehman] No, I haven't. Nobody wanted |
| 7 | to market them. |
| 8 | [Counsel for APCo conferring off the record.] |
| 9 | MR. MILLER: I have one final exhibit to mark. |
| 10 | We're going to mark this one final matter: we'll mark |
| 1.1 | this for identification purposes as Alabama Power Company |
| 12 | 91, and describe it for the record as a September 22, 1988 |
| 13 | Notice of Violation issued to Consumers Power Company, Big |
| 14 | Rock Point Nuclear Plant, |
| 15 | Why don't I show that to you, the purpose being |
| 16 | the same series of questions we asked you for the other one |
| 17 | I'll have to get a copy for you. I have exactly 6. |
| 18 | JUDGE BOLLWERK: Let the record reflect that APCo |
| 19 | Exhibit 91 has been marked for identification. |
| 20 | [APCo Exhibit No. 91 was |
| 21 | marked for identification.] |
| 22 | BY MR. MILLER: |
| 23 | O What our goal is going to be is to authenticate it |
| 24 | and ask you if anybody remembers sitting on that EQ |
| 25 | Enforcement Review panel. I might as well give that one to |

- 1 you.
- 2 [Witnesses reviewing document off the record.]
- 3 A [Witness Luehman] We're ready.
- 4 Q Is that, as far as you can tell, an accurate copy
- 5 of the Notice of Violation I described?
- 5 A [Witness Luehman] Yes, it is.
- 7 Q Does anyone on the panel remember sitting on the
- 8 Enforcement Review Panel for that particular NOV?
- 9 A [Witness Luehman] I do.
- 10 Q Mr. Potapovs?
- 11 A [Witness Potapovs] I also remember sitting on
- 12 that one.
- 1. Q Mr. Walker?
- 14 A [Witness Walker] I'm sure I was on it. I can't
- 15 say I recall specifically this one.
- 16 Q All these ones, these and the other two we talked
- 17 about, Indian Point; the -- one of your tasks was the
- 18 consistency check we've heard about?
- 19 A [Witness Luehman] That's correct.
- 20 Q Okay.
- MR. MILLER: No further questions. Thank you,
- 22 sir. Thank you, gentlemen.
- JUDGE BOLLWERK: Mr. Holler do you have any
- 24 redirect?
- MR. HOLLER: I do. If it please the Court, I

- recognize that we've just come from a break, but can we take a brief -- keep it to an actual 10 minutes, and we should be
- 3 able to finish prior to lunchtime.
- JUDGE BOLLWERK: Okay, we'll do that and take 10
- 5 minutes then.
- 6 [Brief recess.]
- JUDGE BOLLWERK: Why don't we go back on the
- 8 record.
- 9 Mr. Holler, are you ready to proceed?
- MR. HOLLER: Yes, sir.
- 11 REDIRECT EXAMINATION
- 12 BY MR. HOLLER:
- 13 Q Mr. Potapovs, in your testimony during cross
- 14 examination, you made reference to NRC communications.
- 15 Would you please explain to the Board the time frame that
- 16 these communications issued and which of these
- 17 communications in terms of, not particulars, but in the
- 18 issuing of them, you took into account in considering
- 19 actions under the modified enforcement policy?
- 20 A [Witness Potapovs] The primary means of
- 21 communicating information on issues of the type that were
- 22 discussed would be the information notices put out by NRC,
- 23 and information notices were put out throughout and
- 24 preceding the period when the inspections began and
- 25 continued after the equipment qualification deadline.

- The particular ones that were considered in the enforcement deliberations would be those information notices that were issued by the Commission prior to the November 1985 deadline.
- 5 Q Did information notices continue to issue after 6 1985?
 - A [Witness Potapovs] Yes.

1.7

- Q Is it your testimony, then, that those -- explain to the Board how they were dealt with in inspections that were taken for enforcement actions under the modified enforcement policy?
 - A [Witness Potapovs] The informatic, notices issued after the 1985, November 30th deadline date were not considered as providing information to a licensee that he should have known before the deadline.
 - Q Yesterday, the panel, in cross examination, agreed with Mr. Miller that Generic Letter 86-15 had superceded Generic Letter 85-15. Could the panel explain to me what they meant by that?
- A [Witness Luehman] Well, I think what we meant is that -- superceded may have been a poor choice of words, if we used it. I think that what we really meant was that 86-15 supplemented what was discussed in 85-15 and some of the information used in both 85-15 and 86-15 in fact continues and appears in Generic Letter 88-07.

Q Mr. Walker, yesterday, I believe in your cross examination you referred to the December 13th, 1984 SER issued to Alabama Power Company as superseding the previous SERs. Can you explain for me and the Board what that means?

A [Witness Walker] Yes. What I meant was that all the work that took place prior to that SER was considered. There were a lot of deficiencies identified in the prior work. That SER was supposed to take into consideration all the things done prior to that time and represent the staff effort to date, and therefore, those things that were at one point no longer qualified and now found to be qualified, it would be reflected in that SER.

A [Witness Luehman] In fact, I would add that the Commission issued a policy statement on environmental qualification that, you know, I think in the '83 time frame, that put licensees on notice that that was going to be in fact the case that a set of SERs would -- or SERs would be issued to all the operating plants pulling together all of the previous SERs for the individual plants, and that SER went on to talk about how at that point, the point of the policy statement, that most of the plants were considered Category 1. If you recall from yesterday, Category 1 was used in some of those check lists that Mr. Miller showed us indicating equipment qualified.

So in '83, the Commission had recognized that most

1 of the plants had made -- I think that they call it in the 2 policy statement reasonable efforts to comply, and that a set of, you know, SERs pulling together all the information from previous SERs and the deficiencies and how they would be resolved would be issued to every plant.

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- Earlier this morning, Mr. Luehman, you testified in answer to Mr. Miller's question regarding the use of the word "knowledge" in the modified enforcement policy. I wonder if you could clarify for the Board how knowledge and information are addressed in the modified enforcement policy.
- [Witness Luehman] Well, the only point that I was trying to make is that there is a distinction, and I think that that distinction is called out in the modified policy, that knowledge is, in my opinion, the -- would involve information that is known by a particular individual.

My point was that the informatior may have been available, and we did not try to determine if the licensee knew the information. We only tried to determine if, in the form of a generic letter, or an information notice, or some other type of, you know, vendor document, that the information was available to them, and the presence of that information before the deadline could be used as a basis for making a "clearly should have known" finding.

In fact, if you bear with me just a second, on the

top of Page 2 of the modified policy itself, if you read the paragraph that continues on the top of Page 2, the word "information" is used a number of times. It's not the word "knowledge", it's the word "information", and that's the

only point I was trying to make.

regard to clearly should have known?

Q Let me address this to the panel as a whole. On cross examination, you offered quite a bit of testimony regarding clearly should have known and those things taken into account. Were there any other organizations within the NRC that participated in the input that you considered with

A [Witness Luehman] Obviously. The first cut at the "clearly should have known" criteria in modified policy was made by the Regional office proposing the civil penalty, or submitting the proposed civil penalty, the draft notice of violation to the Office of Enforcement.

I guess I'll have to -- I assume, and I think that Mr. Walker and Mr. Potapovs could add something to this, that during the normal process of enforcement this -- these actions are reviewed by other offices, such as the Office of Nuclear Reactor Regulation.

And I would say that it was our expectation in the Office of Enforcement that those other offices, in fact, looked at other criteria that had to be met and made those judgments.

| | I can speak for the view |
|-------------|--|
| A | [Witness Potapovs] Well, I can speak for the view [Witness Potapovs] Well, I can speak for the view Office of Inspection/Enforcement, which was later Office of Inspection/Enforcement, which was later Office of Nuclear Reactor Regulation. These |
| 2 at the | t Inspection, These |
| | A # 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| | a cases were |
| 5 and I | and my stall and m |
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| 7 final | leveling. Q And by notices, Mr. Potapovs, you are referring to |
| 8 | Q And Di |
| 9 | A [Witness Potapovs] The proposed notice of |
| 10 | that the Region sent |
| | to he dimensional transfer of the contract of |
| 12 | A [Witness Walker] And referred to, as the branches |
| 13 14 on | A [Witness Walker] And I happen to be A [Witness Walker] And I happen to be a the branches e of those branches that was referred to, as the branches at that information was provided to for review and nat that information was provided to for review and |
| | that information |
| | and of Comments and lige me, |
| 17 | Q Okay. If Mr. Miller will industry of myself, I will apologize, and |
| 18 | |
| 19 | here. And if I am ahead of my withhold my question. But at what point withhold my question. But at what point withhold my question. But at what point |
| 20 | MB MILLEA. |
| 21 | have your way with it |
| 22 | BY MR. HOLLES |
| 23 | Q At one point on this chart, |
| 2.4 | andline, I berry |

November 30, 1985 deadline, I believe it indicates

- 1 "inspections." And it's labeled: Staff conducts numerous
 2 EQ inspections.
- Am I ahead of you, sir, or is that a fair description of what it says?
- 5 MR. MILLER: That's what it says.
- 6 BY MR. HOLLER:
- 7 Q And I'm going to ask the panel:
- Are the dates, in their opinion, that are
 indicated for the first -- for the "Staff conducts numerous
 In the indicated for the first -- for the "Staff conducts numerous
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- 11 benefit, it begins January, 1986 and terminates August,
- 12 1987.

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- A [Witness Luehman] I think that those dates are not correct. In fact, as early as 1984 the staff was going out to conduct the inspections. The earliest of these inspections were to gather, get some experience and gather some information from which the temporary instructions that were subsequently drafted were -- I mean, those inspections were used as a resource.
- So really, the inspections went back, at least

 I've seen inspections as early as 1984, with inspectors, in

 particular some of the inspectors that are listed on that

 outline, as participating in or leading those inspections.
- 24 Q And as to the cut-off date, sir, does the Board 25 have any comment with regard to that? The last inspections?

| 1 | A [Witness Luehman] Well obviously I don't have |
|----|--|
| 2 | any reason to dispute that inspection. Because I think that |
| 3 | the Farley inspections are after that date. And I think |
| 4 | that there may have been, in my recollection, some |
| 5 | inspections in other Regions after the Farley inspection. |
| 6 | But, clearly, I don't think that they have any I don't |
| 7 | think they are pertinent information for this proceeding. |
| 8 | A [Witness Potapovs] I believe that that is |
| 9 | correct, that inspections of this type were started in 1984. |
| 10 | And I believe they did continue somewhat after August 1987. |
| 11 | [Counsel for NRC conferring off the record.] |
| 12 | MR. HOLLER: That concludes my redirect. |
| 13 | JUDGE BOLLWERK: Mr. Miller, do you have any |
| 14 | recross? |
| 15 | MR. MILLER: Yes, sir. |
| 16 | RECROSS EXAMINATION |
| 17 | 3Y MR. MILLER: |
| 18 | Q Let's make it right, men. Let's try and make it |
| 19 | right. |
| 20 | You say that the inspections, the EQ inspections, |
| 21 | started in 1984? |
| 22 | A [Witness Luehman] That is correct. |
| 23 | Q And when in '84 did they start? |
| 24 | A [Witness Luehman] The earliest I know of is, I |
| 25 | think, is October 1984. But I think that they are that's |

- 1 the earliest date that I know of. There might have been a
- 2 couple before that.
- 3 Q So, but for the purposes of the proof in this
- 4 proceeding, the earliest that we can say is October 1984?
- 5 Right?
- 6 A [Witness Luehman] That's correct.
- 7 Q And you say it was done by the same people that
- 8 subsequently went to the Sandia Lab?
- 9 Well, strike that.
- That at least those people began their efforts
- 11 back then?
- 12 A [Witness Luehman] As I recall, some of the
- 13 individuals -- I don't think that any one of those
- 14 inspections had all these same individuals.
- 15 A [Witness Potapovs] The inspections were done
- 16 under the same organizational unit. They used substantially
- 17 the same people.
- 18 Q All right. And that's when they started these
- 19 efforts leading up to the EQ inspection at Farley?
- 20 A [Witness Potapovs] That's correct.
- 21 A [Witness Walker] I feel --
- 22 Q I'm sorry, go ahead.
- 23 A [Witness Walker] I feel the urge to interject, if
- 24 I may.
- 25 Q Okay.

- A [Witness Walker] There were inspections before
 1984. But I think he said the inspection that is related to
 this effort. Now I don't think he is suggesting that there
 were no EQ inspections before 1984 at all.
- 5 Q How about first-round EQ inspections; is that what 6 you are describing?
 - A [Witness Walker] That's right.
- 8 Q Okay.

- 9 A [Witness Walker] That's more accurate, yes.
- 10 Q Why don't we make these first round. I'll say -11 we'll put in numerous first round. How is that? Does that
 12 make it correct?
- A [Witness Walker] I believe so.
- A [Witness Potapovs] As long as we define a term.
- And the first round would be the type of inspections that
- 16 were conducted --- at Farley were conducted, at every
- 17 operating plant. And that would be the first round.
- 18 Q All right. Well, that tells us, if I read the
- 'imeline correctly, that by the time these inspectors showed
- 20 up at Plant Farley in the Fall of 1987, they had three years
- 21 of EQ experience under their belts, true?
- A [Witness Potapovs] Some of the inspectors, that's correct.
- 24 Q That's right. And this so-called body of
- 25 knowledge had been building for three years by the time they

- 1 walked in our door?
- 2 A [Witness Luehman] And was available to the
- 3 licensee.
- 4 O We're going to talk about that. But the answer to
- 5 the so-called body of knowledge -- whether or not it was
- 6 available to the licensee -- is a point. But we know that
- 7 it was available to the NRC. True or false?
- 8 A [Witness Luehman] That's correct.
- 9 Q Now, actually, since we're on the chart -- this
- 10 chart is missing one other thing, isn't it? Didn't we talk
- 11 yesterday about the evaluation of the Unit 2 license
- 12 condition? Do you recall that testimony?
- 13 A [Witness Potapovs] Yes.
- 14 Q Didn't we determine yesterday that in the summer
- of 1985 the Unit Two license condition referencing EQ
- 16 qualification was deemed to be met?
- 17 A [Witness Luehman] Yes.
- 18 Q All right. So, let's put that in there, so we'll
- 19 make it accurate or more accurate, how's that -- and
- 20 complete.
- 21 You with me on that?
- 22 A [Witness Luehman] Yes.
- 23 Q If I recall, and your memory may be better, it was
- 24 Unit 2s and NUREG-0588 plant. If that's not right, somebody
- 25 tell me so. Is that right? That is right? Everybody out

- here says yes. What do you say?
- 2 A [Witness Walker] I am *not even sure if I know
- 3 what that means. But --
- 4 A [Witness Potapovs] I believe that's correct --
- 5 Q All right.
- 6 A [Witness Potapovs] -- in the terminology that we
- 7 used.
- 8 Q Well, having had an opportunity to look at the
- 9 chart, do you see anything else about it that you believe to
- 10 be inaccurate?
- 11 A [Witness Luehman] No.
- 12 Q Okay.
- What we'll do then, for the purpose of the
- 14 records, is we will -- this is not working, I'm just telling
- 15 you right now.
- 16 We'll mark this chart as Alabama Power Company
- 17 Exhibit 92. And we'll have to work on this logistically,
- 18 but we'll find some way to reduce it to a smaller version so
- 19 it can be included in the record. And we'll define Alabama
- 20 Exhibit 92 as a timeline showing various milestones along
- 21 the way associated with the Farley EQ enforcement
- 22 proceedings.
- MR. HOLLER: If I may, insofar as we've gone up to
- 24 November 30th and the inspections, I believe -- I can't see
- 25 the chart from here -- if we could -- to the extent that

- there are no other items on the end, we've addressed those
- 2 -- I reserve the right to correct the chart as that becomes
- 3 necessary.

- MR. MILLER: Or supplement it.
- 5 JUDGE BOLLWERK: I take it we can at this point
- 6 mark it for identification. Have that marked.
 - [APCo Exhibit No. 92 was marked
- for identification.]
- 9 BY MR. MILLER:
- 10 Q Okay. Let's see if we can go back and review some
- 11 of these things.
- Mr. Luehman, you said that knowledge in the
- 13 modified enforcement policy, and you said these words --
- 14 that knowledge is the same as information and if it is known
- 15 by the licensee. Did you mean to say clearly known by the
- 16 licensee?
- 17 A [Witness Luehman] Well, I think that, in the
- 18 context of the modified policy, I guess that that is
- 19 correct.
- 20 Q Thank you, sir.
- Now, and you pointed us to the paragraph at the
- 22 top of page two referring to the statement "information
- 23 provided to the licensees by the NRC will be taken into
- 24 consideration," and you see that?
- 25 A [Witness Luehman] To that statement, as well as

- 1 there's another statement in that same paragraph.
- 2 Q Right. Now, but there's yet another discussion
- 3 that goes something like this. I'll paraphrase it as best I
- 4 can. If one licensee determines an EQ deficiency existed,
- 5 the staff would not assume that all licensees should also
- 6 come to the same conclusion.

- Am I right so far?
- 8 A [Witness Luehman] That's correct.
- 9 Q "Unless," the modified enforcement policy goes on
- 10 to say, "information about this specific deficiency had been
- 11 widely dissemination within the industry or by the NRC."
- 12 A [Witness Luehman] That's correct.
- 13 Q Now, how many licensees participated in the 1987
- 14 Sandia L boratory EQ Seminar?
- 15 A [Witness Potapovs] I don't believe anybody did.
- 16 Q How many licensees had sent to them by the staff
- of the NRC the agenda from that seminar?
- 18 A [Witness Potapovs] I'm not sure that anybody did.
- 19 Q How many licensees had the papers and discussions
- on limitorques, splices and terminations that were discussed
- 21 at the '87 Sandia Seminar sent to them by the NRC?
- 22 A [Witness Potapovs] I believe a lot of those
- 23 documents were publicly available.
- 24 Q In the PDR?
- 25 A [Witness Potapovs] I am not sure that the vendor-

- 1 related information would normally be placed in PDR unless
- 2 it happens to be part of the submittal to NRC. I cannot
- 3 speak to that.
- 4 Q Okay. So, you can't say whether or not they were
- 5 in the PDR?
- 6 A [Witness Potapovs] The information exchanged with
- 7 the licensees that I alluded to in my earlier testimony was
- 8 in reference to other meetings that we had with the same
- 9 body of people participating that were held in the
- 10 Washington area and were publicly noticed.
- 11 0 I see.
- 12 What about those of us down in the Dothan area?
- 13 Did you send any down to the Houston County Library?
- 14 A [Witness Potapovs] You were all invited to
- 15 participate.
- 16 Q Uh-huh. But your answer is that this seminar
- 17 agenda and the associated materials was not widely
- 18 disseminated by the NRC to the licensees?
- 19 A [Witness Potapovs] The seminar was an internal
- 20 NRC training session.
- 21 Q Thank you, sir.
- Now, you told us, Mr. Potapovs, that the primary
- 23 means of communications with the licensees was information
- 24 notices. And I should have added prior to '85.
- 25 A [Witness Potapovs] That's one of the primary

- methods of communicating information to licensees on these types of subjects.
- Q We have heard you say, at great length, all
 members of the panel, that things like SERs should be read
 carefully and not tried to -- expanded upon. Is that the
 same thing -- same principle holds true with information
 notices?
- A [Witness Potapovs] I'm not sure that there's any specific direction how people should read information notices. There is some statement in each notice that describes the purpose of the notices.
- 12 Q Is there -- are you familiar with a statement that
 13 says no specific action or response notice is required?
 - A [Witness Potapovs] That i correct.
 - Q And what does that mean, p ase, sir?

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- A [Witness Potapovs] That 1 and that NRC does not solicit or expect any written response from the licensee that they have complied with whatever is in the information notice or taken any action with respect to it.
- 20 Q Or taken any action with respect to it. Weren't those your words?
 - A [Witness Potapovs] What we do expect --
- 23 Q Weren't those your words, Mr. Potapovs?
- A [Witness Potapovs] You took a half of a sentence.

 My words were "taken any action." Only specific methods

- 1 were -- were directions specified in that notice. What NRC
- 2 does expect that the recipient of the notice does review an
- 3 information notice and --
 - Q For applicability to their facilities?
- 5 A [Witness Potapovs] It is exactly right.
- 6 Q And if it's not applicable to their facilities, no
- 7 specific action?
 - A [Witness Potapovs] That's correct.
- 9 Q You said, and I may have misunderstood this, that
- 10 86-15 did not supersede 85-15, it supplemented 85-15?
- 11 A [Witness Potapovs] That's correct.
- 12 Q And I have to confess, I got a little lost there.
- 13 Did you say that 88-07 supplemented 86-15 and 85-15? If I
- 14 missed it, please correct me.
- 15 A [Witness Luehman] That's essentially correct, but
- 16 ---

- 17 Q Okay. And --
- 18 A [Witness Luehman] -- but I would go to add that
- 19 -- that, ultimately, 88-07 was the document that the
- 20 Commission directed the staff to apply, rather than the 85-
- 21 15 or 86-15.
- 22 Q The two earlier generic letters, 85-15 and 86-15
- 23 -- I don't know to say it -- were supplemented by 88-07,
- 24 were collapsed into 88-07, they formed the basis for 88-07.
- 25 You can choose whichever one of those you want.

| 1 | A [Witness Potapovs] I don't believe that the |
|-----|--|
| 2 | operability discussion from the earlier notice was carried |
| 3 | on into the 88-07 document. So, that still remained as a |
| 4 | requirement. |
| 5 | MR. MILLER: Okay. |
| 6 | [Counsel for APCo conferring off the record.] |
| 7 | MR. MILLER: Could we have just one minute? |
| 8 | JUDGE BOLLWERK: Certainly. |
| 9 | [Counsel for APCo conferring off the record.] |
| 0 | MR. MILLER: No further questions. Thank you very |
| 1 | much, gentlemen. |
| 2 | JUDGE BOLLWERK: Mr. Holler? |
| 13 | MR. HOLLER: May I have just 30 seconds? |
| 4 | [Counsel for NRC staff conferring off the record.] |
| 1.5 | MR. HOLLER: I thank the Board for the time. I |
| 16 | was just conferring with regard to the training materials. |
| 17 | If the duplication machines did not break down, we |
| 1.8 | should have copies available for Mr. Miller and for the |
| 9 | Board sometime after lunchtime today, and that concludes the |
| 0 | staff's testimony. |
| 21 | I would, at this time, move that the staff's |
| 2 2 | testimony, including Exhibits 1 through 15, number 30, and |
| 2.3 | number 56, be moved into evidence. |
| 4 | JUDGE BOLLWERK: Okay |

MR. MILLER: No objection.

JUDGE BOLLWERK: All right.

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Let's do one thing. We should have done this up front in terms of identifying them, and we didn't. Can you give us a brief identification of each one, and let's move 4 5 them in individually?

I want to make sure there is no question about the record here, what we have let in, especially since we have some numbers that are duplicates. So, it will take a couple of seconds, but I think it would be worthwhile.

MR. HOLLER: The staff moves the following documents, which have been marked for identification, be moved into evidence: Staff Exhibit No. 1, NRC staff professional qualifications.

MR. MILLER: No objection.

MR. HOLLER: Staff Exhibit No. 1, notice of violation and proposed imposition of civil penalty, dated August 15, 1988.

MR. MILLER: It may help if we just say one time we have no objection to any of these exhibits coming in.

JUDGE BOLLWERK: Can you just identify them all?

MR, HOLLER: Staff Exhibit No. 3, order imposing civil monetary penalty, dated August 31, 1990.

Exhibit No. 4, modified enforcement policy relating to 10 CFR 50.49, short title Generic Letter 88-07. Staff Exhibit No. 5, a Commission paper which is

- styled as SECY Paper 87-255, proposed modification of policy on enforcement, dated October 13, 1987.
- 2 on enforcement, dated October 13, 1987.
- 3 Staff Echibit No. 6, SECY 85-220, environmental
- 4 qualification program actions resulting from April 2, 1985,
- 5 Commission meeting, dated June 18, 1985.
- 6 Staff Exhibit No. 7, information relating to the
- 7 deadlines for compliance with 10 CFR 50.49, short title
- 8 Generic Letter 85-15, dated August 6, 1985.
- 9 Staff Exhibit No. 8, SECY 86-122, policy for
- 10 enforcement of environmental qualification requirements,
- 11 dated April 21, 1986.
- 12 Staff Exhibit No. 9, information relating to
- 13 compliance with 10 CFR 50.49, short title Generic Letter 86-
- 14 15, with enclosure, dated September 22, 1986.
- 15 Staff Exhibit No. 10, SECY 88-63, proposed generic
- 16 letter on modified enforcement policy related to 10 CFR
- 17 50.49, dated March 2, 1988.
- 18 Staff Exhibit No. 11, NRC inspection reports
- 19 numbers -- docket numbers 50-348, 50-364, inspection numbers
- 20 87-25, dated October 19, 1987. An enclosure is included
- 21 with Staff Exhibit No. 11.
- 22 Staff Exhibit No. 12, NRC inspection report with
- 23 enclosure, docket numbers 50-348, 50-364, inspection number
- 24 87-30, Tated February 4, 1988.
- 25 Staff Exhibit No. 13, enforcement conference

1 summary, dated April 13, 1988. Staff Exhibit No. 14, SECY 88-213, notice of 2 violation and proposed imposition of civil panalty for EQ 3 violations at Farley Nuclear Plant. 4 5 Staff Exhibit No. -- relating to Staff Exhibit No. 14, I don't have the date here. The identification number 6 on that is EA, for enforcement action, 88-40. 7 Staff Exhibit No. 15, response of Alabama Power 8 Company to the notice of violation and proposed imposition 9 of civil penalty, dated August 15, 1988. The actual date of 10 the response is November 14, 1988. 11 Staff Exhibit No. 30, electric hydrogen recombiner 12 splices, justification for continued operation, with 13 14 enclosure, dated September 23, 1987. 15 Staff Exhibit No. 56, SECY 90-093, status of enforcement actions taken under the modified enforcement 16 17 policy relating to 10 CFR 50.49, dated March 12, 1990. 18 JUDGE BOLLWERK: Thank you. I appreciate that. Counsel for Alabama Power having indicated no 19 objection, Staff Exhibits 1 through 15, No. 30, and No. 56 20 will be received in evidence. 21 [Staff Exhibit Nos. 1 through 15, 22 30, and 56 were received in 23 evidence.] 24

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MR. MILLER: M it please the Board, on behalf of

| 1 | Alabama Power Company, we move the admission of Exhibits 83 |
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| 2 | to 91, recognizing that the timeline is marked as 92 but may |
| 3 | require some additional comments or supplementation. |
| 4 | So, at this time, we'll move the admission of |
| 5 | thos: exhibits. They have been previously identified for |
| 6 | the record. |
| 7 | JUDGE BOLLWERK: Any objection? |
| 8 | MR. HOLLER: Staff has no objection. |
| 9 | JUDGE BOLLWERK: APCo Exhibits 83 through 91 are |
| 10 | received into evidence. |
| 11 | MR. MILLER: We may make one quick calibration |
| 12 | check. |
| 13 | Pat, did I get my numbers right? I did. Okay. |
| 1.4 | Good. |
| 15 | JUDGE BOLLWERK: So, Exhibits 83 through 91 for |
| 1.6 | Alabama Power are moved into evidence. |
| 17 | [APCo Exhibit Nos. 83 through 91 |
| 18 | were received in evidence.] |
| 19 | JUDGE BOLLWERK: I think the members of the Board |
| 20 | have a couple of questions for this panel, briefly. I think |
| 21 | Judge Carpenter would like to begin. |
| 22 | EXAMINATION BY THE BOARD |
| 23 | JUDGE CARPENTER: I would like to get your help |
| 2.4 | and I am in the process of ctill trying to understand this |
| 3.6 | modified enforcement policy. You all have lived with that |

- 1 policy day-in and day-out for a good many years. So, if I
- 2 could ask questions which just speak to the narrow legal
- interpretation, but primarily in the sense of how it
- 4 operated when you were doing your reviews.
- 5 I'd like to just so what happened in your reviews
- 6 as a result of some words in the policy. The first one is a
- 7 little one:
- 8 On the unnumbered page, the first page of Modified
- 9 Enforcement Policy, at the bottom of the page, under the
- 10 List of Factors the NRC Will Examine, No. 4 is, "Did other
- 11 licensees identify similar problems and correct them before
- 12 the deadline?"
- 13 I'd like to ask, in your reviews, how you could
- 14 address that question? And, of course, if this Board chose
- 15 to look at that guestion, that would help me understand how
- 16 I might go about it.
- 17 WITNESS LUEHMAN: Well, I think that --
- JUDGE CARPENTER: Is there some place a tabulation
- 19 of all the problems that licensees found before the deadline
- 20 that one could look at?
- 21 WITNESS LUEHMAN: No. We had access to the
- 22 inspection reports that document the types of problems that
- 23 were found before the deadline. But I think that at least
- 24 the way I think that we applied this is, if there was a
- 25 problem that recurred at a number of plants and, clearly,

- let's say, 90 percent of the plants that had that problem
- 2 discovered it before the deadline -- for instance, if they
- 3 reacted to a particular Information Notice that the NRC had
- 4 issued prior to the deadline and 90 percent of the plants
- 5 that ultimately had the problem found the problem because of
- 6 the Information Notice, I think that that would give a
- 7 strong indication to the members of the panel that a
- 8 licensee that did not draw a similar conclusion with respect
- 9 to that information, whether it be an Information Notice,
- 10 notification from a vendor or whatever, that that licensee
- 11 was an outlier and that the Board -- or that the Panel
- 12 should consider that in determining whether a licensee
- 13 clearly should have known.
- 14 Clearly -- I mean, if all the other licensees
- 15 picked up on it, based on that information, why didn't this
- 16 on or two licensees do it?
- JUDGE CARPENTER: That's the reason I asked the
- 18 question. I don't see how you get the factual basis for
- 19 that. Where do you ook to find out?
- 20 WITNESS POTAPOVS: May I can respond to that a
- 21 little bit, since my group was in charge of conducting
- 22 inspections early on. But there is a temporary instruction
- 23 which was issued to provide guidance in doing these
- 24 inspections, and it did include a basis for selecting
- 25 certain types of equipment and documentation to support

1 qualification of that equipment.

So, in looking at these particular equipment models. We must recognize that they are not unique to a specific operating plant. Much of this equipment is used over and over again in different power plants, and the same information is applicable to all of this equipment, depending, of course, on its specific environmental profile at that power plant.

So, if a specific piece of equipment requires a moisture seal for it to operate properly, that would be something that would be looked at for all plants and then the specific documents reviewed would be whether or not that particular plant profile was considered in providing this moisture seal for that equipment to operate.

Now, if the particular licensee did not even recognize that a moisture seal was needed to operate that equipment, then -- and everybody else did -- then obviously you would consider that there was a problem with that licensee not receiving information. We would then continue looking at that.

JUDGE CARPENTER: To focus more narrowly, with respect to these papers that I've only read once or twice which lead down to an assessment of the basis for assigning a fine for the issue; where in those papers would I find the documentation that NRC, in fact, did examine with respect to

1 Item No. 4?

WITNESS POTAPOVS: I am not sure,

JUDGE CARPENTER: Well, as a layman, I pretty much almost expect what you just said. But I'm saying, with respect to this case, with respect to Farley, where -- how can I go to see whether the things that were found at Farley had been previously found by other licensees, which is what No. 4 says should be done? Or maybe I'm making it too simple.

(Witnesses conferring off the record.)

WITNESS LUEHMAN: I think one of the ways that we gathered that information is, for instance, if an Information Notice came out prior to the deadline, a lot of times, in many instances, the -- that information -- the results of various 'icensees' inspection of that or their equipment with regard to that Information Notice would be fee back to the NRC, as well as to the Nuclear Utility Group on Environmental Qualification or a number of other people that were out there.

Information on what specific findings the NRC had prior to the deadline, and did they correct them, is available in NRC inspection reports that were issued prior to the deadline. Also, Franklin TERs point out specific problems that were found at individual plants.

WITNESS WALKER: In addition to that, though, with

1 Information Notices and inspections, one of the thirgs that 2 we always ask or look for is the way Information Notices are

3 handled.

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For example, -- and I'm going to cite you a specific case that nobody got penalized for, so I don't get in trouble here -- 86-03, I believe it was, had to do with internal wiring.

We, at least on the inspections I've been on, we ask what did you do about 86-03? And in most cases, people had -- would have a documented evidence that they looked at the internal wiring. Those that didn't have it, we would want to know why.

If I remember correctly, I think everybody probably took care of that problem. If there were other Information Notices, we would handle it the same way. And if most people took care of the problem, then we assumed that, of course, everyone had the opportunity and, you know, we'd have to try to liqure out why didn't a particular licensee take care of the problem that everyone else seemed to have taken care of.

WITNESS POTAPOVS: The way we would get into that is that a typical inspection would identify representative equipment that will be examined for qualification, and this will include such things as wiring, solenoids, motors, different pieces of equipment, a standard list, maybe 50 or

- 1 so, up to that many packages of information.
- 2 The assigned inspector will review that
- 3 information for qualification in accordance with the
- 4 guidance specified in the rule, the 50.49 rule.
- 5 If discrepancies are identified in this review,
- 6 then we get into this mode of why is the discrepancy there,
- 7 and that's when we look at what the previous history of this
- 8 particular item was.
- JUDGE CARPENTER: Well, staying right with that
- 10 context, it's only the degree which might lead you to do
- 11 this, if it was sufficiently significant.
- 12 My real question is, for these deficiencies that
- 13 were identified in 1987 at the Farley power plant, how many
- 14 of these deficiencies falling in the category specified by
- 15 item 4 had been previously identified before the deadline by
- 16 other licensees? Is it one, two, three, all, or what?
- 17 WITNESS POTAPOVS: Many.
- JUDGE CARPENTER: Many. Well, how is it
- 19 documented?
- 20 WITNESS LUEHMAN: How is what documented?
- JUDGE CARPENTER: That other licensees did. How
- 22 can this Board make a finding to that effect?
- 23 WITNESS LUEHMAN: Well, I guess the first thing is
- 24 ---
- 25 JUDGE CARPENTER: I'm really asking whether I

missed the point in the testimony, at this point in time, or not, but I thought you all were the review group and you had to look at what these people did before it came to you.

So, I would avail myself of your perspective from being the last in line.

WITNESS LUEHMAN: Well, that's -- that's -- that's correct.

If we were -- we did -- like I said, earlier, we -- we did have the availability of (a) the inspection reports of previous -- of the -- of the previous inspections that identified this and the knowledge of the people on the panel who were in the -- who were either, in Mr. Potapovs' and Mr. Walker's case, having performed these inspections, and if we were aware that this -- if they were aware that a particular item that was under consideration under one of these plants had ween previously identified and had not -- and that fact had not been identified to us by, let's say, the region, because sometimes the region would say we found piece X unqualified, this is similar to what we found at plant -- you know, at another plant prior to the deadline in their response to information notice, whatever.

If that wasn't the case, if the region didn't bring to our attention, I guess I -- I would say that, not having been involved in the EQ inspections, I relied primarily on Mr. Walker and Mr. Potapovs to bring that to

1 the panel.

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2 However, in many cases, the genesis of the information notices that were issued, although they don't 3 talk about specific plants, the genesis of the information notices is that that deficiency was discovered at other 5 6 plants, and therefore, the information notice was issued, and so, though the -- the information notice doesn't talk 7 about the particular plant, because that's not really 8 9 relevant, to spread the name of the plant al r the 10 country necessarily, but the -- most -- a lot of the 11 information notices were -- were -- were arrived at because of a deficiency that was found somewhere or at maybe more --12 in many cases, it was at more than one place, because obviously, if you find an -- every isolated problem, you 15 don't issue an information notice, but if you find that 16 problem 6 or 10 times, then you issue the information 17 notice.

WITNESS POTAPOVS: Maybe I can be just a little more specific.

JUDGE CARPENTER: Let me please try to bring you back specifically to a very narrow question. Where can I find this information about the deficiencies which were identified at the Parley plant in 1987?

WITNESS POTAPOVS: You mean in relation to other plants.

| 1 | JUDGE CARPENTER: It says the factors |
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| 2 | WITNESS WALKER: Are you asking if there is a |
| 3 | tabulation someplace of all the |
| 4 | JUDGE CARPENTER: I am just curious as to how |
| 5 | it says "Did other licensees identify similar problems and |
| 6 | correct them before the deadline?", and I was curious as to |
| 7 | how you answer that question. |
| 8 | WITNESS LUEHMAN: Yes. |
| 9 | JUDGE CARPENTER: It ends with a question mark. |
| 10 | WITNESS LUEHMAN: But, I guess, two things: One |
| 11 | is that only that only forms part of the deliberation we |
| 12 | made. I mean there may not be, for a particular there |
| 13 | may not we consider all of these four factors. |
| 14 | We do not have to find information under each one |
| 15 | of these numbered items to conclude "clearly should have |
| 1.6 | known." In other words, there may be a particular item |
| 17 | where no other licensees had this deficiency report. |
| 1.8 | JUDGE CARPENTER: I absolutely agree. I asked a |
| 19 | very simple question. Is there someplace that you can put |
| 20 | your finger on this and make it known to the Board? |
| 21 | WITNESS LUEHMAN: Yes. |
| 2.2 | JUDGE CARPENTER: Is it in some of these papers |
| 2.3 | that I am looking at and I haven't found it yet? |
| 24 | WITNESS LUEHMAN: Pre-deadline pre-November 30 |
| 25 | 1985, inspections indicate the inspection reports I |

think there were 10 inspections done before the deadline and a number of them in which the NRC or the licensee identified deficiencies similar to the ones that we're discussing in the Farley case in particular.

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WITNESS POTAPOVS: And also, as we stated before, the -- the Franklin TER and the resolution of the Franklin TER open items or deficiencies is a matter of record, and the inspectors did review that information before going on the inspections as part of the preparation, at least in early stages.

Now, what -- what the -- the way it was considered, the relation to enforcement policy, was pretty much like what was stated. The region would make the first cut, applying all of this existing information. Then it would be staffed through the NRR technical branches.

Both of these bodies would have the Franklin TER information available, as well as previous inspection reports available, and at that point, this information would be considered in making the proposed notice that will be later staffed through the agency.

JUDGE CARPENTER: Well, I'm not going to belabor this, but let me just summarize to see if I understand.

Within this "clearly knew or should have known" analysis, it's not necessary to have a documented, item-by-item consideration of whether that kind of deficiency met

criteria 4; namely, it had been previously identified before the deadline by one, some, or many licensees. There is no clean statement of this anyplace.

WITNESS POTAPOVS: If you mean a checklist, no. JUDGE CARPENTER: Yes.

WITNESS POTAPOVS: There was no such document.

JUDGE CARPENTER: Or even a line-by-line or paragraph-by-paragraph tabulation.

WITNESS LUEHMAN: I think we, in the proposed Notice of Civil Penalty, we outlined in summary form some of the documents that we relied on for the violations. That's the closest thing to a tabulation that there is.

JUDGE CARPENTER: Thank you.

Turning over to page three, and I'm asking this question in an information sense, not in a sense that I'm asking you to do a legal interpretation of the policy. In the last paragraph on page three, in the middle of that paragraph begins a sentence that says the NRC will not underline a number of items -- will not consider refinements, et cetera, running all the way along to additional analysis or testing, et cetera.

The concluding sentence, I'd like to get your perspective on. It says, "This assumption is made for enforcement purposes, in order to reduce the resources anticipated to be spent by the licensees and the NRC to

evaluate in detail whether system operability was in question."

As a layman, I've never been on an inspection, and I've never been the recipient of a violation; but if I'm operating a nuclear power plant and I've got a violation, I think the first thing I've got to do is convince the NRC I can keep on operating the plant; isn't that true?

WITNESS POTAPOVS: That's correct.

WITNESS LUEHMAN: That's correct.

JUDGE CARPENTER: So, in that sense, the NRC is going to have to review my statement?

WITNESS LUEHMAN: That's correct.

JUDGE CARPENTER: So, am I really going to save any resources? Can I avoid all those things in the previous sense?

WITNESS LUEHMAN: I think this statement is made purely from the contexts of -- for enforcement purposes.

Obviously, for operation of the plant, the NRC is going to consider a licensee's justification for continued operation.

JUDGE CARPENTER: I'm not asking you to interpret what I see here. The words say what they say. But I was just looking from a technical point of view. Still, those things have to be done. Or otherwise, turning to the next page, under mitigation escalation factors, number three speaks to corrective actions, including the time taken to

make an operability or qualification determination.

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So, while the previous page tells me that this will save the licensee and NRC some resources, the next page is telling me that if there's a hope for a mitigation, things better proceed without delay. Do I read this right?

WITNESS LUEHMAN: I think largely you do, but I think the one -- the one point that needs to be made is determining what the corrective action for a particular deficiency needs to be may be a straightforward -- may -- in many cases, it can be a fairly straightforward process. Evaluating -- if that corrective action is not taken, evaluating the ultimate impact that that -- that deficiency left uncorrected, would have had on the plant, may be a very hard thing to determine. And I think that that's the point that your policy was getting at.

We, I think, discussed in our pre-filed testimony and it was discussed in one of the papers that was presented to the Commission, that the problem that would be presented is if a deficiency was found in a certain piece of equipment, evaluating that deficiency by itself, if that was the only deficiency, is pretty straightforward. But when you start having to evaluate a multitude of deficiencies that may -- I mean, a multitude of qualification problems -- in other words, if they -- if you determine you have 10 components that may be affected by a steamline break,

evaluating the overall consequences of one of those things fairing, or two, or the whole matrix, up to all 10 failing, or nine out of the 10 and the whole, you know, series of matrices that you would have to make, as far as the -- the components and figuring out which would be the worst case and what the ultimate impact on the plant is, would be a very difficult situation.

JUDGE CARPENTER: I quite agree. The more violations, and/or the more that that violation is spread through the plant, the more difficult it is to do the analysis.

But my question, and my reading on page four under mitigation about corrective actions, whether hard or not, somebody is probably going to try to do it.

witness Luehman: Well, I think that they are going to correct the deficiency. I don't know whether they're necessarily going to try to evaluate -- if they correct the deficiency, I think that they will make a good faith effort to, if they have to -- for instance, if they have to report it to the NRC -- if a licensee has to report that the deficiency caused a problem, I think they'll make a good faith effort to make a general determination of what the potential impact on that -- of that equipment is going to be on the plant.

I don't know that they're going to evaluate in

1 excruciating detail every possible aspect of the

2 qualification problem, given the difficulties I just talked

3 about.

They're going to say we've fixed it, and it would have had some impact or it wouldn't have, and give some general summary. I doubt they're going to go through an item-by-item recount of exactly how each one of these items is going to affect the plant.

JUDGE CARPENTER: Well, stepping back from the leaves and the trees to look at the forest. I'm trying to get some help with whether I understand that on page three it says don't pay much attention to this, in fact, don't consider it. And on page -- on page four it says, well, that's so, but then, having said that, it won't consider extensive operability arguments, et cetera, et cetera, for the purposes that are specified, in terms of deciding a violation category, et cetera.

Now, having done that, having said that -remember, I'm stating this, but I'm asking a question -having said all of that, is it true that what page four
tells you and, therefore, would tell this Board, that you do
consider those things for -- in the mitigation analysis?

WITNESS POTAPOVS: Again, if we can separate the operability from the standpoint of safety, and operability from the standpoint of enforcement; if, for instance, a

utility would self-identify an unqualified condition which would put them into tech spec shutdown situation, if it went uncorrected, and went on and corrected that condition, they would still be subject to the enforcement policy under this modified policy.

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Having done so, all we're saying is that at this point, the main thrust is the fact that the situation was corrected, and we would not try to justify or spend a lot of utility and staff resources trying to justify if another way could have been done or accomplished to provide basis to qualify that equipment, or provide some additional justification, testing, or analysis.

If, for instance, the equipment was not qualified because a certain test was not done and, therefore, the condition of the equipment was indeterminate, the licensee chose to replace that equipment, we're saying we don't expect the licensee, after having replaced that equipment, go back and contract for testing to possibly qualify this piece of equipment and thereby reduce the civil penalty by mitigation.

JUDGE CARPENTER: Is the corrective action -- is what's included in the brackets the boundary of some possible corrective action -- the exact case where there was immediate attention and I corrective action was taken?

WITNESS PC "APOVS: That would be considered.

JUDGE CARPENTER: So that the safety issue became very, very small very rapidly. Is that the sort of thing that this mitigation --

WITNESS POTAPOVS: That's correct.

JUDGE CARPENTER: -- item three is all about?

WITNESS LUEHMAN: That's correct.

JUDGE CARPENTER: You know, I expect we're going to hear some arguments about this in the coming weeks. And I just want to be sure whether I look on page three and say no, we're not going to consider, or yes, we are going to consider.

WITNESS LUEHMAN: We would consider those things in the context of corrective action, but we would not have considered them in the context of whether enforcement was going to be taken or not.

If a licensee rapidly corrected something, that's fine for corrective action, but that doesn't -- that doesn't preclude the fact that the violation existed up until it was corrected.

JUDGE CARPENTER: So, what you're telling me, that it pretty much, as you all have operated with it, has gone just the way it reads? This operability business is not an excuse for the violation. You're not going to get out of the violation. The violation was an operability argument that doesn't lead to a single conclusion that the equipment

- 1 is qualified.
- But, having said that, an operability argument, in
- 3 terms of prompt reponse, adequate response, et cetera, can
- 4 still be considered under the mitigation part of the policy?
- 5 WITNESS LUEHMAN: That is correct.
- 5 JUDGE CARPENTER: That is all I wanted to find
- 7 out. Thank you.
- 8 JUDGE BOLLWEFK: Judge Morris?
- 9 JUDGE MORRIS: I have a few questions, but before
- 10 I start, Mr. Holler, can you tell us today whether it's your
- 11 intention to have this panel back for your rebuttal
- 12 testimony?
- MR. HOLLER: No, sir. If I may remind the Board,
- 14 as I understand it, our rebuttal testimony will be submitted
- 15 21 days at the completion of cross examination on direct
- 16 testimony, both NRC staff and APCo licensees. So we do not
- 17 intend to have -- present this staff today for cross
- 18 examination on rebuttal testimony.
- Maybe I misunderstand your question. I apologize.
- JUDGE MORRIS: Well, let me explain my reason for
- 21 the question and you may want to comment on that. I would
- 22 like some time to ask this panel some questions based on the
- 23 Applicant's rebuttal or surrebuttal, whatever it is.
- 24 Mr. HOLLER: I understand now, Judge Morris.
- 25 After --

1 JUDGE MORRIS: I'm sorry, not on surrebuttal, but on their direct testimony, and I'm wondering whether I 2 should ask now questions which you will answer in your 3 rebuttal? 4 5 MR. HOLLER: May we have a minute? 6 [Counsel for NRC Staff conferring off the record.] 7 MR. HOLLER: Judge Morris, if I may, let me see if I can take a crack at this: Thu dilemma that we were B 9 discussing or that we see is, the organization, Alabama 10 Power Company, chose to use for their direct testimony. I 11 have difficulty squaring our panels up directly with theirs. 12 I don't want to cut myself off by saying at this 13 point that we do not anticipate rebuttal testimony that 14 would be sponsored by this particular panel. However, I'm 15 not prepared to say that definitely I will. 16 If I may offer as a compromise, even if we do not 17 sponsor rebuttal testimony with this panel, the Staff 1.8 certainly can make this panel available in May when the 19 rebuttal testimony is offered for questions by the Board. Would that -- does that address your concerns? 20 21 JUDGE MORRIS: Maybe we can agree on the following 22 procedure: that I not ask any questions based on the licensee's direct testimony at this time, and then you can 23

choose your own witnesses at the later date to respond.

MR. HOLLER: If I understand, sir, then the

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- 1 questions you may have on direct will be addressed to
- 2 whatever witnesses we have available to rebut that
- 3 testimony?
- 4 JUDGE MORRIS: Yes, and if you don't have the
- 5 witnesses, that's your problem.
- 6 MR. HOLLER: Yes, sir, and the testimony stands
- 7 that he's given. 7 it sounds acceptable. Yes, sir, thank
- 8 you, sir.
- 9 JUDGE MORRIS: Now, I direct my questions to the
- 10 panel at large, and whoever chooses to answer is fine. And
- 11 my questions are directly largely to make sure I understand
- 12 what you're saying.
- 13 If we turn to page 3 of your testimony, in the
- 14 second paragraph, you state:
- "All such listed items, by definition, perform
- 16 important safety functions. Thus, safety significance is
- 17 inherent with respect to each item on the list or each item
- 18 that should be on the list."
- 19 WITNESS LUEHMAN: Yes, we have that.
- JUDGE MORRIS: My question is are all items on the
- 21 list considered equally important?
- 22 WITNESS LUEHMAN: As a general rule, we would say
- 23 yes.
- 24 WITNESS POTAPOVS: For the purposes of the
- 25 enforcement policy, it would be a yes.

JUDGE MORRIS: That was my understanding. But is it your opinion that that is not really true from a safety point of view: for example, doing a safety analysis or probabilistic risk assessment?

WITNESS POTAPOVS: Certainly, I think you could make that statement that some items, as identified in the Generic Letters and the policy, would be more important than other items, if you considered the application and consequences of inoperability of that item.

JUDGE MORRIS: Thank you.

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At the bottom of the same page, you state:

"The Commission developed Categories A, B, and C, based on the extensiveness of the violations, which reflect the overall pervasiveness and general safety significance of the significant EQ violations."

WITNESS LUEHMAN: Yes, sir.

JUDGE MORRIS: Is safety significance based only on the number of the items or an analysis of the effects or consequences of design basis accidents, environments for the violations?

WITNESS POTAPOVS: Actually, it would be both counts. The number of items is a measure of the safety significance, and that's why it was chosen as a categorization measure. If we went back to the Generic Letter 85-15, which proposed a substantially larger civil

penalty per item, it would get rather unrealistic to assess that on a per-item basis when many items are involved.

That's why we tried to accomplish the same graduation of the safety significance by combining the items in system sense.

WITNESS LUEHMAN: The other thing I would add is that strictly accounting of the number of components or the number of systems didn't always lead or wouldn't always lead the Panel to a result that made -- well, complete sense, in that, for instance, if you had one plant that had one EQ violation, for instance, they did not qualify a particular component that was used extensively in the plant, and therefore there were many components affected, that would be one case.

And then as compared to another case, for instance, where you had a similar number of total components affected, however, they were affected by maybe six or seven different types of violations -- whether in one case, it would be splices, the one case it would be splices alone and they were used extensively in the plant, and in another case, they had splice problem -- a few splice problems plus a few limitorque operator problems plus a few solenoid valve problems, but the total number of components in both cases came up to the same number, you can make arguments both ways as to which problem is more significant.

We didn't think that in all cases, simply counting the number of systems and components was completely proper.

JUDGE MORRIS: In the specific case of Farley, is it correct that you do not limit yourself simply to counting the numbers of things?

WITNESS LUEHMAN: Not strictly counting the number of components, that's correct. We looked at the systems affected, and we looked at the fact that they had a number of different of types of violations. In other words they had splice problems, problems with terminal blocks. There was not one problem that caused all the equipment at issue to be unqualified.

JUDGE MORRIS: So, is it correct to say that in addition to the numbers of systems and components, you wid consider safety significance?

WITNESS LUEHMAN: Again in a general sense, as you stated earlier, we did not go to the extent of doing indepth assessments of the components and what the individual component or group of components -- the likely result of their failure would be, because the policy directed us not to get into that. And we weren't equipped to do it, either.

JUDGE MORRIS: I am not sure I have a complete understanding. Did you make some judgment about the overall significance other than numbers of systems and components?

WITNESS LUEHMAN: Yes.

1 JUDGE MORRIS: And was safety a factor in that 2 judgment? 3 WITNESS POTAPOVS: Yes. JUDGE MORRIS: Thank you. 4 5 With respect to the "clearly should have known" 6 concept -- I beliave I read somewhere in the submitted 7 testimony or exhibits that I think it was in a discussion with the Commission, the word "clearly" was added to an 8 9 earlier use of just "should have known"; is that correct? 10 WITNESS LUEHMAN: That is correct. The Commission directed the addition of the "clearly" into the policy. 11 12 JUDGE MORRIS: Can you provide the Board with some 13 background as to why the Commission did that, what their 14 intent was by doing it? 15 WITNESS LUEHMAN: I cannot -- I can't give you any 16 direct -- I don't have any direct knowledge on why the 17 Commission decided to do that. 18 JUDGE MORRIS: Any other members of the panel? 19 WITNESS POTAPOVS: I think it had to do with a 20 perception of what type of information and to what extent was this information available to the responsible licensee 21 22 personnel that did the qualification. There was 23 deliberation about the fact that only existence of such

information by itself would not be sufficient, that

information would have needed to be broadly disseminated and

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there was a large confidence level that this information should have been available to the individuals responsible for the qualification activity. It was a matter of focusing on the availability of the information.

I don't recall the specific -- I don't recall that there was any specific written direction to do that. It was deliberation between the NRC Staff and comments from the Commission and the Commission Staff that resulted in this language.

JUDGE MORRIS: Would it be correct to assume that it was added to make sure that the Staff had more than just a reasonable assurance that something should have been known?

WITNESS LUEHMAN: I think we can get into -- I really don't know that we can get into the semantics. I think the standard, as we applied it, was that an engineer that was knowledgeable in environmental qualification, had he had this information or was it shown that it was available to him, that he should have reached the conclusions -- in other words, the person receiving the information had to be more than simply an engineer at the plant or the person that had the information available to him. It had to be a person versed in EQ. What should have he done -- what would the reasonable EQ engineer do with the information? That is the standard, basically, as we applied

it.

So, it is a higher threshold than just giving the information to an engineer, you know, just a plant person, not necessarily knowledgeable in the area, but should an engineer with an EQ background have done the right thing with the information? That is the standard as we applied it.

So, I don't know whether that is a reasonable assurance, how the distinction of "should have known" and "clearly should have known" is drawn. That is the standard as we applied. We told the Commission in a SECY paper that that was the standard that we were applying, that -- the EQ engineer with the information, and that is what the Board used.

JUDGE MORRIS: I think you have used the word "knowledgeable" before. Would it be correct to say that a knowledgeable professional in the EQ field would have recognized?

WITNESS LUEHMAN: That is basically the standard we used, yes.

JUDGE MORRIS: Thank you.

It is my understanding that the inspection effort of the NRC uses inspection modules or something of that kind to give guidance to the field inspectors as to how to conduct their inspections, is that correct?

WITNESS LUEHMAN: That's correct.

JUDGE MORRIS: Was there some comparable guidance given to the environmental quality inspection that was made at Farley?

WITNESS LUEHMAN: Yes, there was.

JUDGE MORRIS: What form did that take?

WITNESS POTAPOVS: That was a temporary inspection and I believe the number's TI 2515/76 -- I'm sorry, that's the program or maybe that is the --

WITNESS LUEHMAN: Basically the 2515 refers to, that's the operating reactor section of the NRC inspection program and the 76, if that's the correct number, designates the number of the temporary instruction in sequential order to the operating inspection program.

JUDGE MORRIS: Did this instruction apply only to the team that went to Farley or to all the teams?

WITNESS POTAPOVS: It would apply to all of these series of inspections and it was developed, as we mentioned earlier, during the early stages of the inspection starting in '84 ,and it was issued some time after development, but it was in effect and used at the time the Farley inspection was conducted.

WITNESS LUEHMAN: Just to clarify -- or not clarify but add to what Mr. Potapovs said, the earlier '84 inspections were done -- I mean they did some before the

- 1 deadline to determine what kind of guidance they would have
- 2 to give to inspectors and then later on in those
- inspections, as you know, a draft of the TI was, you know,
- 4 put together.
- 5 Then on subsequent inspections they refined it
- 6 till they got the TI that was published for final use in
- 7 subsequent inspections.
- 8 I am not aware, and maybe Mr. Potap s or Mr.
- 9 Walker is, exactly which was the first inspection that the
- 10 final Temporary Instruction was used at.
- 11 WITNESS POTAPOVS: I don't know.
- 12 JUDGE MORRIS: Was it prior to the Farley
- 13 inspection?
- 14 WITNESS POTAPOVS: Yes.
- 15 JUDGE MORRIS: Was it prior to the seminar at
- 16 Sandia?
- 17 WITNESS POTAPOVS: Yes.
- 18 JUDGE MORRIS: So that the instruction was not
- 19 modified after the Sandia seminar?
- 20 WITNESS POTAPOVS: I don't think it was.
- JUDGE MORRIS: I will ask both parties whether or
- 22 not this document is in the record anywhere.
- MR. MILLER: I don't think it is yet but we'll be
- 24 happy to provide it and make it available.
- 25 MR. HOLLER: Judge Morris, I can tell you that is

1 one of the documents that was made available on discovery 2 and we can certainly produce the document. JUDGE MORRIS: If you would, please. 3 MR. MILLER: It may be pertinent to point out that 4 the inspection module doesn't list the equipment that is 5 going to be inspected. 6 7 JUDGE MORRIS: I would understand that. WITNESS POTAPOVS: It does list the equipment by 8 9 type. 10 [Pause.] JUDGE MORRIS: That is all I have. Thank you. 11 JUDGE BOLLWERK: I don't have any questions. 12 Judge Morris has gone into the areas I was interested in. 13 14 At this point I think, Mr. Luehman and Mr. Walker, 15 we'll be seeing you again. Mr. Potapovs, we appreciate your service to the 16 Board and your testimony and you are excused subject to 17 18 being recalled for any purpose that might be necessary. 19 WITNESS POTAPOVS: Thank you. JUDGE BOLLWERK: Thank you very much. 20 21 [Panel excused.] JUDGE BOLLWERK: 11 the parties have nothing else 22 at this point, we could take our luncheon break now. 23 MR. MILLER: It may help, Judge Morris, to know 24

that it was issued on March 27th, 1986, TI 2515-76. We'll

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1 make a copy of it over the lunch break. 2 MR. HOLLER: The Temporary Instruction Mr. 3 Potapovs referred to was issued on the 4th of April, 1985. 4 We'll also muke that available. 5 MR. MILLER: Thank you. I take that back. You 6 have a copy. 7 MR. HOLLER: What number do we want to give it? 8 MR. MILLER: Board Exhibit? 9 JUDGE BOLLWERK: Let's mark it as one of your exhibits, if you don't mind, if that is acceptable to you. 10 11 MR. MILLER: Which I will identify for the record 12 as the Temporary Instruction 2515+76, issue date March 27th, 1986, evaluation of licensee's program for qualification of 13 electrical equipment located in harsh environments. 14 JUDGE BOLLWERK: APCo Exhibit 93 is marked for 15 identification. 16 [APCo Exhibit No. 93 17 was marked for identification.] 18 19 MR. MILLER: Move the admission of that exhibit, 20 please. JUDGE BOLLWERK: Any objection from the Staff? 21 MR. HOLLER: No objections. 22 JUDGE BOLLWERK: APCo Exhibit 93 is received into 23

evidence.

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| 1 | [APCo Exhibit No. 93 |
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| 2 | was received into evidence.] |
| 3 | JUDGE CARPENTER: Mr. Miller, while you're up |
| 4 | here |
| 5 | MR. MILLER: Yes, sir? |
| 6 | JUDGE CARPENTER: I keep thinking that I want |
| 7 | to ask a question about your Exhibit 92. |
| 8 | MR. MILLER: Yes, sir. |
| 9 | JUDGE CARPENTER: About all this paper I keep here |
| 10 | in reference to one thing and another, for some simple place |
| 11 | to go, the vertical arrangement to find the order, |
| 12 | chronology, all these things people are talking about. |
| 13 | Is there any chance you could convert that from |
| 14 | the horizontal to the vertical in a form where at least it |
| 15 | might fit in a notebook, it might even fit in a final |
| 16 | decision some day, as a neat summary of what everybody is |
| 1.7 | talking about? |
| 18 | MR. MILLER: We'll have it for you in the morning. |
| 19 | JUDGE CARPENTER: Not necessary. September's |
| 20 | fine. |
| 21 | MR. MILLER: No time like the present. |
| 22 | JUDGE MORRIS: If you took longer, perhaps you |
| 23 | could include the dates of the critical documents that |
| 2.4 | affect this development of the EQ problem. |
| 25 | MR. MILLER: We can do it and I know I may have |

| 1 | overpromised for the morning for that, but why don't we |
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| 2 | undertake to do that and we'll have it for you promptly. |
| 3 | JUDGE MORRIS: At your convenience, thank you. |
| 4 | MR. MILLER: Yes, sirs. |
| 5 | JUDGE BOLLWERK: Why don't we go ahead, if there |
| 6 | is nothing else, and take our luncheon break. |
| 7 | Why don't we make it back here we'll come back |
| 8 | at 1:30 then. |
| 9 | [Whereupon, at 12:13 p.m., the hearing was |
| 10 | recessed for lunch, to reconvene at 1:30 p.m. this same |
| 11 | day.] |
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AFTERNOON SESSION

2 [1:32 p.m.]

JUDGE BOLLWERK: Let's begin the afternoon session.

Before 'e begin with the next staff panel I have one procedural issue I want to raise with the parties.

Mr. Miller has provided us with a copy of a cross examination plan that he prepared for Staff Panel No. 1.

And under the Commission's Rules 2.743(b), I believe it is, it provides that we are to generally hold cross examination plans until an initial decision has been issued and then file them with the Office of Secretary for inclusion in the record.

objection, one thing that we can do which might make more sense in terms of the way the record is set up, is to go ahead and include the cross examination plan, bind it into the record after the cross examination is completed. We can do whatever the parties feel comfortable with.

MR. MILLER: When you say included, do you mean after the cross examination of May 18th?

JUDGE BOLLWERK: Your cross examination of Panel 1 is now completed. I would propose to have it bound into the record at that point. If that doesn't make you comfortable, we can do it the way the Rule provides.

| 1 | MR. MILLER: I have to confess that we would |
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| 2 | prefer to go ahead and follow the Rule. |
| 3 | JUDGE BOLLWERK: Okay, that is not a problem. |
| 4 | MR. MILLER: Thank you, sir. |
| 5 | MR. HOLLER: Judge Bollwerk, one other |
| 6 | administrative item. |
| 7 | Prior to breaking, Mr. Miller was kind enough to |
| 8 | give you a copy of the temporary instructions. The Staff |
| 9 | indicated that it had also the draft temporary instruction |
| 10 | 2515 that was referred to in the testimony. If it please |
| 11 | the Board, we can mark it out for identification now and |
| 12 | provide those copies. |
| 13 | JUDGE BOLLWERK: All right, why don't we do that. |
| 14 | MR. HOLLER: This would be for identification |
| 15 | purposes Staff's Exhibit No. 57. And for the record, draft |
| 16 | temporary instruction, 2515/XX marked in the upper right- |
| 1.7 | hand column, 4/16/85 comments. |
| 18 | JUDGE BOLLWERK: Let the record reflect that Staff |
| 19 | Exhibit No. 57 has been identified for the record. |
| 20 | [Staff Exhibit No. 57 is marked |
| 21 | for identification.] |
| 22 | MR. HOLLEP: If I may, Judge Bollwerk, one other |
| 23 | item. We do, in fact, have the training materials on the |
| 2.4 | Sandia course. If you would like it at the end of the day' |

25 session, I can pass those out, or would you prefer to mark

| 1 | the one copy for identification? |
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| 2 | [Board members conferring off the record.] |
| 3 | JUDGE BOLLWERK: Why don't you provide us with a |
| 4 | copy, and we will make a determination at that point whether |
| 5 | it is necessary to put them into evidence, given they look |
| 6 | rather extensive. We don't want to waste any additional |
| 7 | paper if we don't have to. |
| 8 | MR. HOLLER: Yes, sir. I will make that |
| 9 | available. |
| 10 | JUDGE BOLLWERK: Is there anything further? |
| 11 | MR. BACHMANN: No, sir. |
| 12 | JUDGE BOLLWERK: All right. Why don't we go ahead |
| 13 | then and rwear in the next panel. |
| 14 | MR. BACHMANN: Do you want them to rise |
| 15 | individually as we did? |
| 16 | JUDGE BOLLWERK: Yes. |
| 17 | Whereupon, |
| 18 | JAMES G. LUEHMAN |
| 19 | NORMAN MERRIWEATHER |
| 20 | CHARLES J. PAULK, JR. |
| 21 | PAUL C. SHEMANSKI |
| 22 | and |
| 23 | HAROLD WALKER |
| 24 | were called as witnesses on behalf of NRC Staff and, having |
| 25 | been first duly sworn, were examined and testified as |

| 1 | follows: |
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| 2 | DIRECT EXAMINATION |
| 3 | BY MR. BACHMANN: |
| 4 | Q I am going to address the entire panel. Do each |
| 5 | of you have in front of you and I would like you to |
| 6 | answer starting with Mr. Shemanski and then proceed down fo |
| 7 | the convenience of the court reporter have in front of |
| 8 | you a document entitled Testimony of James G. Luehman, |
| 9 | Norman Merriweather, Charles J. Paulk, Jr., Paul C. |
| 10 | Shemanski and Harold Walker on behalf of the NRC Staff |
| 11 | concerning the V-type tape splices. |
| 12 | A [Witness Shemanski] Yes, I do. |
| 13 | A [Witness Merriweather] Yes, I do. |
| 14 | A [Witness Paulk] Yes, I do. |
| 15 | A [Witness Luehman] Yes, I do. |
| 16 | A [Witness Walker] Yes, I do. |
| 17 | Q Did each of you assist in the preparation of this |
| 18 | particular piece of testimony? |
| 19 | A [Witness Shemanski] Yes, I did. |
| 20 | A [Witness Merriweather] Yes, I did. |
| 21 | A [Witness Paulk] Yes, I did. |
| 22 | A [Witness Luehman] Yes, I did. |
| 23 | A [Witness Walker] Yes, I did. |
| 24 | Q Do any of you have any changes or corrections to |
| 25 | be made of this testimony? |

- A [Witness Shemanski] I have no corrections.
- 2 A [witness Merriweather] I have some corrections.
- 3 On Page 5 where we show the exhibit, we want to
- 4 show that as being Exhibit 21, Staff Exhibit 21.
- 5 MR. BACHMANN: I would just note for the reporter that these changes have been made in the copies provided to the reporter.
- B JUDGE BOLLWERK: Thank you.
- 9 WITNESS PAULK: I have a correction on Page 16,
- 10 the sixth line. It states, "it was not a self vulcanizing
- 11 tape." It should state, "was an unvulcanized (uncured)
- 12 tape".
- BY MR. BACHMANN:
- 14 Q Do you have any corrections, Mr. Luehman?
- 15 A [Witness Luehman] No.
- 16 Q Mr. Walker?
- 17 A [Witness Walker] Yes, I have one, maybe two small
- 18 corrections.
- On page 17, line 4, where the sentence begins,
- 20 "The tests conducted by Wyle Laboratories was terminated,"
- 21 that should have been "was apparently terminated."
- Page 18, second line from the bottom, it says
- 23 "environment condition." That should have been
- 24 "environmental condition."
- 25 Q I will address the panel in order again. Does

| 1 | this testimony, as corrected, is it true and correct to the |
|-----|---|
| 2 | best of your knowledge and belief? |
| 3 | A [Witness Shemanski] Yes, it is. |
| . 4 | A [Witness Merriweather] Yes, it is. |
| 5 | A [Witness Paulk] Yes, it is. |
| 6 | A [Witness Luehman] Yes, it is. |
| 7 | A [Witness Walker] Yes, it is. |
| 8 | JUDGE BOLLWERK: Could we have Mr. Paulk give his |
| 9 | correction again? |
| 10 | WITNESS PAULK: Yes, sir. It's on page 16. It |
| 11 | stated "was not a self-vulcanizing tape." It should read |
| 12 | "was an un-vulcanized (uncured) tape." |
| 13 | JUDGE BOLLWERK: Thank you. |
| 14 | MR. BACHMANN: At this point, I would move the |
| 15 | Board that this testimony be bound into the record as read. |
| 16 | MR. MILLER: No objection. |
| 17 | JUDGE BOLLWERK: It will be bound into the record. |
| 18 | [The testimony of James G. Luehman, Norman |
| 19 | Merriweather, Charles J. Paulk, Paul C. Shemanski, and |
| 20 | Harold Walker follows:] |
| 21 | |
| 22 | |

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

| In the Matter of | Docket Nos. 50-348-CivP |
|---|----------------------------|
| ALABAMA POWER COMPANY | 50-364-CivP |
| (Joseph M. Farley Nuclear Plant,) Units 1 and 2) | (ASLBP NO. 91-626-02-CivP) |

TESTIMONY OF JAMES G. LUEHMAN, NORMAN MERRIWEATHER, CHARLES J. PAULK, JR., PAUL C. SHEMANSKI AND HAROLD WALKER ON BEHALF OF THE NRC STAFF CONCERNING V-TYPE TAPE SPLICES

- Q1. State your full name and current position with the NRC.
- A1. James G. Luehman, Senior Enforcement Specialist, Office of Enforcement (OE).
 - Norman Merriweather, Reactor Inspector (Electrical), Region II.
 - Charles J. Paulk, Jr., Reactor Inspector, Plant Systems Section, Division of Reactor Safety, Region IV.
 - Paul C. Shemanski, Senior Electrical Engineer, License Renewal Project Directorate,
 Office of Nuclear Reactor Regulation (NRR).
 - Harold Walker, Senior Reactor Systems Engineer, Plant Systems Branch, Division of Systems Technology, Office of Nuclear Reactor Regulation (NRR).
- Q2. Have you prepared a copy of your Professional Qualifications?
- A2. (All) A copy of each of our Professional Qualifications is included in Staff Exh. 1.
- Q3. What is the purpose of your testimony?

- A3. (All) The purpose of our testimony is to support the Staff's position regarding the violations of the environmental qualification (EQ) requirements for the V-type tape splices at the Farley nuclear plant as set forth in the Notice of Violation (NOV), dated August 15, 1988 (Staff Exh. 2), and the Order Imposing a Civil Penalty (Order), dated August 21, 1990 (Staff Exh. 3).
- Q4. What are the EQ requirements and how were they violated?
- A4. (All) The EQ requirements and the nature of the violations are stated in the NOV, page 1, under the heading "Violations Assessed A Civil Penalty" (Violation I.A.1) as follows:

10 CFR 50.49(d), (f) and (j), respectively, require in part that (1) the licensee shall prepare a list of electric equipment important to safety covered by 10 CFR 50.49, (2) each item of electric equipment important to safety shall be qualified by testing of, or experience with, identical or similar equipment, and that such qualification shall include a supporting analysis to show that the equipment to be qualified is acceptable; and (3) a record of the qualification of the electric equipment important to safety shall be maintained in an auditable form to permit verification that such equipment is qualified and that it meets the specified performance requirements under postulated environmental conditions.

Contrary to the above, from November 30, 1985 until the time of the inspection which was completed on September 18, 1987:

1. Alabama Power Company (APC) had V-type electrical tape splices installed on numerous safety-related electrical components including solenoid and motor operated valves. These tape splices were installed in various configurations and material compositions which were not documented as being environmentally qualified to perform their function under postulated accident conditions at the Farley Nuclear Plant (FNP) Units 1 and 2. The various configurations of V-type electrical tape splices had not been previously tested or demonstrated to be similar to an appropriately tested configuration. Furthermore, these tape splices were not installed in accordance with approved electrical design details or notes for splices or terminations, and were not identified on the environmental

qualification (EQ) Master List of electric equipment required to be qualified under 10 CFR 50.49.

- Q5. What was your role, if any, in the September 1987 inspection referenced in the NOV?
- A5. (Merriweather) During the September 14-18, 1987 inspection, I served as team leader.
 (Paulk) During the September 1987, inspection, I reviewed the licensee's design drawings and engineering instructions. I also reviewed a qualification document for taped splices.
- Q6. What was the reason for the inspection?
- A6. (Merriweather) The September 1987 inspection was a "reactive" inspection and resulted because Alabama Power Company (APCo or licensee) reported that it had identified deficiencies with the qualification of V-type tape splices in solenoid valve circuits, Limitorque valve operators, and containment fan coolers. A reactive inspection is an unplanned inspection which inspectors do not normally prepare to conduct as part of the routine inspection program. These types of inspections are performed to respond to events that have occurred. APCo had submitted Licensee Event Report (LER) 87-012-00, dated July 30, 1987 (Staff Exh. 16) addressing problems with the configuration of EQ solenoid valve splices and terminations. NRC Inspection Report Nos. 50-348/87-17 and 364/87-17, dated September 1, 1987 (Staff Exh. 17), documented these deficiencies as three separate unresolved items. Region II had a copy of the Justification for Continued Operation (JCO) transmitted by Bechtel Letter AP-13169, EQ Solenoid Valve

Splices - Justification for Continued Operation (Staff Exh. 18', and APCo JCO transmitted by letter NS-87-0229 from G. Hairston to J. Woodard dated July 21,1987 (Staff Exh. 19). The Region had information that tape splice problems had been identified at Calvert Cliffs, a plant in another region.

I was notified at some point that a team consisting of C. Faulk, C. Smith, W. Levis and myself (team leader) would be going to Farley to follow up on the splice problems. We also evaluated the reason the licensee inspected the containment fan motor splices/terminations and the method they chose: each component taken out of service, inspected for splice deficiencies and then repaired one at a time.

- Q7. What do you recall about the inspection itself, with regard to the V-type splices?
- A7. (Merriweather and Paulk) The NRC inspection team conducted a series of interviews during the inspection with electricians, foremen and the craft training instructors. The purpose of the interviews was to learn if the licensee could have known the configuration of the containment fan motor splices (i.e., V-type tape splices and the tape material used) prior to the series of visual inspections and reworking the splices. The results of the interviews indicated that the craft would routinely install V-type tape splices on EQ equipment, particularly the containment fan motor terminations that were determinated and reterminated for outage work during each refueling. The team also reviewed some procurement records on tape, installation aetails for splices and terminations, JCOs on solenoid valve splices and Limitorque motor operator splices. A review of the maintenance records showed that tape splices were installed. Based on the discussions

the team concluded that the taped splices were not in-line type and that the craft would not always use both the Okonite T-95 and No. 35 tapes inside containment, as documented in the Okonite Test Report (NQRN-3) (Staff Exh. 21) In fact, some electricians stated to us that they were allowed to use only T-95 tape inside containment. In addition, the maintenance records did not always show that safety-related materials were used to make the splices. Furthermore, it was learned that the splices were being documented on the Maintenance Work Request as being completed in accordance with design by the peer inspection program.

During the inspection we had discussions with J. Love (Bechtel Engineering) regarding the qualification of the V-type splices. The team disagreed with his opinion that the splices could be qualified by just doing volts per mil analysis, without taking into account the performance of the tape during accident conditions at elevated temperatures, pressures, radiation levels and with the effects of aging. The team believed that the splice configuration was important in establishing the qualification of the splices. The configuration would include such information as type of tape used, seal length of the tape, numbers of layers of tape and overlap of the tape, orientation (in-line versus V-type), and hardware. We looked at one or more JCOs that had been documented by the licensee. We also saw some information from the test reports of tests performed by Wyle Laboratories for Commonwealth Edison Company (CECO) (Staff Exh. 20). Based on our review of this information and the Okonite Test Report (NQRN-3) (Staff Exh. 21) that was included in the licensee files at that time, we concluded that the V-type splice was not the same configuration as the 5 kV in-line shielded power cable splice tested by

Okonite. To determine if the in-line splice was applicable to the Farley splices we requested information on the actual configuration of the V-type tape splices. D. Jones (APCo) informed us that the plant design required Raychem heat shrinkable material with sealing capabilities and that the plant installation drawings did not provide a detail for these types of splices/terminations. At the September inspection the only information that was provided regarding the configuration of some of the V-type splices was to show that they were similar to the splices in the CECO report with T-95 and/or No. 35 tapes. We concluded that this information was not adequate to qualify the splices because the CECO reports clearly showed that these failed to demonstrate qualification of the splices. The CECO test reports tested the splices in what we would consider the worst case condition in that the splices were in contact with the ground plane allowing a direct path for the leakage current to ground. In this configuration the splices failed. However, the licensee had not established whether any of the V-type splices in the plant were in the bottom of housings, condulets or junction boxes, and therefore did not know if grounding was a concern. In addition, based on the responses from the craft, the splices may not have been configured with both the T-95 and No. 35 tapes as were the splices in the CECO test reports. There was no way of knowing whether the installed splices used the same materials or safety-related materials.

During the course of this inspection and at the exit meeting we informed the licensee that the V-type splices were considered unqualified as defined by Generic Letter 85-15 (Staff Exh. 7). During the inspection, J. Woodard (APCo) remarked that they disagreed that the splices were unqualified; it was just that the splices had not been tested

yet. The team was not aware that a test program had been undertaken by the licensee until the EQ meeting held September 24, 1987 at the NRC offices in Bethesda. This meeting was memorialized in a letter from APCu to the NRC Region II Administrator, dated September 30, 1987 (Staff Exh. 22).

- Q8. What were the Staff's findings regarding the V-type splices as a result of the September 1987 inspection?
- A8. (Merriweather) The Staff's findings regarding the V-type splices are summarized in NRC Inspection Report Nos. 50-348/87-25 and 50-364/87-25, dated October 16, 1987 (Staff Exh. 11). I adopt the following from Section 5 of the Report as part of my testimony:

During the weeks of May 11-22,1987, and June 1-5, 1987, a Procurement and Vendor Technical Interface Program Inspection was performed by NRC [at the Farley plant]. In order to address concerns expressed by the NRC inspection team and recent EQ maintenance problems experienced by other utilities (such as Calvert Cliffs), Farley management formed an Environmentally Qualified Equipment Document Verification task team on June 15, 1987, to review maintenance records to verify that EQ equipment had been maintained in a qualified status.

On July 16,1987, the licensee's task team noted a potential problem with the electrical connection between the solenoid pigtails and the field wires. Plant inspection of a sample solenoid valve on July 20, 1987, confirmed that the connection was not in accordance with design and the licensee subsequently notified NRC. A JCO was prepared for the solenoid valves to allow for continued operation based on the operability requirements of the solenoid valves.

Further review by the licensee's task team indicated that the potential problem also existed with MOV motor lead splices and other 600V motor terminations. A JCO was prepared for the MOVs on July 30, 1987. Three MOVs in each containment were not capable of justification for

continued operation and required immediate configuration verification. These valves were inspected and subsequently repaired on July 31, 1987 and August 1, 1987.

- Q9. What was your role in the preparation of the Inspection Report?
- A9. (Merriweather) I received inputs from each member of the team to prepare the inspection report.

(Paulk) I prepared, in part, Section 5 of the Inspection Report. My contributions were the last four paragraphs of Section 5 on Page 3. My main findings, which I adopt as part of my testimony, are as follows:

On August 4, 1987 the licensee's task team identified the same potential splice problem with containment fan motors. There were ten fans involved per unit, which affected several systems. Instead of preparing a JCO for these fans as recommended by Generic Letter 86-15 and as done previously with the SOVs and MOVs, the licensee chose to inspect the motor terminations one train at a time and correct deficiencies as they were found. In this manner, the train was declared inoperable during the inspection [,...] repair[ed] and later declared operable upon completion of repairs. All splices/terminations for the containment fan motors were found to be deficient and required replacement. The work was accomplished for Unit 1 from August 7-13, 1987, and for Unit 2 from August 13-19, 1987.

During the week of September 14-18, 1987, NRC Region T performed a Reactive Inspection to follow up on the EQ splice deficiencies dentified by the licensee on solenoid valves, motor operated valves, and inside containment fan motors. The inspection concluded that there was not sufficient documentation to establish qualification of the installed splices. The splices were determined to be unqualified as defined by Generic Letter 85-15. The unqualified configuration is a type V-stub connection splice using T95 tape for insulation and [No.] 35 tape for jacket material. This configuration is not covered by design drawings or engineering instructions and has not been environmentally tested for Design Basis Accidents (DBA) (e.g., Loss of Coolant Accident (LOCA), High Energy Line Break (HELB)) by APCo. This type of splice is not completely

sealed. It can allow moisture to travel along the cables to the V-stub connection. The root cause of these unqualified configurations was determined to be due to incomplete design drawings/engineering work instructions and misinterpretation of electrical notes and details by craft.

It should be noted that the drawing did not address the V-type stub connection but indicated that the Raychem splice kit for in-line splices should have been used in the above applications.

The splice issue for SOVs, MOVs, and the containment fans were previously identified as Unresolved Items 50-348, 364/87-17-01, 02, and 03, respectively, and will remain open. Additionally, potentially unqualified splices may exist in electrical penetrations and instrumentation circuits inside containment. The licensee did not perform adequate walkdowns prior to November 30, 1985, to ensure compliance with 10 CFR 50.49.

- Q10. What was your role in the preparation of the V-type tape portion of the Notice of Violation (NOV)?
- A10. (Merriweather) I prepared the original version of the NOV and reviewed the final version, that is, I prepared the initial draft of the violation and specifically reviewed the changes if any occured. I reviewed and concurred on the final version.

(Paulk) I wrote Violation I.A.1 of the NOV regarding taped splices which is quoted above as A4. I obtained concurrence from NRR and SANDIA consultants that the examples were justified and correct.

(Luehman) I reviewed and edited the NOV prior to issuance, both as OE reviewer and as a member of the EQ Enforcement Review panel. When the draft NOV was submitted by the Region, I reviewed and revised it. I was primarily responsible for revising and enhancing the Region's discussion of the "clearly should have known" finding.

(Walker) I had no involvement in the actual preparation of the NOV. However, I was a member of the EQ Enforcement Review panel which reviewed the NOV prior to issuance.

- Q11. Did you review APCo's response to the NOV, dated November 14, 1988 (Staff Exh. 15)?
- A11. (Merriweather) I reviewed the licensee's response to the NOV. I helped prepare the initial draft response to the licensee's answer to the NOV and reviewed the final NRC Order Imposing dated August 21, 1990.

(Paulk) I assisted N. Merriweather in the review of APCo's response. We discussed the issue with other inspectors and our SANDIA consultants.

(Luehman) I reviewed it extensively following receipt, had discussions with various other offices concerning how the Staff would approach responding to it, and used the response to validate the Appendix of the Staff's Order prior to issuance.

- Q12. What was your role in the preparation of the Staff's Order Imposing a Civil Penalty, dated August 21, 1990 (Order)?
- A12. (Merriweather) As stated above, I helped prepare the initial response to APCo's answer to the Notice of Violation for all of the proposed violations, not just V-type tape splices.

 I was assisted in this effort initially by C. Paulk prior to his departure from Region II.

 This initial response was later changed several times over a period of approximately a year. This was based on the review of the licensee's response dated November 14.

1988. I also was involved in reviewing markups and rewrites of the Order and responded to Staff questions regarding the Order.

(Paulk) N. Merriweather and I worked on the original draft of our response to APCo for NRC management, that is, we worked on Region II's input to the Order. We coordinated with various groups within the NRC to come up with the final draft that was accepted. I left Region II prior to the Order being finalized. I reviewed APCo's response along with other members of the NRC Staff. I concurred that APCo's response was not adequate. APCo did have Wyle Labs perform some testing; however, the results were never formally presented to NRC for review. I provided my input along with the findings/concurrence of NRR and SANDIA to N. Merriweather.

(Luehman) I prepared portions, reviewed and edited the entire document prior to issuance. When the draft Order was conceived a meeting was held with Region II by phone to divide up responsibility for responding to the licensee's submittal of November 14, 1988. Basically, Region II handled the specific technical issues, NRR was responsible for the general technical issue such as engineering judgment, walkdowns, etc. and OE was responsible for discussion of the application of the Modified Policy. Region II then assembled the document which had to undergo extensive reformatting by me after it was submitted by the Region.

(Walker) I'm the primary author of three sections of Appendix A to the order imposing a Civil Penalty dated August 21, 1990; those sections are, NRC Staff's Evaluation of Licensee Response in Attachment 2. Sections V.A.1 (engineering judgment), V.A.2 (walkdowns) and V.A.3 (document deficiencies). In addition, I was

a member of the NRC EQ Enforcement Review panel that reviewed all NOV's related to Generic Letter 88-07 which involved escalated enforcement. My involvement with the Order was the EQ Enforcement Review panel. The panel reviewed the Order to assure consistency with Staff positions on the various issues represented by the Order.

Q13. Is it your opinion that the V-type splices were required to be on APCo's EQ Master List?

A13. (Merriweather) I believe that V-type splices are not the same as the in-line splices that were addressed in the qualification file that was reviewed at the site during the September 14-18, 1987 inspection. Based on this finding and the fact that tape splices are considered electrical equipment, 10 C.F.R. § 50.49 indicates that it should be included on the list of electrical equipment required to be qualified. In my opinion, it would be acceptable if the licensee qualified the splices as part of an end device qualification, in which case it would be acceptable for the termination/splice not to be identified separately on the EQ Master List. The licensee would have maintained configuration control by including this information as part of the qualification file for the end device. However, the licensee did not address the splices in the qualification for the end devices. The licensee could have also qualified the splices on a generic basis, in that the EQ Master List may have identified tape splices and the EQ file would have established qualification for the V-type splices based on the accident environment they would be required to perform, including appropriate electrical performance characteristics for the circuits in which these splices are installed, and the identification of the areas in the plant where these splices are located. All of these examples provide configuration control ach that the EQ files are auditable and the qualification of the EQ components in the plant can be verified, yet it may not result in each V-type splice or termination being separately identified on the EQ Master List. Without similar provisions the splices would have to be separately identified on the EQ Master List consistent with the position discussed in NRC's Order Imposing dated August 21, 1990. NUREG-0588 (Staff Exh. 23) provided information to the industry that equipment interfaces must be "recognized and addressed" in the qualification process. In addition to the above, Enclosure 2 to IE Bulletin 79-01B (Staff Exh. 24) provided a method to the industry that was acceptable to NRC for addressing "cable splices" on a typical EQ Manter list example. The typical list identified a cable splice and tape as a component requiring qualification in accordance with the bulletin. Furthermore, the licensee admitted that it failed to address the configuration of terminations and splices in the EQ program submitted to NRC as stated in LER 87-12 dated July 30, 1987.

(Luehman) The Staff does not assert that splices necessarily have to be separately listed on the EQ Master List. As stated on page 19 of Appendix A to the Order, "10 CFR 50.49 required splices to be on the master list as separate items or to be explicitly considered as parts of other equipment." Documents supporting this position include NUREG-0588 (see page 17 of Appendix A to the Order).

(Shemanski) 10 C.F.R. § 50.49 does not require that V-type splices or any other specific type of electrical equipment important to safety be identified on the EQ Master List. Electric equipment important to safety identified by the requirements of 10 C.F.R. § 50.49(b)(1), (b)(2), and (b)(3) comprise the Master List. The licensee has the option

as to how the equipment is categorized and listed on the Master List. Splices, for example, can be qualified individually or as part of a larger assembly. Industry practice has been to qualify splices separately since it is usually impractical to qualify a splice and its associated equipment such as a cable, penetration, motor, etc. In my experience, licensees normally include splices separately on a EQ Master List since industry test reports qualify individual splices and not subsystems.

- Q14. Have you reviewed the Wyle test report (Staff Exh. 25) on the splices cited by APCo in its November 14, 1988 response to the NOV?
- A14. (Merriweather) During the course of the November inspection, D. Jones (APCo) stated to me that they had the final test report for V-type splices. I was never asked to review the report and, as far as I know, none of the team members reviewed this report. I was aware of the fact that there were 14 configurations tested and that the configurations were capable of conducting the specified currents. It was my understanding that this report only addressed control and power circuits where leakage currents can be tolerated at much higher levels. Therefore, it would not qualify the application of V-type splices in instrumentation circuits. I had received the results of the test and a copy of the 14 splice configurations that were in the test program prior to the inspection. The splices tested were representative of those in solenoid valve circuits, Limitorque operators, fan motors and pump motors. (This information had been annotated on the copy of the test data that I had in my possession). However, there was no information to support the use of these splices in instrumentation circuits. At the time I was planning the inspection it was my

understanding that the splices were being replaced and the enforcement guidance available at the time clearly indicated that if the splices were not qualified at the time of the inspection (September 1987), subsequent testing and analysis would not be considered as far as enforcement. Based on the information included in the test data it confirmed my initial conclusion made during the September inspan on that a similarity analysis had not been established to the CECO test reports and that the licensee was not certain as to the actual configuration of the splices/terminations. And since the licensee did not assure that the splices were installed in accordance with design I concluded that a generic qualification had not been made. Thus a review of the test report was not considered as part of the November inspection. I considered the issue resolved as far as corrective action and all that remained was for NRC to assess what if any enforcement was appropriate.

(Paulk) The Staff cannot accept or evaluate a report that was not presented to it. The licensee commenced testing taped splices after it was informed there was a qualification issue, but failed to inform NRC until it was summoned to the September 24, 1987 meeting to discuss why Farley should continue operating. The test was designed to run 30 days, but was secured shortly after the meeting was over, after being run for 45 hours.

The Wyle Report was formally submitted to the NRC for review in 1989, but not by APCo. Two Entergy Operations sites were using this test to support qualification of their splices. NRR reviewed this report in 1990 and concluded that it was not sufficient to support qualification of the splices APCo stated represented those at Farley. Arkansas

Nuclear One (ANO), an Entergy Operations site, decided to conduct additional tests on these splices, after its taped splice configurations were held to be unqualified by the NRC. The testing did not begin until after all questionable splices had been replaced with fully qualified splices. After the testing was halted, ANO informed Region IV of the results. The testing, and the licensee's discussions with Okonite, the manufacturer of the tape, revealed that the T-95 tape (insulation tape) was not a self-vulcanizing tape and was highly viscous at room temperature because it lacked peroxides. The manufacturer also stated that it had repeatedly told its customers that the T-95 had to be completely encased. The testing by ANO showed that as temperature rose the T-95 tape expanded and began to run as it became less viscous and more fluid, similar to the way glass responds.

(Walker) This licensee did not have acceptable qualification information in their files at the time the inspection was conducted on September 14-18, 1987. In accordance with Generic Letter 88-07, this is sufficient reason for the Staff to conclude the item in question is not qualified. If a test is conducted after November 30, 1985, the deadline for establishing environmental qualification, that fact alone would not be sufficient to justify Staff rejection of a test report. Licensees are expected to update files if and when new information becomes available. However, the Staff did not accept the test report because the test had not been conducted prior to the completion of the September inspection. Even if this particular test had been conducted, it would not have demonstrated qualification. I reviewed the October 1987 test report 17947-01 prepared for the Farley plant by Wyle Laboratories. However, I reviewed the report when it was

November 1989. My evaluation of the report prepared for Farley, and of other test reports for taped splices, is contained in an NRC Memorandum dated May 16, 1990 (Staff Exh. 26). The test conducted at Wyle was terminated prior to its completion, and without sufficient information to demonstrate qualification for the Farley application.

- Q15. APCo has asserted in its Response to the NOV that if the EQ program provides installation instructions, and another group within the utility, namely the craft, does not follow those instructions, this would not be an EQ violation. What is the Staff's position?
- A15. (Merriweather) I disagree with the licensee's position that adequate installation instructions had been provided to the craft to ensure EQ splices/terminations were installed in accordance with design. At the time of the September inspection a licensee respresentative indicated that the design required the use of heat shrink material in these applications. The fact that unqualified V-type splices were installed is a breakdown in the EQ program to assure that the as-installed configuration is similar to the way it was tested. The tested configuration was an in-line shielded power cable tape splice by Okonite (Report NQRN-3). The failure to assure that the as-built configuration was similar to the tested configuration and the failure to address tape splices as a component required to be qualified on the EQ Master list is an appropriate violation to be cited against 10 C.F.R. § 50.49. It may be true that violations can be cited against other

regulatory requirements. However, this violation was caused by the lack of an adequate EQ program as it related to splices/terminations.

(Luehman) With specific regard to the Staff's response to this argument, that can be found on page 14 of Appendix A of the Order. The violations cited may well violate other requirements but in so far as they affect EQ the licensee can be cited under 10 C.F.R. § 50.49. Of course, this argument is not needed for the splices as there were no specific installation instructions so this is not a case of simply not following procedures. It is a case of not having controls to ensure EQ is maintained.

(Shemanski) The Staff's position is that the licensee must establish a program for qualifying the electric equipment identified in 10 C.F.R. § 50.49(b). Inherent in an EQ program is the responsibility of the EQ coordinator to ensure that all aspects that contribute to the qualification status of each item of electric equipment important to safety be verified. Since multiple groups within a utility can impact the qualification status of an item, oversight is mandatory. APCo's claim is not only wear but, it shows a lack of understanding of basic engineering validation/verification practices.

(Walker) As stated in Regulatory Guide 1.89, the purpose of qualification is to demonstrate that the electric equipment is capable of performing its safety function under environmental stresses resulting from a design basis accident. General Design Criterion (GDC) 4 states, in part the "structures, be designed to accommodate the effects of and to be compatible with the environment, conditions associated with normal operation, maintenance, testing and postulated accidents, including loss-of-coolant accidents." This

position is reiterated in the DOR Guidelines (Encl. 4 to Staff Exh. 24). The Staff position is that a piece of equipment cannot be expected to accomplish these tasks if it is not properly installed or not installed at all. It is the responsibility of the licensee to assure that all requirements are met and maintain, and that the licensee is responsible for the actions of its employees as far as meeting the licensing requirements.

- Q16. On what basis do you assert that APCo "clearly should have known" the V-type tape splices were not environmentally qualified?
 - (Luehman) The "clearly should have known" test is set forth in the Modified Enforcement Policy Relating to 10 C.F.R. § 50.49, "Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants" (Generic Letter 88-07), dated April 7, 1988 (Modified Policy) (Staff Exh. 4). (A detailed discussion of the Modified Policy and how it was applied in this case is found in the Testimony of James G. Luehman, Uldis Potapovs and Harold Walker on Behalf of the NRC Staff Concerning Enforcement, also filed in this proceeding.) As stated in the Modified Policy, the NRC will examine four factors in determining whether a licensee clearly should have known that its equipment was not qualified:
 - 1. Did the licensee have vendor-supplied documentation that demonstrated that the equipment was qualified?
 - 2. Did the licensee perform adequate receiving and/or field verification inspection to determine that the configuration of the installed equipment matched the configuration of the equipment that was qualified by the vendor?

- 3. Did the licensee have prior notice that equipment qualification deficiencies might exist?
- 4. Did other licensees identify similar problems and correct them before the deadline?

The basis for asserting that APCo clearly sould have known of the requirement for environmental qualification of the splices is set forth in the Staff's Order. The Staff's position, which I adopt as my testimony, is as follows:

The NRC staff considered all four factors listed in the Modified Policy in making the determination that APCo clearly should have known that the V-type tape splices were not qualified. As explained earlier, the NRC staff does not balance these factors. Moreover, all four of the factors provide information to show that APCo clearly should have known of this violation before the deadline.

Factor number one was applicable because the Okonite splice documentation, available in the qualification file prior to the deadline, clearly only addressed shielded power cables and therefore should have alerted the beensee to the need for more specific information.

Factor two applied because APCo records did not show what kind of splice was installed in a particular location, nor did its quality control procedures assure that these splices were installed according to drawings for an environmentally qualified splice. In fact, only one qualified splice, for 4160 volt power circuits, was shown on the drawings. Moreover, licensee walkdowns or field verifications were inadequate because they did not consider electrical connections which were components that licensees were required to account for in demonstrating qualification.

Factor three was considered applicable because NUREG-0588 states that it is necessary to recognize and address equipment interfaces to qualify equipment. In addition, while the NRC staff did not specifically identify V-type splices as causing qualification deficiencies, the NRC staff did give the licensee prior notice of splice problems by issuing generic documents, as described below.

Factor four was considered applicable because other licensees had identified qualification problems with cable splices. For example, NRC Circular 78-08, at page 3, describes when electrical cable splices

associated with electrical penetration assemblies were determined to be unqualified by a licensee during a search for qualification documentation. In addition, NRC Circular 80-10 identifies another example where the wrong class of insulating material had been used on the motor leads of a containment fan cooler. In that Circular the NRC staff emphasized the "...importance of properly installing and maintaining environmentally qualified equipment which clearly requires more than a review of QA records."

Furthermore, the Okonite splice documentation that was in the file only addressed a very specific splice configuration (4160v shielded power cable), yet the licensee used this to demonstrate qualification for numerous configurations at varying voltages without any adequate similarity analysis.

Q17. Does this conclude your testimony?

A17. (All) Yes.

MR. BACHMANN: Next, this testimony encompasses some of the previous testimony which has already been admitter into evidence and also Exhibits 16 through Exhibit 26. Those are staff exhibits. They have been pre-numbered. The reporter has been furnished with three copies, also pre numbered, of these exhibits, and we would like to ask the Board to have these considered marked for identification as Staff Exhibits 16 through 26. JUDGE BOLLWERK: They have already been identified for the record earlier. So, they are marked for identification as 16 through 26. (Staff Exhibit Nos. 16 through 26 were marked for identification.] JUDGE BOLLWERK: What I will ask to do is, when we move them into evidence at, I guess, the close of the cross 15 examination again, I would ask that you identify each one 16 briefly as we move it in. I'd appreciate that. 17 MR. BACHMANN: Yes, sir. 18 At this point, I would offer the panel for cross 19 20 examination. JUDGE BOLLWERK: Thank you. 21 CROSS EXAMINATION 22 23 BY MR. MILLER:

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are the lead witness of this panel. Is that correct? 25

Mr. Merriweather, the way we understand it, you

- [Witness Merriweather] I don't know that, but --2 No one has told you that your lawyers identified you in the brief as the lead witness? 3 Ä [Witness Merriweather] Okay. All right, sir. You're the lead witness, and I 5 understand -- will you also tell the Board that you were the 6 7 team leader of the EQ inspections at Plant Farley in 1987? 8 [Witness Merriweather] Yes, I was. 9 There was an EQ inspection in September of that year, and you were the team leader. 10 A [Witness Merriweather, Yes, I was. 11 And there was another EQ inspection in November of 1.2 that year. 13 14 [Witness Merriweather] That's true. And I take it that, as the team leader, you look 15 16 at those inspections as the "first-round" inspection of plant Farley. Is that true? 17 [Witness Merriweather] The September inspection 18 19 was a reactive inspection. It was not part of the firstround inspections. 20
- 22 A [Witness Merriweather] The November inspection 23 was considered the first-round inspections.

So --

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Q Oh, I are. So, the first-round inspection was the November inspection. Is that what you have to say?

[Witness Merriweather] That's what I just said. A 2 All right. 3 Now, I'll ask you whether or not your understanding is that the modified enforcement policy 4 applies only to the first-round inspection. 5 [Witness Merriweather] I don't -- I don't -- I 6 don't know if that's true or false. 7 8 Q You haven't learned that one way or the other in your capacity as team leader? 9 [Witness Merriweather] No. 10 Is that so? 11 O [Witness Merriweather] I said I don't know if 12 13 that's true or false. That's what I said. I don't know. 14 0 All right. Well, then, tell me, in your judgment, which 15 enforcement policy was applicable or is applicable today to 16 the reactive inspection you conducted in September of 1987. 17 18 A [Witness Merriweather] We understand that 08-07 is applicable. 19 20 0 That's applicable? 21 [Witness Merriweather] Right. You agree then or you're at least testifying today 22 23 that 88-07 applies to that inspection as well as the 24 November inspection?

[Witness Merriweather] True.

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| 1 | Q Are you saying that they should be looked at for |
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| 2 | purposes of 88-07 as one inspection? |
| 3 | A [Witness Merriweather] I don't believe that's |
| 4 | true. |
| 5 | Q Well, how can we divide them if they are different |
| 6 | inspections but the same modified policy? |
| 7 | A [Witness Merriweather] There were two there |
| 8 | were two different inspections. All all I can tell you |
| 9 | is there was one in September, there was one in November. |
| 10 | One of them was specific to look at specific |
| 11 | issues, and the other one was was considered a EQ |
| 12 | inspection where we actually implemented the TI. |
| 13 | Q I see. And if if Generic Letter 88-07 speaks |
| 14 | in turms of sufficient data existing or developed during the |
| 15 | inspection, which inspection would that be, please, sir? |
| 16 | A [Witness Merriweather] It could be either one of |
| 17 | those. |
| 18 | Q I see. (kay. Any data developed during either |
| 19 | the September inspection or the November inspection. Is |
| 20 | that what you're telling us? |
| 21 | [Witnesses conferring off the record.] |
| 22 | A [Witness Merriweather] Excuse me. Ask the |
| 23 | question again? |
| 2.4 | Q If it would help, Mr. Paulk, do you need to assist |

25 Mr. Merriweather on that?

- A [Witness Paulk] It would depend on which issue 2 you're talking about.
 - I'm talking --

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- [Witness Paulk] If it was -- if it was 4 information for something that was identified during the 5 September, it would have to be during, or shortly 6 7 thereafter, the September inspection.
- You cannot say that because I developed something in November for the September, that it's within the same timeframe. 10
- I see. Now I understand. 11
 - You tell me if this is right: For purposes of the modified enforcement policy, there was an inspection in September and an inspection in November, both of which are governed by this document, and I'm holding up Generic Letter 88-07. Is this true?
 - (Witness Merriweather) I believe that's true.
 - But for purposes of providing additional data, the phrase "inspection" in this document doesn't control. It has to be added to say "inspections." Is that what you're telling us, Mr. Paulk?
 - [Witness Paulk] I didn't understand.
- Q I will ask you to look at page two. I will ask 23 you to look at this word, and does it not say "inspection"? 24
- [Witness Paulk] Yes, sir. 25 A.

- 1 Q And for purposes of this policy, you are telling 2 this Board "inspection" is both inspections, correct?
- A [Witness Paulk] In this case, there were two inspections.
- And for purposes of providing the additional data, though, that cannot be done during the "inspection" but must be done either in inspection one or inspection two. Is that what you're true g us?
- 11 Q I see. No. I understand exactly. You want to
 12 play it both ways. You want to have data in one inspection
 13 but both inspections governed by the entire policy. Is that
 14 what you're telling this Board?
 - A [Witness Paulk] If you had three inspections, all three of them you have to you have to apply the policy to each inspection individually.
- 18 Q Can we say, then --

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- 19 A [Witness Paulk] We -- we put them all together in 20 aggregate and issued one proposed violation.
- 21 Q Can we say, then, that the September inspection -22 the results of that inspection control the activities
 23 conducted there? Right? The inspection -- I'll strike that
- 24 and ask it to you this way:
- 25 Can we say that the inspection report for the

| 1 | September inspection controls the activities of that |
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| 2 | inspection? |
| 9 | (Witnesses conferring off the record.) |
| 4 | Q Can somebody say a yes? |
| 5 | [Witnesses conferring off the record.] |
| 6 | WITNESS MERRIWEATHER: I don't believe I |
| 7 | understand your statement there. |
| 8 | MR. MILLER: Okay. All right. |
| 9 | BY MR. MILLER: |
| 10 | Q You understand that there was a September |
| 11 | inspection which you have called the reactive inspection. |
| 12 | A [Witness Merriweather] True. |
| 13 | Q We're going to talk about that in just a minute, |
| 1.4 | but Mr. Paulk says, for purposes of providing additional |
| 15 | data, that inspection was closed in September. |
| 16 | That's the way I understand it, Mr. Paulk. |
| 17 | A [Witness Paulk] For the enforcement purposes, |
| 18 | yes. |
| 19 | Q All right. For purposes of imposing the civil |
| 20 | penalty under the modified policy, that inspection wouldn't |
| 21 | close, then. That inspection goes on into November. Is |
| 22 | that what you told us? If it isn't, say so. |
| 23 | A [Witness Luehman] That's correct. |
| 24 | Q Okay. Your right to provide the additional data |
| 25 | is cut off in September. Your obligation or your exposure |

- for escalated enforcement runs to November. That's what you told us, isn't it?
- A [Witness Luehman] And I think that's consistent with the modified policy.
- 5 Q That's all right. As long as that's what you're 6 telling us, we'll let that, the modified policy, speak for itself.
- So now I'm going back to the September inspection.

 There was an inspection report issued, was there not?
 - A [Witness Merriweather] Yes, there was.
- 11 Q And if I look at that inspection report, I'm going
 12 to see the results of those inspections and whether any
 13 violations or deficiencies were identified.
 - A [Witness Merriweather] There is a results section in the report.
- 16 Q All right. And what I asked you earlier, and I'll
 17 ask you again, is that the inspection report, and the
 18 conclusions therein control this first, first of the two EQ
 19 inspections?
 - A [Witness Merriweather] I believe that inspection report is clear in terms of what was looked at and what was found, and there is a result section in the report.
- 23 Q Okay.

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24 A [Witness Merriweather] Now, that's the way I 25 understand it.

Can you tell us what that results section says? 2 [Witness Merriweather] I don't know. We can look 3 at the report. 4 [Pause.] BY MR. MILLER: 5 While we're looking for it, I'll ask you this, Mr. 6 Merriweather: 7 If the September inspection was a reactive 8 9 inspection, why wasn't the -- why weren't any alleged violations arising out of it handled under Part 2, Appendix 10 C, instead of the modified enforcement policy? 11 A [Witness Merriweather] Basically -- okay. Here 12 we go. The guidance I was given is that we were going to 13 14 identify these items as unresolved. Q I see. And that's the point where we are. 15 You have Staff Exhibit 11 in front of you, do you 16 not? 17 [Witness Merriweather] Is that the inspection 18 19 report? Q Yes, sir. For purposes of the record, that's the 20 21 inspection --22 [Witness Merriweather] 87-25. A Yes, sir. 23 0 (Witness Merriweather) All right. 24 A The inspection report, October 19th, 1987 is the 25 0

- 353 date, and it refers to Reports Number 5348/87-25 and 5364/87-25. 2 JUDGE BOLLWERK: Let me just interrupt you. 3 Do you have a cross examination plan for this 5 panel? MR. MILLER: As a matter of fact, I do, and I'm 6 sitting here holding that instead of handing it out. 7 JUDGE BOLLWERK: I just thought it would be more 8 useful if we had it. 9 MR. MILLER: I don't know, Judge. I get cranked 10 up and there's no telling where I'm going. There you are, 11 sir. 12 [Documents proffered to the Board.] 13 BY MR. MILLER: 14 All right. You've got it there in front of you? 15 16 Do you, Mr. Merriweather? [Witness Merriweather] Yes, I do. 17
- 18 Q And the question that we're trying to determine is 19 that if this is a reactive inspection --
- 20 A [Witness Merriweather] Okay.
- 21 Q -- and I understand you said it wasn't a first-
- 22 round EQ inspection, why, then, if you know -- and you may
- 23 not -- was it not covered under Part 2, Appendix C
- 24 enforcement policy?
- 15 A [Witness Merriweather] The way I understand it,

- we did have some guidance out. I think 86-15 may have been out, 85-15.
 - 0 85-15?

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- A [Witness Merriweather] Right. 85-15, and I think 86-15 was out.
- 6 Q I see.
- A [Witness Merriweather] And that would have subjected them to the \$5,000 a day civil penalty, and I believe that was then in question, as to whether we were going to carry out or implement 85-15, and --
- 11 Q You know, that may explain something.
- 12 A [Witness Merriweather] Let me finish.
- 13 Q Oh, I'm sorry.
- 14 A [Witness Merriweather] Let me finish.
- 15 Q Go ahead.
- 16 A [Witness Merriweather] The previous EQ

 17 inspections, I believe, that had been done had been

 18 categorized in items as potential enforcement/unresolved

 19 items is just a way we did business in Region II. We don't

 20 have potential enforcement/unresolved items; we only have

 21 unresolved items. So we did what we normally do in Region

 22 II, which is categorize these items as unresolved items.
 - Q Okay. Let me ask this just to make sure I understand it, because I think you've clarified one thing.

 At the time you conducted the inspection, there

- was no Generic Letter 88-07?
- 2 A [Witness Merriweather] Right.
- 3 Q And you understood at that time that you were
- 4 proceeding under Generic Letter 85-15 and 86-15?
- 5 A [Witness Merriweather] I believe that's true,
- 6 yes.
- 7 Q Okay. We'll talk more about it, but I recall
- 8 seeing that in your testimony.
- 9 I'll ask you now if you will turn to the summary
- 10 page of your inspection.
- 11 A [Witness Merriweather] Okay.
- 12 Q And read into the record the results of this
- 13 special announced inspection.
- 14 A [Witness Merriweather] Okay. The results say,
- 15 "No violations or deviations were identified."
- 16 Q Okay. And that is your way of saying that there
- 17 were some open items, and they hadn't been resolved yet?
- 18 A [Witness Merriweather] No. I think this is
- 19 standard practice when we wrote reports. If you didn't have
- 20 a violation that was attached to the letter, we just
- 21 identified it in the results section that no violations were
- 22 identified in the report. Now --
- 23 Q Okay. So -- I'm sorry, go ahead.
- 24 A [Witness Merriweather] That does not address
- 25 unresolved items. Unresolved items can become violations.

Q I understand that. But can we say, though, at the time that this inspection was conducted, had you seen a clear violation, you would have said so?

A [Witness Merriweather] No. What I said was we were given guidance to identify EQ issues or EQ violations as unresolved items which is consistent with headquarters' potential enforcement/unresolved item category.

Q Okay.

A [Witness Merriweather] We did not have a potential enforcement/unresolved item category in Region II. We just couldn't put it on our computer database. We have an old computer system, and we just don't do it that way. We can either make it an unresolved or a potential enforcement item. That's it.

Q All right.

A [Witness Merriwsather] And we make it an unresolved item. Period. That's it.

Q You couldn't say -- you mean you didn't have a third choice to say violation? That wasn't one of your choices?

A [Witness Paulk] It would be identified as a potential violation in the report until the violation was issued.

Q Wait. You say it would not be identified as a potential violation until the violation --

- A [Witness Paulk] There's a difference between a potential violation and a violation.
- Q I didn't understand what you said. Did you say it would be so identified or would not?
 - A [Witness Paulk] It could be.
- 6 Q Okay.

- A [Witness Paulk] We did not have that terminology

 8 in Region II, potential enforcement or potential
- 9 violation/unresolved item.
- 10 Q I understand. So the most you could do when you 11 went down there, no matter what you saw, was say unresolved 12 item?
- 13 A [Witness Paulk] Yes.
- 14 A [Witness Merriweather] That's not necessarily true.
- 16 A [Witness Luehman] It could have been --
- Q Wait a minute. Time out. Time out. Mr. Paulk
 says yes. Somebody says that's not true. Somebody else
 wants to explain. You're going to all get your chance, but
 we have to help the court reporter out and do it one at a
- 21 time.
- Now, who is it that says Mr. Paulk is wrong?
- 23 [Laughter.]
- 24 MR. MILLER: The interesting thing about that
- 25 though, Judge, is of the five people, Mr. Paulk said I'm

wrong and nobody else said he was.

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All right. Let's go back. We're not here to play games. We are trying to get to the truth.

WITNESS LUEHMAN: Simply stated, the reason that it was left unresolved is (a) they didn't call it anything else is because that's what their tracking system allowed them to do.

The reason that it was left as an unresolved item was not that the inspectors had necessarily reached a conclusion that there was no violation here but because of the decision that had yet to be made as to which enforcement policy, given that revisions to the 86-15 enforcement policy were being discussed for the per item, per day basis, so until that policy decision was resolved, the guidance to inspectors was to leave these things as unresolved items and put the licensees on notice that the inspectors did not agree to some extent with their conclusions but that at this point enforcement action wasn't being taken.

BY MR. MILLER:

Q Can we say, though, that at the end of the September inspection at least we know these things, the status of these inspected items was unresolved for enforcement purposes, yes or no?

A [Witness Luehman] What enforcement action was going to be taken was unresolved.

- Q All right.
- Well, wait a minute. Do you mean to say that
- 3 there was a violation but the enforcement action hadn't been
- 4 selected yet?
- 5 A [Witness Luehman] I'll say that the inspectors do
- 6 not make the final decision on whether something is going to
- 7 be called a violation by the Staff or not.
- 8 Q I understand that and we really ought to ask Mr.
- 9 Merriweather, since he is the team leader and I am trying to
- 10 decipher what his report means that he signed out in October
- 11 16th of 1987.
- 12 So I'll ask you, Mr. Merriweather, at the time
- 13 this inspection was over with, was it your understanding
- 14 that no violations at Farley had been identified? Was that
- 15 your understanding?
- 16 A [Witness Merriweather] What I'm saying is that
- 17 the way we wrote our reports, if there's not a violation
- 18 cited in the details, specifically cited, that result
- 19 section will reflect that there are no violations in these
- 20 details --
- 21 O All right --
- 22 A [Witness Merriweather] Let me finish.
- 23 Q All right.
- 24 A [Witness Merriweather] -- identified with a
- 25 number. That doesn't mean an unresolved item is not a

violation. All I am saying is when you look in the details you're not going to find violation umpty-squat.

Q Okay.

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A [Witness Merriweather]" Okay, but if you read the details, you will find that we specifically stated whether something was qualified or not and we gave our opinion in the details.

Q Okay.

A [Witness Merriweather] The enforcement aspect is a different issue. We were given guidance to identify an EQ issue that appeared to be a violation or apparent violation, or whatever you want to call it, as an unresolved item until the enforcement policy was decided.

Q Did you have it within your power, had you so concluded that a violation had been identified, to write those words in your inspection report?

A [Witness Merriweather] Basically, the way I worked, I reported to my supervisor and he has to review and approve anything that I do. Anything we say is subject to management review or change or whatever.

Now as far as whether I could cite something as a violation, I had to have that approved with my supervisor.

Q If your supervisor had so approved, was it within the power of Region II, as you understood it, in your capacity as team leader that they could write down a

- violation was identified if they wanted to?
- A [Witness Merriweather] The way I understand it,
- and this is the direction I got from my boss, which we will
- 4 identify them as unresolved items. That's all I know,
- 5 Q All right, so the most you can do is write down 6 any alleged violation as unresolved --
- 7 A [Witness Merriw ather] For EQ -- let me clarify, 8 for EQ.
- 9 Q For EQ. That's what brings us here today, I promise you that.
 - In those words, by "unresolved," do you mean to suggest that it could be resolved in favor of the licensee or be resolved as a violation at some later point?
 - A [Witness Merriweather] Well, I think in this context it was strictly from the enforcement standpoint.
 - Q Okay, all right. What you are telling me then, as I understand it, is that the phrase "unresolved" in this inspection report really should read violation but we hadn't decided what enforcement we're going to pursue?
- 20 A [Witness Merriweather]" I think that's a clearer 21 statement.
- Q Okay. You'd identified this and described it as a "reactive inspection"?
- 24 A [Witness Merriweather] Yes.

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25 Q And is that a phrase that you have selected to

- suggest that an LER had been filed or submitted by Alabama
 Power Company?

 A [Witness Merriweather] It could relate to an LER.
 - It just could relate to a event that was reported to the Commission or that we became aware of.
 - Q Was that the case in this instance?
- 7 A [Witness Merriweather] I think in this case we 8 had a copy of an LER.
- 9 Q I see.

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- 10 A [Witness Merriweather] And an inspection report.
- 11 Q I see.
- Tell me, if you know, did that LER prompt a

 meeting on September 24th, 1987 between the NRC Staff and

 Alabama Power Company representatives?
- 15 A [Witness Merriweather] I don't kno; if it was the
 16 LER by itself. It may have been a combination of LER and
 17 our inspection report.
- 18 Q Do you know that such a meeting was held?
- 19 A [Wi*ness Merriweather] September the 24th --
- 20 Q Yes.
- 21 A [Witness Merriweather] In Washington?
- 22 Q Yes, sir.
- 23 A [Witness Merriweather] Yes. I am aware of that.
- 24 Q Did you attend that meeting?
- 25 A [Witness Merriweather] I attended that meeting.

- And you know that Alabama Power Company made a presentation about the V-type electrical splices at the Farley site?
 - A [Witness Merriweather] Yes, I do.
- 5 Q And you know part of their presentation was that 6 the V-type splices, they considered the V-type splices 7 gualified?
- 8 A [Witness Merriweather] Well, I understand their 9 position, yes.
- 10 Q Okay, and can you tell me whether or not as a

 11 result of this presentation that the NRC Staff went out and
 12 had a caucus?
- 13 A [Witness Merriweather] They had a caucus at one 14 time, yes.
- 15 O What is a caucus?

- A [Witness Merriweather] Basically the way I
 understand it, they had listened to the licensee's
 presentation and then had made a decision, because I think
 it was a choice between whether we were going to issue an
 order to shut them down. That's what you caucus about.
- 21 Q All right --
- 22 A [Witness Merriweather] If they should continue to operate.
- Q Wasn't the consensus of the NRC Staff at that time
 that they would accept Alabama Power Company's judgments

- that the splices are qualifiable, as best you recall?
- 2 A [! tness Merriweather] I don't know if were
- gualifiable, but I know they allowed them to continue to
- 4 operate, based on the fact that they had a test, and I think
- 5 there was an indication that they were 24 hours in the test
- 6 and they hadn't had any failures up to that point.
- 7 Q I see.
- 8 A [Witness Merriweather]" That was the key that
- 9 allowed the Staff to make a decision.
- 10 Q Tell us the name of that test.
- 11 A [Witness Merriweather] I don't know the number,
- 12 but it was a Wyle test.
- 13 Q Okay. Perhaps that's the Wyle test report Davey
- 14 Jones told you about during the inspection?
- 15 A [Witness Merriweather] Yes.
- 16 Q Okay, I see.
- 17 So this Wyle test report that you were told about
- 18 during the inspection was --
- 19 A [Witness Merriweather]" Wait, wait, wait -- are
- 20 you talking November or September?
- 21 Q Well, you mentioned in your testimony that Davey
- 22 Jones gave you this Wyle test report and you never looked at
- 23 it.
- 24 A [Witness Merriweather] He never gave me a test
- 25 report. It depends on which one we are talking about.

- There are other Wyle reports, but I think the one you are
- 2 referring to -- I'm talking about the one that was done in
- 3 September that we were informed in that meeting that they
- 4 were 24 hours into the test.
- 5 Q I see.
 - A [Witness Merriweather] Okay?
- Okay. You are referring to the Wyle test that was being performed in September of 1987?
- 9 A [Witness Merriweather] Right.
- 10 Q And as a result of that test and hearing its
- 11 description, the NRC Staff concluded that Plant Farley could
- 12 continue to operate?
- 13 A [Witness Merriweather] The way I understand it,
- 14 yes.

- 15 Q Is that the same thing as saying that it had a
- 16 reasonable assurance of public health and safety of the
- 17 plant operations were --
- 18 A [Witness Merriweather] I would imagine that to
- 19 allow them to continue to operate, yes.
- 20 Q Okay, all right.
- Now we'll do this just for the purposes of the
- 22 record and I'll ask that this summary be marked as Alabama
- 23 Power Company Exhibit 94.
- 24 While we are getting our copies, I'll ask you to
- 25 look at that, Mr. Merriweather, and see if that is not a

| 1 | true and accurate copy of the NRC Summary of the meeting |
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| 2 | just described. |
| 3 | [Witness reviewing document.] |
| 4 | (Pause.) |
| 5 | JUDGE BOLLWERK: Could you give us, again, a brief |
| 6 | summary description of this? |
| 7 | MR. MILLER: Yes, sir. This is Alabama Power |
| 8 | Company Exhibit 94. It is a memorandum signed by Edward A. |
| 9 | Re ves, Sr., Project Manager of the Farley Plant, employee |
| 10 | of the NRC, dated November 5th, 1987, and it's subject is, |
| 11 | Summary of Meeting Held on September 24, 1987 Between NRC |
| 12 | Staff and APCo Representatives To Discuss Recent Problems |
| 13 | Related To Qualification of V-Type Electrical Splices at |
| 14 | Farley Site. |
| 1.5 | JUDGE BOLLWERK: Let the record reflect that APCo |
| 16 | Exhibit 94 has been marked for identification. |
| 17 | [APCo Exhibit No. 94 Was |
| 18 | marked for identification.] |
| 19 | BY MR. MILLER: |
| 20 | Q Would you mind, Mr. Merriweather, if you've got |
| 21 | the time, to see if the copy I handed you had attached the |
| 22 | enclosure? Do you see the enclosure with the attendee list? |
| 23 | A [Witness Merriweather]" Yes. |
| 24 | Q Okay, good. Well, that's interesting. I just |
| 25 | noticed that, Mr. Walker, you were there. |

[Witness Walker] I don't remember that. 2 Were you part of the consensus that the V-type splices were qualifiable, or were you a dissenting vote? 3 4 (Witness Walker) I don't know if I had a vote at al1. 5 Well, does -- you know, that's interesting. 6 0 Does that mean that when it says the staff 7 consensus, that everybody agreed on that, or you don't 8 9 recall any dissent to that? 10 [Witness Walker] Staff consensus does not 11 necessarily mean everyone agrees. 12 All right, but it does mean it's the position on the Staff? 13 14 [Witness Walker] That's correct. 15 Okay. Let's turn now to the signature page, Mr. 16 Merriweather, and let's make sure we've got it right. All right, let's read Item 1, the heading being, 17 "Following the NRC staff caucus, Mr. Grace presented the NRC 18 19 Staff consensus as, will accept the APCo judgment that splices are qualifiable at this time." 20 [Witness Merriweather] Right. 21 22 Okay, and when you say "qualifiable," does that mean qualifiable to the EQ Rule, as far as you know? 23

[Witness Merriweather] I don't think that's so.

Wait a minute, the question was --

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- A [Witness Merriweather] Qualifiable --
- 2 Q Do you think it's so, or is that what Mr. Luehman 3 just told you was so?
 - A [Witness Merriweather] No. Well, in this context, it's probably qualified by the fact that they told us they were 24 hours in the test and they didn't have any fairures.
 - Q Qualifiable to what standard?

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- 9 A [Witness Merriweather] I have no idea what they
 10 mean by that. That's what I'm saying, but that's -- I'm
 11 telling you the context of -- I was there at the meeting.
 12 It was based on -- they said -- and we were 24 hours in the
 13 test. We haven't had any failures. So, one would think
 14 that would be enough information to say, yes, these things
 15 may be qualifiable.
- 16 Q All right. That's all right. Okay, so, let's see 17 if I've got this right:
 - You know that you're sitting there on that panel because the NRC has determined that the V-type splices were not qualified under the Modified Enforcement Policy.
 - A [Witness Merriweather] True.
- 22 Q And when you say that -- or, strike that.
- You say that at the same time that the NRC allowed the plant to operate with these V-type splices?
- 25 A [Witness Merriweather] I think I explained that

- that was the reason why we had the one-day meeting.
 - Q Okay, I understand that.

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- A [Witness Merriweather]" Now, as -- what I'm saying is the fact that they -- and I'm not the Staff; I'm not totally the Staff, and I didn't make the decision about continued operation. I was there at the meeting, but I did not make the decision.
 - It was basically done at a much higher level. But I believe what swayed the procedure was the fact that -- the decision, was the fact that they had an ongoing test. They were 24 hours into the test and they indicated they had no failures.
- 13 Q I understand that. Don't misunderstand me, Mr.
 14 Merriweather. Let's just make this simple point:
 - The NRC was satisfied that the plant could operate with the V-type splices and you know that to be the case?
- 17 A [Witness Merriweather] Based on that meeting, 18 yes.
 - Q And the NRC came back later and said, these splices are not qualified under the Modified Enforcement Policy and, in part, based the civil penalty on that, and you know that to be the case?
- 23 A [Witness Merriweather] Okay.
- Q For plant operations, qualifiable; for enforcement action, no.

- [Witness Paulk] I believe if you substitute qualifiable -- for qualifiable, operable, it would be more 2 accurate. The terminology that Mr. Reeves used may not be 3 -- reflect those in the EQ inspection field. 4 Mr. Paulk, I have learned that we are forever 5 6
 - accusing those outside of this hearing room of making poor word choices.
- [Witness Paulk] You're asking us to interpret his 8 words. 9
- Can we say, though, that the V-type splices were 10 operable? 11
- [Witness Paulk] Reading this, I would have to say 12 that that's the decision they made. 13
- The decision made by the NRC staff? 14
- [Witness Luehman] Based on the amount of 15 information that they had. 16
- We all agree that operable means they can perform 17 their intended function? It's fairly straightforward stuff. 18
 - [Witness Paulk] Under a certain environment,
- 20 Okay, all right.

- You know I've got to ask you, Mr. Merriweather, 21
- you mentioned Generic Letter 85-15. We had heard some 22
- testimony earlier this morning that 85-15 was not superceded 23
- by 86-15, but supplemented; is that your understanding? 24
- A [Witness Merriweather] If that's what somebody 25

- 1 said, I really don't know, but I think it was -- 85-15, I think, was supplemented by 86-15.
- 3 Q I see. And let's see if we can turn to page 6.
- 4 A [Witness Merriweather] Which exhibit?
- Of your testimony, Question 7, Answer 7, which actually starts on page 4 and by you and Mr. Paulk.
- 7 A [Witness Merriweather] Where are you?
- 8 Q I'm on page 6, down at the bottom paragraph -- the 9 first full paragraph. It starts off or says:
- "During the course of the inspection and at the
 exit meeting, we informed the licensee that V-type splices
 were considered unqualified as defined by Generic Letter 85-
- 13 15."
- 14 A [Witness Merriweather] Yes.
- 15 Q Do you see that?
- 16 A [Witness Merriweather] I see that.
- 17 Q All right. Let's -- before we go any further, V18 type splice, right?
- 19 A [Witness Merriweather] Right.
- 20 Q All right, now, --
- JUDGE BOLLWERK: Do you want the record to reflect that you've given us something?
- MR. MILLER: There was a time in my life when I
- 24 didn't know what a V-type splice was.
- Yes, sir, would the record reflect that we have

- provided the Board with two V-type splices, and can provide more, if you so desire. 2
- JUDGE BOLLWERK: I think these will do for the
- time being.

- MR. MILLER: All right, we need to get Staff 5
- Exhibit 7 also. Would you mind getting that in front of 6
- you, please? Incidentally, that is 85-15.
 - [Witnesses reviewing documents.]
- BY MR. MILLER: 9
- All right, tell me when you have it please, sir. 10
- [Witness Merriweather] I have it in front of me. 11
- And this will be principally directed to Mr. 12 Q
- Merriweather and Mr. Paulk as they sponsored this action. 13
- I will start with you, Mr. Merriweather. Here is 14 our interpretation and tell me if we have it right.
- The reason that you considered these V-type 16
- splices unqualified, as defined by generic letter 85-15, is 17
- because of Footnote 1 of that generic letter. Are we right 18
- or wrong? 19
- A [Witness Merriweather] That's not the reason that 20
- we found it unqualified, but during the inspection it seemed 21
- we had a communication problem. We would say, well, you 22
- didn't have adequate documentation, that is poor 23
- qualification for the splices. And then they'd say, well --24
- they would tell us something else. So, to be on the same 25

- 1 page we said, well, unqualified means what is defined in the
- 2 85-15, which means that not adequate documentation to
- 3 establish the equipment is qualified.
- 4 Q I see.
- 5 A [Witness Merriweather] So, that's what we meant.
- 6 Q That's what we are trying to focus on.
- 7 A [Witness Merriweather] We didn't evaluate them
- 8 against 85-15.
- 9 Q Fair statement. Then you took this definition you
- 10 just read -- and incidentally, that was read out of Footnote
- 11 1 ---
- 12 A [Witness Merriweather] Right.
- 13 Q And what you said was, you don't have the
- 14 documentation so we say it's unqualified.
- 15 A [Witness Merriweather] I believe that's correct.
- 16 Q Okay, Now, let's go back to the Wyle test report.
- 17 Did they not tell you about the Wyle test report at this
- 18 time?
- 19 A [Witness Merriweather] No.
- 20 Q When did they tell you about the Wyle test report?
- 21 A [Witness Merriweather] That was in that one-day
- 22 meeting the first time I ever heard about the test.
- 23 Q Okay, in September.
- 24 A [Witness Merriweather] September the 24th, I
- 25 believe, at the one-day meeting.

- 1 Q All right.
- 2 A [Witness Paulk] I didn't hear about it until the following Monday.
- 4 Q The following Monday of what?
- 5 A [Witness Paulk] September -- whatever -- after 6 the 24th.
- Q Can we say, though, that you heard about it shortly after the inspection that you conducted in
- 9 September?
- 10 A [Witness Merriweather] It depends on what you mean by shortly after.
- 12 Q Well, I mean --
- 13 A [Witness Merriweather] The inspection ended on
 14 the 18th and we found out about it on the 24th. So, the
 15 week after the inspection we had several conference calls
 16 with the licensee and I don't think it was ever mentioned in
 17 any of those conference calls. Like I said, the first time
 18 it was ever mentioned was in that one-day meeting, and
 19 that's it. That's all I can tell you.
- Q We know, though, that by September 24th or in your case two or three or four days later, Mr. Paulk, you knew the awareness of the Wyle test report?
- 23 A [Witness Merriweather] In that one-day meeting, I 24 can say on the 24th, we knew that they were 24 hours into 25 the test.

- O Okay. [Witness Merriweather] We don't know what they 2 were testing, we knew that they were testing V-type splices, 3 okay, but that's about it. 4 And since that matter was in the unresolved 5 category, surely you then asked to see a copy of the test 6 7 report. 8 A [Witness Merriweather] I didn't. 9 Mr. Paulk? 0 [Witness Paulk] I believe we asked for it, but we 10 11 were told that it wasn't ready. 12 All right. And then when did you later -- strike 13 that. You then asked for it again; did you not? 14 [Witness Paulk] I did. 15 A And when was that? 16 0
- 17 A [Witness Paulk] In the November inspection.
- 18 Q And did you review it in the November inspection?
- 19 A [Witness Paulk] No, sir, it wasn't given to us.
- 20 Q Pardon me?
- 21 A [Witness Paulk] It wasn't given to me.
- 22 Q You mean to tell me that you asked for the Wyle
- 23 test report in the November inspection and they didn't give
- 24 it to you?
- 25 A [Witness Paulk] Yes, sir.

And to whom did you direct your question? 0 2 [Witness Paulk] I believe it was Mr. Jones. A Mr. Davey Jones, who is here with us today? 3 0 [Witness Paulk] Yes, I believe so. 4 A 5 And tell me the circumstances about this request. 0 Who was present at the time you made it? 6 7 A [Witness Paulk] I do not remember. 8 0 Can you tell us where it occurred? 9 (Witness Paulk) On-site. A 10 0 Where on the site? 11 [Witness Paulk] The little conference room, 12 Birmingham Room, I guess. 13 I see. And was anyone else in the immediate 14 vicinity that could have overheard this request? 15 A [Witness Paulk] Maybe. 16 0 Who would that person be or persons? 17 [Witness Paulk] It could have been anybody on the A 18 team. And tell us as closely as you can the words that 19 20 Mr. Jones said to you when you asked for the Wyle test 21 report. 22 A [Witness Paulk] It wasn't finalized. Have you seen the Wyle test report since? 23 [Witness Paulk] Since then? Yes. 24 A Have you noticed that it is dated October, 1987? 25

- A [Witness Paulk] I didn't look at the date.
- 2 Q All right. But you testified today that you asked
- 3 Mr. Jones for this test report in November, 1987 and he told
- 4 you that it wasn't finalized?
- 5 A [Witness Paulk] I believe so.
- 6 Q You say you believe so. Are you certain that is
- 7 what he said?
- 8 A [Witness Paulk] I didn't get it.
- 9 Q On how many occasions did you ask for it?
- 10 A [Witness Paulk] Just once.
- 11 Q Did you report to your team leader that you asked
- 12 for it and was told that it wasn't finalized?
- 13 A [Witness Paulk] I don't remember.
- 14 Q Mr. Merriweather, you tell us where this
- 15 conversation took place, that is the one where Mr. Paulk
- 16 tells you that he asked for it --
- 17 A [Witness Merriweather] I don't remember that.
- 18 Q Mr. Merriweather, I will ask you to look at the
- 19 testimony before you on Page 14, Question 14, and Answer 14.
- 20 And tell me when you are there, please.
- 21 A [Witness Merriweather] Okay. Answer 14?
- 22 Q Yes, sir. Does it not say that during the course
- of the November inspection, D. Jones stated to me that they
- 24 had the final test report for V-type splices.
- 25 A [Witness Merriweather] That's what it says.

- Now, is D. Jones there the same Davey Jones that is here with us today?
 - A [Witness Merriweather] Yes, it is.
- Q And you testified here that you were told there was a final test report.
 - A [Witness Merriweather] Well, what you had asked before was did I remember a conversation where he asked me about the test report.
- 9 Q But I just asked you right now is that you were 10 told there was a final test report.
- A [Witness Merriweather] I was told, I believe, at some point in time that he had the report. Now, I don't know what week that was, whether that was a walk-down week or -- I think it was the last week of the 16th to the 20th.
- 15 Q It was during the course of the November 16 inspection?
 - A [Witness Merriweather] Right.
- 18 Q Let's make sure -- you are not saying that the words here on your printed testimony are wrong; are you?
- 20 A [Witness Merriweather] To the best of my 21 knowledge he indicated that he had the report.
- 22 Q Final report.

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A [Witness Merriweather] Well, he had a report -
that is what he told me. If I say "final" that's the final

report, okay.

All right. So, he had the final report? 0 2 [Witness Merriweather] Right. A 3 0 And he told you that? 4 [Witness Merriweather] He told me that. A 5 Mr. Paulk, he said you said you asked for the 0 6 final report and he said there wasn't one. 7 [Witness Paulk] I asked for a rate report. 8 0 And he told you that there wasn't any final 9 report? 10 [Witness Paulk] That is what I understood. A 11 [Witness Merriweather] I may want to clarify 12 something here is that the week of the walk-down --13 0 Do you think that that was a poor choice of words? 14 [Witness Merriweather] Well, to clarify it being -- let me straighten out something here. The week of the 15 16 walk-down, a lot of their files were in transition, they 17 were trying to put them together. I don't know if we looked 18 at any files the week of the walk-down. So, if he had asked 19 for the file during the week of the walk-down, it may not have been available because they were putting it together. 20 21 I don't know. 22 Just a minute. I am trying to resolve what is 23 clearly a discrepancy and inconsistency of the two witnesses who sponsored this part of the testimony. One man says 24

David Jones told him the report wasn't final and he couldn't

have it. You say that David Jones told you that there was a final test report but you didn't ask to look at it.

Am I right so far?

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A [Witness Merriweather] Well, what I tried to clarify to you is that the week of the walk-down, a lot of the reports were not available for review. That doesn't mean they didn't have it, that says that they didn't have the file in the proper format for us to look at; okay? So, like I said, if he asked during the week of the walk-down, he may have told him that. I didn't ask for it the week of the walk-down.

Q I can't reconcile what you and Mr. Paulk are telling me, so let's move on.

You were told by Mr. Jones that there was a final test report. Did you then ask to look at it?

- A [Witness Merriweather] I did not ask for it.
- Q Did you then tell Mr. Jones that Mr. Paulk was doing that part of the inspection --
 - A [Witness Merriweather] He didn't ask --
- 20 Q -- and he said give it to him --
- 21 A [Witness Merriweather] I don't remember a 22 conversation about Mr. Paulk with Mr. Jones.
- 23 Q Then tell me the words you said when Mr. Jones
 24 told you that Alabama Power Company had a final test report
 25 for the V-type splice?

- A [Witness Merriweather] I don't remember what I told him.
- 3 Q Well, when during the inspection did you look at 4 the final test report?
- 5 A [Witness Merriweather] I did not look at the test 6 report.
- 7 Q Have you ever looked at the test report?
- A [Witness Merriweather] I have never looked at the test report. I have looked at some data that came out of the report, which was made available to me back in September, I think, or October. I guess it was October.
- 12 Q What year?
- 13 A [Witness Merriweather]" '87, prior to the
 14 inspection. I knew that there were 14 configurations. That
 15 information I knew.
- We also had a copy of a letter that came from Wyle
 to Alabama Power Company which indicated that all the
 splices were able to carry current at rated voltage. I knew
 that.
- 20 Q Mr. Paulk, you told us that you asked for a report 21 and couldn't get it, correct, and then if I remember right 22 you told us you went to see Mr. Merriweather and told him.
- 23 A [Witness Paulk] I said I believe I did.
- Q Can you tell us whether or not Mr. Merriweather
 then said to you --

- A [Witness Paulk] I --
- 2 Q -- copy of the final test report?
- 3 A [Witness Paulk] I do not remember.
- 4 Q Had he done so, surely you would have looked at it
- 5 then?

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- A [Witness Paulk] Probably.
- 7 Q Oka;. Let's see if we can focus on this because 8 we've got to move on.
 - Let's go back to 85-15 and we have talked about the definition of unqualified equipment for purposes of enforcement, as equipment for which there is not adequate documentation to establish that the equipment will perform
 - Are you with me so far, Mr. Merriweather?
- 15 A [Witness Merriweather] Yes.
- 16 Q Now do you recognize that the Wyle test report 17 that Mr. Jones told you about was at least additional
- 18 documentation on the V-splices?

its intended function.

- 19 A [Witness Merriweather] I don't believe that is
- 20 additional documentation. I believe that's what they're -- I
- 21 didn't look at the files so I don't know what they are
- 22 claiming as qualification but obviously they may be able to
- 23 use that test report to establish qualification for some
- 24 type of V-type splice configuration.
- 25 Q Okay. I know you didn't look at it, which is why

- 1 I purposefully didn't ask you about its content. All I am
- 2 asking you is that do you recognize that it fits the status
- 3 of "more documentation" or "additional qualification
- 4 documentation?"

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- A [Witness Merriweather] Well, we considered that test report outside the inspection. It was testing done subsequent to the inspection.
 - Q I see, so it was, you know, additional -- what is the phrase that you use after the fact?
 - A [Witness Merriweather] After the fact.
- 11 Q And as you understand the policy at the time and
 12 certainly as you understand this definition here in Footnote
 13 l of 85-15, there is no additional testing allowed or after
 14 the fact testing?
 - A [Witness Merriweather] After the fact testing.
 - Q How about earlier analyses that would go to qualification or qualifiability? Would you accept that and by "that" I mean documents existing before September, 1987?
 - A [Witness Merriweather] If the licensee had provided that information during the inspection and we had reviewed it, we would have considered it, but after the inspection, if they had to do additional analysis, it was outside the bounds. It's after the fact.
- 24 Q Additional testing or analysis is outside your 25 view of acceptability of this documentation?

- A [Witness Merriweather]" Well, I said after the inspection if they did additional testing or analysis.
- Q Okay. We have typed this up and I'l. ask you whether or not you agree with this:

"If on the other hand the NRC identifies equipment for which documentation is insufficient to permit NRC verification of qualification but which there is a sufficient basis to anticipat that the particular equipment can and will be qualified, the violation should be categorized as Severity Level IV" -- did I read it right so far?

- A [Witness Merriweather] Okay.
- Q "Examples of such deficiencies in the documentation may include additional testing or analysis is necessary to fully establish qualification." That's on their (1) in parentheticals and under (2) "As installed configuration differs from test configuration to the extent that additional testing or analysis is necessary to maintain equipment qualification" -- I'm reading it right, aren't I?
 - A [Witness Merriweather] Okay.
- Q "Violation involving procedures which are not sufficiently adequate to satisfy all 50.49 requirements may also be categorized as Severity Level IV violations."
- 24 A [Witness Merriweather] Okay.
- 25 Q Got it! Ever seen that before?

- A [Witness Merriweather] I don't know where that -I don't know where that came from specifically. I mean --
- Q Do you agree with it? I mean it clearly says
 additional testing or analysis. Are you telling me you
 disagree with it?
- A [Witness Merriweather] Well, let me read it again.
 - Q Read it again.
- 9 [Witness Merriweather reviewing document.]
- JUDGE BOLLWERK: Oh, bring it closer to the eyes.
- MR. MILLER: You and I are about the same age,
- 12 which means our arms are getting ready to get to be too
- 13 short.

- 14 JUDGE BOLLWERK: Would it help to put it on the
- 15 easel?
- MR. MILLER: I'm afraid you all might want to get
- 17 up because he wants to read it.
- WITNESS MERRIWEATHER: Okay, I think the key point
- 19 here is it says that verification and qualification but for
- 20 which there is a sufficient basis to anticipate that
- 21 particular -- at the time of that inspection there was no
- 22 basis to support that this stuff would be qualified, so --
- BY MR. MILLER:
- 24 Q Okay. We're going to talk about it.
- 25 A [Witness Merriweather] Okay.

- 1 Q But you agree though -- well, do you agree with
- 2 this sentence? I'll ask you that.
- 3 A [Witness Merriweather] I think I agree with that,
- 4 yes.
- 5 Q You do?
- 6 A [Witness Merriweather] Right.
- 7 Q That additional testing or analysis is allowed?
- 8 That's what it says.
- 9 A [Witness Merriweather] All right.
- 10 Q Examples of such documentations may include --
- 11 A [Witness Merriweather] [Reviewing document.]
- 12 Q Agree or disagree?
- 13 A [Witness Merriweather] I don't believe I agree
- 14 with that.
- 15 Q You don't agree with that. Let your lawyer look
- 16 at it. Tell us what a SECY paper is.
- 17 A [Witness Merriweather] You're asking me a
- 18 question?
- 19 Q Yes, sir.
- 20 A [Witness Merriweather] I believe that's something
- 21 the Staff presents to the Commission.
- 22 Q What's the significance of a SECY paper for NRC
- 23 Staff?
- A [Witness Merriweather] I believe that's a policy
- 25 document. I'm not certain.

O You told us about 85-15. Have you read the SECY 2 paper associated with 85-15? [Witness Merriweather] I don't know; I may have. 3 I can't say right now that I have. I can't say I haven't. 4 Perhaps you have read your Staff Exhibit 6? Can 5 you tell me whether you have read your Staff Exhibit 6? 6 [Witness Merriweather] I haven't seen it yet. A 7 [Document proffered to the witness.] 8 9 BY MR. MILLER: I hand you a copy of Staff Exhibit 6 and ask you 10 to compare the highlighted version of that SECY paper, 85-11 220 with what we have typed up and presented to you, and 12 which I don't have to remind you, you said you disagreed 13 1.4 with. [Witness Merriweather] [Reviewing document.] 15 16 [Pause.] 17 b. MR. MILLER: The question to you, Mr. Merriweather, is can you 18 19 compare the highlighted portion of the Exhibit I gave to you 30 21 [Witness Merriweather] It looks the same. A -- with what you and I just read. 22 0 [Witness Merriweather] Yes, it looks the same. 23 A It's the same; isn't it? 24 Q 25 [Witness Merriweather] Okay.

All right. 0 2 [Counsel for APCo conferring off the record.] 3 BY MR. MILLER: Mr. Paulk, would you be nice enough to turn to 4 page 8 of the testimony, Question 9 and Answer 9, and tell 5 me when you're there, please, sir? 6 7 [Witness Paulk] I'm there. You said you prepared, in part, Section 5, the 8 Inspection Report? 9 [Witness Paulk] Yes. 10 And then you go ahead and set this out? 11 12 [Witness Paulk] Yes, sir. 13 Which parts did you prepare? Okay, maybe I've got 14 that wrong. What you have set out here is the part you 15 prepared? 16 [Witness Paulk] Yes, sir. Let's turn the page to page 9, the last sentence. 17 18 "The licensee did not perform adequate walkdowns prior to November 30, 1985 to ensure compliance with 10 CFR 50.49." 19 20 A [Witness Paulk] Yes, sir. 21 0 You prepared that sentence? 22 [Witness Paulk] Yes, sir. A 23 0 Where were you in the years 1980 to 1985? 24 [Witness Paulk] Well, in the Spring of 1980, I 25 was down on the Farley site interviewing with them, but most

- 1 of that time, I was working with another utility. 2 Interviewing for what position? 3 [Witness Paulk] Whatever position they had open 4 at the time. I was getting out of the Navy. 5 0 I see. And you went to another utility? [Witness Paulk] Yes, sir. 6 A Which one was that? 0 7 8 [Witness Paulk] Carolina Power and Light. A 9 Were you working for the NRC during 1980 and 985? 0 10 [Witness Paulk] No, sir. A 11 0 Would you turn over to page 11, Mr. Paulk? It 12 says here, APCo -- I'm sorry, let me give you a better cite. 13 We're about, oh, 6 or 8 lines down, maybe 9, "APCo did have 14 Wylie Labs perform some testing, however, the results were 15 never formally presented to NRC for review." 16 [Witness Paulk] Yes, sir. Is that what you mean to say when you described 17 your conversation with David Jones earlier? 18 [Witness Paulk] Yes, sir. 19 A You asked for it and didn't get it? 20 0 [Witness Paulk] Yes, sir. 21 A 22 [Pause.] BY MR. MILLER: 23
- Q Mr. Shemanski, would you mind turning to page 18, please?

- A [Witness Shemanski] Okay.
- 2 Q And by your name, I see a couple of sentences
- 3 about the Staff's position that a licensee must establish a
- 4 program for qualifying electrical equipment identified in 10
- 5 CFR 50.49(b).
- 6 A [Witness Shemanski] Yes.
- 7 Q Okay, and then you go on to talk about what is
- 8 inherent in an EQ program, correct?
- 9 A [Witness Shemanski]" Yes, that's correct.
- 10 Q By program, do you mean to describe
- 11 identification, qualification and documentation of Class I-E
- 12 electrical equipment?
- 13 A [Witness Shemanski] I would extent that to the EQ
- 14 Rule which talks about equipment important to safety.
- 15 0 I see
- 16 A [Witness Shemanski] And that includes safety-
- 17 related equipment, non-safety-related, and the Reg Guide
- 18 1.97.
- 19 Q Okay, so equipment subject to EQ, the program
- 20 should identify it, qualify it and document the
- 21 qualification?
- 22 A [Witness Shemanski] Yes, that's correct.
- 23 Q And that's what you mean when you talk about an EQ
- 24 program?
- 25 A [Witness Shemanski] Yes.

- Mr. Luehman, if you will turn to Page 20.
- 2 (Witness Luehman) Yes.
- This is your answer to the "clearly knew or should 3 have known" guestion. 4
- 5 [Witness Luehman] Okay.
- And you go down on the last paragraph on Page 20 7 and the top of Page 21, where you are discussing Factor 4.
 - A [Witness Luehman] That's correct.
- 0 And you cite NRC Circular 78-08? 0
- [Witness Luehman] That's correct. 10 A
- As the basis for the applicability of Factor 4. 11 0
- 12 [Witness Luehman] In part. A
- Right. And NRC Circular 80-10. 13 0
- 14 [Witness Luehman] That's correct. A
- And you say that those are examples of why Factor 15 0 4 is applicable under 88-07. 16
- [Witness Luehman] In helping the staff reach the "clearly knew or should have known" finding, that's correct. 18
- I'm sorry, go ahead -- say that again for us. 19
- [Witness Luehman] Yes. Those were two of the 20 information notices that we relied on under Factor 4 to help 21 in arriving at a "clearly should have known" finding. 22
- Q This is the -- did other licensees identify 23
- similar problems and correct them before the deadline. 24
- That's Factor 4. 25

A [Witness Luehman] That's correct.

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- Q Okay. And you say because of these, 78-(8 and 80-10, other licensees identified these similar problems and corrected them before the deadline?
 - A [Witness Luehman]" The generic correspondence was issued in response to -- was issued in response to problems found with various types of splices.
 - Q Any reasonable licensee would have looked at this generic correspondence and seen to go out and look at its splices.
 - A [Witness Luenman] They would have been on notice that splices were something that was required to -- splices and terminations were something that was required to be looked at by a licensee.
 - Q Suppose an NRC staff inspector came to their plant after the issuance of these two notices and said their splices were all right.
 - A [Witness Luehman] I don't know -- well, all right doesn't equal qualification, so I'd like to -- I guess I'd have to know what he said.
- 21 Q Well, suppose he looked at them for qualification 22 purposes and said that no violations or deviations were 23 found?
- A [Witness Luehman] Again, as I testified, I think, yesterday or the day before -- well, yesterday, actually,

- 1 I'd have to read all the words that he used. I'd have to
- 2 see if he inspected the file as well as inspected the
- 3 installed equipment and the drawings to ensure that he
- 4 looked at the whole trail of documentation and installation
- 5 that was required to establish qualification.
- 6 Q You can't just take him at his word?
- 7 A [Witness Luehman] I could take him at his word.
- 8 If he said they were qualified, then they were qualified.
 - Q You know who we're talking about, don't you?
- 10 A [Witness Luehman] I assume you're talking about
- 11 Mr. Gibbons.

- 12 Q Uh-huh. And can you tell us that these two
- 13 circulars were out and issued by the NRC by the time Mr.
- 14 Gibbons came to the Farley plant in December of 1980?
- 15 A [Witness Luehman] I can tell you that the 78-08
- 16 definitely was. I don't know the issuance date of Circular
- 17 80-10.
- 18 Q Okay.
- MR. MILLER: CAn we take just a minute, please.
- JUDGE BOLLWERK: Yes.
- 21 [Counsel for APCo conferring off the record.]
- BY MR. MILLER:
- 23 Q Mr. Merriweather, let's go back to the September
- 24 24, 1987 meeting, and I'll ask you, sir, whether or not, at
- 25 that meeting, Alabama Power Company told the staff that the

- 1 V-type splices would perform their intended function and
- 2 were qualified?
- 3 A [Witness Merriweather] I don't remember.
- 4 Q Okay.
- 5 A [Witness Merriweather] Okay.
- Q Can you tell us, though, from your memory, whether
 or not the LER that was submitted took the position that the
 V-type splices were qualified?
 - A [Witness Merriweather] We can look at it.
- 10 Q That's what we're getting ready to do as soon as
- 11 we can -- if you'll get Staff Exhibit 16, and I guess we
- 12 ought to just check and make sure we're talking about the
- 13 LER dated 7/21/87.

- 14 A [Witness Merriweather] 7/21?
- 15 Q '87. Staff Exhibit 16.
- A [Witness Merriweather] I've got July 30th, '87.
- 17 Q What did I say? Did I say something wrong?
- 18 A [Witness Merriweather] You said July 21.
- 19 Q July 21, '87. I'm reading the numerical. Did I
- 20 confuse you? Oh, I see. No, you're reading the transmittal
- 21 letter and I was reading the LER itself. Actually, I was
- 22 reading the --
- 23 A [Witness Merriweather] That's the month and the
- 24 day it was identified.
- 25 Q We're looking at the same thing.

- A [Witness Merriweather] Okay.
- 2 Q Okay. I got you.
- MR. MILLER: So the record will be clear, we're
- 4 all looking at Staff Exhibit 16.
- 5 BY MR. MILLER:
- 6 Q All right. You will see here in the first
- 7 paragraph that the company says it was determined that no
- 8 system covered by technical specifications would be rendered
- 9 inoperable as a result of adverse effects by design basis
- 10 accidents on the subject solenoid valves. Am I right so
- 11 far?
- 12 A [Witness Merriweather] Correct, yes.
- 13 Q I mean, we're talking about the splices,
- 14 obviously, going to the solenoid valves.
- 15 A [Witness Merriweather] Right.
- 16 Q And then on the next page, description of Event
- Number 2, the operability of each affected system was
- 18 determined. It goes on to say, "No system covered by
- 19 technical specifications would have been rendered inoperable
- 20 as a result of potential adverse effects by design basis
- 21 accidents on the solenoid valves." All right?
- 22 A [Witness Merriweather] Where are you reading
- 23 that? I missed that.
- 24 Q I read it off Page 2, description of event.
- 25 A [Witness Merriweather] Description of event.

- Okay. 2 Yes. Item Number 2. 3 [Witness Merriweather] Okay. Okay. I read it right? You can't testify today 4 5 that you ever heard anyone from Alabama Power Company say 6 that these splices were not operable, can you? 7 [Witness Merriweather] Right. A 8 [Counsel for APCO conferring off the record.] BY MR. MILLER: 9 10 We're trying to focus on other materials, besides 11 the Wyle test report that we discussed. Did Alabama Power 12 Company -- strike that. 13 Didn't Alabama Power Company provide the staff 14 with other materials supporting their conclusion that the 15 splices were qualified, besides the Wyle test report? 16 [Witness Merriweather] Qualified? I would say They provided us some JCOs for continued operation, to 17 show that these systems may be operable. That's what the 18 supports to operability are. 19 20 I see. I know. We tend to use the words 21
- interchangeably. But when you say operable, that means they are capable of performing their intended function in the design?
- A [Witness Merriweather] Well, not necessarily.

 The JCOs were specific. Whether they analyzed saying:

- These things, even if they fail, this may happen; but still
- 2 we have alternate methods to do something. That's what the
- 3 operability knowledge was.
- 4 Q Wait a minute, wait a minute. Are you describing
- 5 a generic JCO, or are you describing a JCO sent in by
- 6 Alabama Power Company?
- 7 A [Witness Merriweather] Well, one of the JCOs was
- 8 the one on solenoid valves. And I knew that they analyzed
- 9 solenoid valves, say, in the main steam valve room. And
- 10 they analyzed both ones that are deenergized, which are
- 11 shortly into the event. And they analyzed the effect if
- 12 they did have a fault or something, because they had already
- 13 performed their safety function.
- 14 That doesn't say it's qualified. It just says:
- 15 Okay, you think it's operable.
- 16 Q All right. But you recall Staff Exhibit 18 being
- 17 provided to you -- strike that.
- 18 I'll ask it to you this way: Being available to
- 19 you prior to the inspection in September, 1987?
- 20 A [Witness Merriweather] I would have to say it was
- 21 probably available before. So that's why I stated it that
- 22 way in my testimony. I think I had it before I went there.
- 23 Q Okay.
- MR. MILLER: If we could take just a couple of
- 25 minutes, please.

- 398 JUDGE BOLLWERK: Are you at a break point, or do you want to continue on for a couple of minutes? 2 MR. MILLER: If I could consult here for just a 3 couple of minutes. We may be getting close to this panel's 4 end. 5 JUDGE BOLLWERK: Fine. 6 [Counsel for Alabama Power Company conferring off 7 the record. 1 8 BY MR. MILLER: 9 Did you get the deposition, a copy of your 10 deposition that we took from you? And let me tell you I 11 would like for you to look at -- here you go. You've got a 12 copy of your deposition, don't you? 13 [Witness Merriweather] Yes. 14 Volume 3, page 38. And while you are looking at 15 16
- that -- tell me when you've got it.
- [Witness Merriweather] I've got it. Page 38? 17 A
- Yes, sir. Now, let's see if we can explain what 18 we're doing here. We were talking in your deposition about 19 the Sandia training seminar, were we not? 20
 - [Witness Merriweather]" Yes.

- And you went to that seminar, didn't you? 22 0
- [Witness Merriweather] Yes, I did. 23
- And didn't you tell us that the purpose of that 24 seminar was to bring the inspectors up to speed about what 25

- was going on throughout the industry?
- 2 A [Witness Merriweather] Where did I say that?
- 3 Q Well, I'm asking you if you recall that from your
- 4 testimony?
- 5 A [Witness Merriweather] I can't say I recall that
- 6 from my testimony, but --
- 7 Q Okay. All right. We'll work on that in just a
- 8 second. What do you understand to be the purpose of the
- 9 Sandia seminar?
- 10 A [Witness Merriweather] As I recall, in '87 I was
- 11 aware of the fact that they were going to being doing EQ
- 12 inspections. And that's what I think that was -- training
- 13 to get prepared for the EQ inspections.
- 14 Q You heard the discussion this morning, or I'll
- 15 strike that, and ask it to you this way.
- Were you in the hearing room this morning when we
- 17 talked about the Sandia seminar?
- 18 A [Witness Merriweather] Right.
- 19 Q Why don't we do this. Why don't you and I read
- the question and answer that we had. And we'll start on
- 21 page 38, line 9.

- A [Witness Merriweather] Okay.
- 23 Q And I'll read for me, and you read for you.
- 24 A [Witness Merriweather] Okay.
- 25 Q We're looking at the agenda for Thursday, August

- 27, 1987, at your Sandia training seminar.
- 2 A [Witness Merriweather] Right.
- 3 Q Are you with me?
- A [Witness Merriweather] Right, I'm with you.
- 5 Q It shows that you got presented, as I understand
- 6 it, the most current and latest thought on limitorque
- 7 operators by whoever J.J. is.

- A [Witness Merriweather] Okay.
- 9 Q And then when you got to the Farley plant, you
- 10 found violations of limitorques, didn't you?
- 11 A [Witness Merriweather] Yes.
- 12 Q It shows that you got presented the most current
- and latest thought process on splices and terminations by
- 3/ Steve Alexander on that Thursday, didn't you?
- 1 A [Witness Merriweather] There is some information
- 16 on splices and terminations.
- 17 Q You got to the Farley plant and found violations
- 18 on splices. As a matter of fact, you went there three weeks
- 19 after this presentation, didn't you?
- 20 A [Witness Merriweather] Yes.
- 21 Q It shows that you got the latest and greatest on
- 22 terminal blocks by Mark Jacobus and Steve Alexander on this
- 23 Thursday, didn't you?
- 24 A [Witness Merriweather] There was some information
- 25 on terminal blocks, yes.

You got to the Farley plant and found terminal block violations? 2 3 [Witness Merriweather] There were violations on 4 cerminal blocks. 5 Ö Let's turn to page 20 of the same volume. 6 Ä [Witness Merriweather] Twenty? 7 Page 20, yes, sir. 0 8 [Witness Merriweather] Twenty, okay. [Witness reviewing documents.] 9 10 Here is my question to you. Maybe another way of 11 saying it is awareness -- that there was a growing awareness 12 in '87 about splice and termination issues, in part, because of the RayChem experience and, in part, because of just a 13 14 general? 15 [Witness Merriweather] Okay. That's a fair --16 Fair statement? 17 [Witness Merriweather] -- statement, yes. 18 And let's turn to -- if you'll get to volume one, page 39, and tell me when you're there? 19 20 [Witness Merriweather] Okay, I'm there. 21 And my question, at the top, starting on line two, 22 would it be fair to say though that, at the beginning, with your first involvement, in 1979, that over time, your 23 24 understanding and knowledge about the EQ requirements of the NRC have evolved as you've learned more, conducted more 25

- inspections, gotten more experience?
- A [Witness Merriweather] Well, I would say that
 from '79 I was only involved in one inspection that I know
 about, and then I wasn't involved in EQ for a long time.
- We'll skip down to -- well strike that.

 I'll say, I'll pick up again on line 11, IC?
 - A [Witness Merriweather] Okay.
- 8 Q All right?

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- A [Witness Merriweather] That's a -- so, I don't know if it involved -- when I went to the most recent training, whichever, whatever one that was -- the last two training courses, and when I was given responsibility for EQ, then I had to go back an review a lot of documents.
- 14 Q I see.
- 15 A [Witness Merriweather] Okay. So whatever
 16 knowledge I have, that's where it came from. It didn't
 17 evolve -- it didn't evolve, I guess is what I'm saying.
- 18 Q All right. And what you're referring to there is
 19 these two training courses?
- 20 A [Witness Merriweather] Yes.
- 21 Q The one in '85, put on by Sandia?
- 22 A [Witness Merriweather] Right.
- 23 Q And the one in '87 put on by Sandia?
- 24 A [Witness Merriweather] That's correct.
- 25 Q Just a second. Can you tell us whether or not Mr.

- Paulk went to the 1987 Sandia seminar?
- 2 A [Witness Merriweather] I believe he did.
- 3 Incidentally, while we're on the topic, can you
- 4 tel. us how it was that you selected Mr. Paulk to be on your
- 5 EQ Inspection Team?
- 6 A [Witness Merriweather] I didn't select Mr. Paulk.
- 7 & I'm not suggesting anything sinister, but how is
- 8 it that he got to be on your team?
- 9 A [Witness Merriweather] Basically, the supervisor.
- 10 He's the one that schedules the inspections and gives
- 11 assignments, things like that.
- 12 A [Witness Paulk] Would you like to know how I got
- 13 on there?
- 14 Q We're going to get to that in just a minute. But
- 15 I take it it was some terrible misfortune in your life.
- 16 A [Witness Walker] As a matter of fact --
- 17 Q Hearing no objection from the witness, I think I
- 18 hit the nail on the head. We're going to talk about that in
- 19 just a second. But, let me ask you this, Mr. Merriweather.
- 20 Did you agree with what Mr. Potapovs told us this morning,
- 21 that is, typically, they look for mechanical or electrical
- 22 engineers to go on these EQ inspections?
- 23 A [Witness Merriweather] I have no knowledge on how
- 24 they selected the teams.
- 25 Q I'm sorry. We did that as a time filler. Let's

- 1 go to your Volume II, page 109.
- 2 A [Witness Merriweather] Page -- excuse me, could
- 3 you repeat the page number?
- 4 Q Yes, sir. Volume II, or day two, page 109.
- 5 A [Witness Merriweather] Okay.
- 6 Q And we were talking there about the materials from
- 7 your August 1987 Sandia seminar. Do you see that?
- 8 A [Witness Merriweather] Yes, Right,
- 9 Q I don't want to get this record confused. So,
- 10 we'll say -- I'm going to paraphrase my question. You had
- 11 the materials from your August 1987 EQ seminar with you when
- 12 you went to plant Farley; did you not?
- 13 A [Witness Merriweather] I believe I did, yes.
- 14 Q And you -- and now I'm back on line seven. And
- 15 you say you typically took it with you on EQ inspections?
- 16 A [Witness Merriweather] Yes.
- 17 Q And that's because this is the latest and greatest
- 18 EQ stuff, I take it? And what was your answer?
- 19 A [Witness Merriweather] Well, at the time, it was
- 20 the latest and greatest.
- 21 Q And the last one, let's see, is in Volume III,
- 22 page 16.
- 23 A [Witness Merriweather] I'm there.
- 24 Q And I'll start at my line three. Do you remember
- 25 though, Mr. Merriweather, back in this timeframe, and that

- is '84, '85, '86 and '87, that there was a growing
- 2 realization throughout the industry that splices any not
- 3 have been conducted in accordance with procedures, but may
- 4 have been conducted in accordance with skill of the craft?
- 5 A [Witness Merriweather] There are a lot of issues
- 6 that came up. I know I have gone to the RayChem training.
- 7 And I don't know when I wen' to that, because, you know, I
- 8 can't give you timeframe dates. But, it had to be somewhere
- 9 between '86-'87, somewhere in there.
- 10 Q Okay, I see.
- 11 A [Witness Merriweather] It could have been '88.
- 12 But, I mean --
- 13 Q Okay. All right. We can put down the
- 14 depositions. Can't you agree with me though, Mr.
- 15 Merriweather, that the purpose of this Sandia -- that's all
- 16 right, I'll get it -- the purpose of the Sandia seminar was
- 17 to inform the inspectors, the EQ inspectors of the latest
- 18 and greatest of what was happening in the EQ inspections
- 19 that have been going on since 1984?
- 20 A [Witness Merriweather] I believe the information
- 21 was current, yes.
- 22 Q Yes. Okay. And then, of course, we talked about
- 23 right after that inspection you came down to the Farley
- 24 plant?
- 25 A [Witness Merriweather] Shortly after that, some

period of time after that. 1 2 [Counsel for APCo conferring off the record.] 3 BY MR. MILLER: Mr. Walker? 4 0 A [Witness Walker]" Yes. 5 I think you testified, in this pre-file testimony, 6 0 that you reviewed the Wyle test report? 7 [Witness Walker] Yes. 8 Did you review it in conjunction with the Farley 9 10 inspection? [Witness Walker] No, I did not. 11 A 12 Did you review it in conjunction with your -- in your capacity as the E -- on your EQ Review Panel? 13 14 [Witness Walker] No, I did not. 15 JUDGE CARPENTER: Which file is this report? You asked him if he had reviewed the Wyle report. Is there more 16 17 than one? MR. MILLER: October 1987. Why don't we get the 18 19 Wyle test report. JUDGE BOLLWERK: Would you like to take a break? 20 MR. MILLER: We've got it right here, unless --21 well, it is time for our -- why don't we do that, and we'll 2.2 have the Wyle test report for you. 23 JUDGE CARPENTER: While you're doing that, do you 24 think you'll be asking some questions about some testing

- that went on in 1987? MR. MILLER: Yes, sir. JUDGE CARPENTER: Did a report come out of that? 3 MR. MILLER: Yes, sir. JUDGE CARPENTER: I have one report, it's your 5 Exhibit 25. If you could identify the other Wyle test 6 report for me after the break, I would appreciate it. 7 MR. MILLER: If you'll hold up the front of it, 8 9 and let's make sure that we don't inundate you with paper you already have. 10 JUDGE CARPENTER: I have 25. 11 MR. MILLER: I've got it. Thank you, sir. 12 JUDGE CARPENTER: It's the linear splice. 13 MR. MILLER: Why don't we, if it's acceptable to 14 the Board, we are at our mid-afternoon break point? 15 JUDGE BOLLWERK: Your 25 is staff 21. You might 16 17 want to MR. MILLER: Okay. 18 19 JUDGE BOLLWERK: -- check that. MR. MILLTR: We'll correlate that and make sure we 20 don't do more paper than we have to. 21 JUDGE CARPENTER: I guess I misspoke, Mr. Miller. 22 I happened to be reading that when you asked the question 23
- and I didn't quick look back and see that it was -- it is only an Okonite test report I was looking at. Excuse me.

MR. MILLER: We'll straighten it out. 2 JUDGE BOLLWERK: All right. Why don't we take a We'll come back at 20 after 3:00. 3 break. [Brief recess.] 4 JUDGE BOLLWERK: Let's go back on the record. 5 BY MR. MILLER: 6 Let's go ahead and see if we can make sure that 7 the record is complete. Let's take Staff Exhibit 18, which 8 I will identify as the Bechtel Eastern Power Corporation 9 10 correspondence, dated July 21, '87, to W.G. Hairston from Mr. K.C. Gandhi. 11 All right. And I'll ask you, Mr. Merriweather or 12 Mr. Paulk, did you have that available to you during the 13 1.4 Farley inspection in September? 15 A [Witness Merriweather]" Yes, we did. 16 Turn to Staff Exhibit 20. I will identify that as a memorandum to Nuclear Utility Group on equipment 17 18 qualification, dated January 9, 1987, from Phil Holzman, H-O-L-Z-M-A-N, subject: CECo splice qualification test 19

I'll ask you, Mr. Merriweather and Mr. Paulk,
whether you had that available to you at the inspection at
the Farley plant.

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information.

A [Witness Merriweather] I'm not certain. I had it, but I am not certain when I had it.

| | S Mr. Lante. |
|-----|--|
| 2 | A [Witness Paulk] I don't recall. |
| 3 | MR. MILLER: Okay. |
| 4 | And I'll mark for identification purposes as |
| 5 | Alabama Power Company 95, which I will identify for the |
| 6 | record as a September 28, 1987, letter, with attachments, |
| . 7 | from Wyle Laboratories to Alabama Power Company discussing |
| 8 | qualification plans for splices fabricated with 3M Scotch |
| 9 | plastic electrical tape for use in Farley Nuclear Plant, and |
| 10 | just one minute. |
| 11 | BY MR. MILLER: |
| 12 | Q We'll get this one and let you look at it, Mr. |
| 13 | Merriweather. The question to you will be have you not seen |
| 14 | the cover letter there and had available the attachments to |
| 15 | that for your inspection? I'm sorry, for your review. |
| 16 | JUDGE BOLLWERK: Let the record reflect that APCo |
| 17 | Exhibit No. 95 has been marked for identification. |
| 18 | [APCo Exhibit No. 95 was marked for |
| 19 | identification.] |
| 20 | BY MR. MILLER: |
| 21 | Q Take whatever time you need, Mr. Merriweather. |
| 22 | [Pause.] |
| 2.3 | BY MR. MILLER: |
| 2.4 | Q Perhaps I should not exclude Mr. Paulk. You might |
| 25 | want to look at that, also. |

- [Pause.]
- 2 A [Witness Merriweather] Okay. I've seen the
- 3 letter.
- 4 Q I see.
- 5 A [Witness Merriweather] Okay. And I have seen
- 6 some of the attachments. Now, I think some of this other
- 7 stuff -- I don't remember seeing all this.
- 8 Q You do recall seeing the letter and some of the
- 9 attachments?
- 10 A [Witness Merriweather] Yes. I think these
- 11 pictures.
- 12 Q Okay. The photographs attached?
- 13 A [Witness Merriweather] The photographs, right.
- 14 Q Okay. All right. And when do you recall seeing
- 15 all of that?
- 16 A [Witness Merriweather] Sometime in October, I
- 17 believe.
- 18 Q 1987?
- 19 A [Witness Merriweather] 1987.
- 20 Q All right.
- 21 I'll ask you to look at Staff Exhibit 25, which is
- 22 titled "Qualification Test Program on Splices Fabricated
- 23 with 3M Scotch Super-33 Plus Vinyl Flastic Electrical Tape,"
- 24 etcetera, under date of October 1987.
- Tell me when you have that before you, Mr.

- Merriweather and Mr. Paulk.
- 2 A [Witness Merriweather] I've got it.
- 3 Q We have talked earlier today about --
- 4 A [Witness Paulk] I've got it.
- 5 Q I'm sorry. I didn't mean to interrupt.
- 6 We have talked earlier today about the Wyle test
- 7 report. Is that the Wyle test report you meant to refer to,
- 8 as we use that phrase?
- 9 A [Witness Paulk] Yes.
- 10 Q This is the Wyle test report that you never looked
- 11 at, Mr. Merriweather.
- 12 A [Witness Merriweather] If it's the Wyle test
- 13 report, yes.
- 14 Q Yes, sir. This is the Wyle test report that you
- 15 looked at in 1989, Mr. Paulk, or '90.
- 16 A [Witness Paulk]" Yes, sir.
- 17 Q Which year was it?
- 18 A [Witness Paulk] '89 or '90.
- 19 Q Sorry?
- .) A [Witness Paulk] It was either late '89 or early
- 21 '90.
- 22 Q All right.
- 23 And Mr. Walker, this is the Wyle test report that
- 24 you looked at in 1989.
- 25 A [Witness Walker] I believe it was.

Q All right.

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Just so we can state -- let me just show something -- this Wyle test report is for the V-type splices that we have here in the hearing room with us, and I refer you to the photographs in the test report.

[Pause.]

plant or another splice.

BY MR. MILLER:

- Q Said another way, this is a Farley-specific Wyle test report. Everybody agree with that? Mr. Merriweather.
 - A [Witness Merriweather] Yes.
- 11 Q Mr. Paulk.
- 12 A [Witness Paulk] Agree with which?
- 13 Q This -- this Wyle test report is for the splices
 14 that we're talking about here in this enforcement
 15 proceeding. This is not for another utility or another
- 17 A [Witness Paulk] The test report is for -- for 18 Wyle. That does not necessarily represent the exact 19 splices.
- Q Okay. We'll let this splice that I hold in my hand and the splice in the picture be reconciled by those that observe them.
- Now, Mr. Merriweather, one of your
 respons bilities as team leader was to ensure that your team
 inspectors looked at the qualification documentation, was it

- 1 not?
- 2 A [Witness Merriweather] Yes, it was.
- 3 Q And who was your team inspector for the V-type
- 4 splices we are here on today?
- 5 A [Witness Merriweather] The way I understand it,
- 6 it was --
- 7 Q Mr. Paulk.
- 8 A [Witness Merriweather] Paulk was -- he was one of
- 9 the inspectors that was on the team.
- 10 Q Mr. Paulk was the inspector who wrote up and has
- 11 testified to in his prefiled testimony about the V-type
- 12 splice issue, is he not?
- 13 A [Witness Merriweather] He provided input for the
- 14 report, yes.
- 15 Q You agree with that, do you not, Mr. Paulk, that
- 16 you wrote that up?
- 17 A [Witness Paulk] The portions I have stated to
- 18 you, yes, sir.
- 19 Q Yes, sir.
- 20 And Mr. Merriweather, I will ask you, sir, in
- 21 evaluating the qualification documentation, what is the role
- 22 of engineering judgement associated with evaluating
- 23 qualification -- EQ qualification documentation of
- 24 electrical splices?
- 25 A [Witness Merr Lather] I do not understand your

- question, what is the role of engineering judgment.
- 2 Q Do you agree with me that -- let me strike that
- 3 and ask it to you this way: This V-type splice refers to an
- 4 electrical termination, does it not?
- 5 A [Witness Merriweather] A termination can be a
- 6 splice.
- 7 Q Okay. And what we're talking about here is a
- 8 termination, is it not?
- 9 A [Witness Merriweather] We're talking about --
- 10 well, if you want to call it termination, that's what we're
- 11 talking about, okay?
- 12 Q All right. And it is electrical, is it not?
- 13 A [Witness Merriweather] It is electrical, yes.
- 14 Q And you understand that Alabama Power Company had
- 15 as its advisors electrical engineers, did you not?
- 16 A [Witness Merriweather] They had -- yes.
- 17 Q Mr. Love and Mr. Sundergill are electrical
- 18 ergineers, aren't they?
- 19 A [Witness Merriweather] I don't know their
- 20 qualifications, but I know the --
- 21 Q And you understand that the issue is the ability
- of this electrical termination to perform -- to be
- 23 documented as qualified and to perform its intended
- 24 function.
- 25 A [Witness Merriweather] Right.

- 1 Q And you say that your advisor on this issue is Mr.
- 2 Paulk?
- 3 A [Witness Merriweather] I said Paulk was one of
- 4 the members on the team.
- 5 Q I see.
- 6 Mr. Paulk, will you tell Mr. Merriweather where
- 7 you got your electrical engineering degree.
- 8 A [Witness Paulk] I do not specifically have an
- 9 electrical engineering degree. I do have an electrical
- 10 engineering background.
- 11 Q Perhaps you will tell Mr. Merriweather where you
- 12 got your engineering degree.
- 13 A [Witness Paulk] I do not have an engineering
- 14 degree.
- 15 Q Perhaps you will tell the Board where you got your
- 16 master's in business administration.
- 17 A [Witness Paulk] I got it at Campbell University.
- 18 Q And your business degree.
- 19 A [Witness Paulk] North Carolina, Wesleyan. And my
- 20 bachelor of physics I got -- bachelor of science in physics
- 21 I got from the University of the State of New York.
- 22 Q While you were in the Navy.
- 23 A [Witness Paulk] Yes.
- 24 Q By correspondence.
- 25 A [Witness Paulk] No.

| 1 | Q You attended classes? |
|-----|--|
| 2 | A [Witness Paulk] Yes, sir. Three of the years |
| 3 | were also in electrical engineering. I was an electrician |
| 4 | in the Navy for nine years. |
| 5 | MR. MILLER: Nothing further for the panel. Thank |
| 6 | you very much, gentlemen. |
| 7 | JUDGE BOLLWERK: You're finished with this panel, |
| 8 | then? |
| 9 | MR. BACHMANN: We still have redirect. |
| 10 | JUDGE BOLLWERK: Right. We recognize that. Any |
| 11 | redirect, then? |
| 12 | MR. BACHMANN: Sir, we would like about three to |
| 13 | four minutes, and then we'll start the redirect. |
| 1.4 | JUDGE BOLLWERK: All right. |
| 15 | MR. BACHMANN: The panel can stay where they are. |
| 16 | [Recess.] |
| 17 | REDIRECT EXAMINATION |
| 18 | BY MR. BACHMANN: |
| 19 | Q Mr. Luehman, earlier in the cross examination, Mr. |
| 20 | Merriweather was questioned on this unknown document which |
| 21 | turned out to be Staff Exhibit a portion of Staff Exhibit |
| 22 | Number 6, SECY 85-220. Could you explain to the Board just |
| 23 | what effect a SECY paper would have on the staff. |
| 2.4 | A [Witness Luehman] A SECY paper is a staff |
| 25 | prop sal to the Commission. I think in the case of this |

SECY paper, this paper was presented to the Commission but was not adopted as written and, therefore, is not binding on the staff.

Q All right. You have before you Staff Exhibit
Number 11, which is the inspection report that was written
by Mr. Gibbons, do you not? Excuse me. APCo Exhibit
Number 11. I'm sorry.

A [Witness Luehman] Yes, I do.

Q All right. There was a question as to the reliance someone could place on that document insofar as whether they -- Mr. Gibbons indicated that those splices were qualified. Did you find anything in that report that would cause a licensee to rely upon that report for the thesis that the equipment was qualified?

MR. MILLER: Well, may it please the Board, we object to the question of Mr. Luehman siving his opinion about what would cause a licensee to rely upon it. We're the licensee and we're in the best position to testify on what we rely on. Mr. Luehman is with the staff.

MR. BACHMANN: Your Honor, the question was hypothetical towards any licensee looking at a report such as this. One of Mr. Luehman's functions on the review panel was to make the "clearly should have known" determination, and he was questioned earlier on whether or not the licensee should or should not be able to rely on that report, and I

think it's a perfectly proper question, that he's looking at the report and he can explain why he felt the licensee could not rely on it.

MR. MILLER: If I could just respond, there is no question about the fact that every time we put up an NRC document, this witness has tried to tell us what the issue is. But the issue is, the question to the witness is, can you tell us why or what a licensee can do or should rely on, and only licensees can answer that question.

He can give the staff's position, as long as we all understand this is the way he views it from his perspective as the staff.

JUDGE BOLLWERK: I will allow the question on that basis. I think that's what he can testify to, what the staff's position would be.

WITNESS LUEHMAN: I think it's very straightforward. Mr. Gibbons nowhere in the report says that the equipment that he looked at is qualified.

BY MR. BACHMANN:

Q Okay. Now, we had a discussion earlier on operability and, in fact, I seem to recall Mr. Miller saying words to the effect that the licensee uses operability and qualification interchangeably. Would you explain to the Board the staff's position on the concept of operability versus qualification so we can get it down? You will be

speaking for the staff. This is, I think, what we will consider the definite position on how we look at it.

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[Witness Luehman] I think we went over it a little bit yesterday, but basically if a deficiency is found that causes a piece of equipment not to meet whatever standard it has -- in this case environmental qualification -- then there is a question of qualification. Even if qualification can't be established, the licensee through the justification for continued operation process can make an argument that a piece of equipment continues to be operable even though it is not qualified. And they can do that by providing information such as a determination that there is other equipment that can perform the function, that it is going to be a limited time until they can in effect corrective actions. And the Staff may accept continued operation and interimly basically consider the equipment to be operable. But accepting that position does not confirm the Staff's position that the Staff believed that the equipment was qualified.

Q Mr. Luehman, would you take a look at Staff
Exhibit 18.

A [Witness Luehman] Yes.

23 Q Would you state for the record exactly what Staff
24 Exhibit 18 is?

A [Witness Luehman] Staff Exhibit 18 is a letter

- 1 from the Bechtel Eastern Power Corporation to Mr. W.G.
- 2 Hairston, III of Alabama Power Company. It is dated July
- 3 21, 1987, and it's a justification for continued operation.
- 4 Actually, the title is "EQ Solenoid Valve Splices
- 5 Justification for Continued Operation".
- 6 Q Okay. Now, in that justification for continued
- 7 operation or JCO as we like to refer to them, can you
- 8 explain -- does that show in any way that those particular
- 9 splices are qualified?
- 10 A [Witness Luehman] Well, there are mentions of the
- 11 word of "qualified" or "qualified tape" and
- 12 "qualifications", but the thrust of NRC review with regard
- 13 to this document would be, we would not use this as a basis
- 14 to make a qualification determination, rather we would look
- 15 at a JCO to determine whether there is enough information to
- 16 allow the licensee to continue to operate with that
- 17 condition in the plant.
- 18 Q Mr. Paulk, did you attend the August, 1987 Sandia
- 19 seminar?
- 20 A [Witness Paulk] Yes, sir.
- 21 Q We have established that you were a major
- 22 contributor to the inspection report and indeed the NOV and
- 23 the order concerning splices. Was there a lot of latest and
- 24 greatest discussion on splices at that seminar?
- 25 A [Witness Paulk]" No, sir.

- Q Was there any material presented on splices at that seminar?
- A [Witness Paulk] There was some information, but it was testing that had been performed prior to the deadline. There was nothing new.
- 6 Q You were presented with no information on splices 7 that happened after November 30, 1985; is that correct?
 - A [Witness Paulk] As far as I can recollect, no.
- Q Going back to the Wyle test report, Staff Exhibit
 10 25, it states in the test report on Section 6.0 that they
 11 tested 14 different splice constructions; do you see that?
- 12 A [Witness Paulk] Yes, sir.
- 13 Q Is there any way of telling from this report if 14 those 14 constructions are a good representative of what was 15 in the plant?
 - A [Witness Paulk] No, sir.
- 17 Q And why not?

- A [Witness Paulk] They came up with 14 after
 looking at approximately 80-82 splices out of the hundreds
 or possibly thousands that existed in the plant, and just
 said that we assume these 14 represent everything.
- 22 Q Would that be, in your view, sufficient to raject
 23 the report as a qualification document for all of these
 24 splices?
- 25 A [Witness Paulk] For all of these splices? Yes.

| 1 | Q I have no further questions. |
|-----|---|
| 2 | JUDGE BOLLWERK: Mr. Miller. |
| 3 | RECROSS EXAMINATION |
| 4 | BY MR. MILLER: |
| 5 | Q Mr. Paulk, I don't recall, did you and I talk on |
| 6 | the cross? I don't recall that you and I talked about |
| 7 | Section 6.0 of the Wyle test report; did we? |
| 8 | A [Witness Paulk] I don't think we talked about it. |
| 9 | You referred to the test report. |
| 10 | Q All right. But you would agree with me that the |
| 11 | questions you were just asked about the test specimen |
| 12 | descriptions were not covered in the cross examination; were |
| 13 | they? |
| 14 | A [Witness Paulk] In a way it was, sir. You asked |
| 1.5 | if the splice you ? eld up was representative and if the test |
| 16 | report represented the splices at Farley. |
| 1.7 | Q All right. And that's what you say forms the |
| 18 | basis for the 6.0 discussion we just heard? |
| 19 | A [Witness Paulk] I believe so, sir. |
| 20 | Q You told us that you say these 14 specimens are |
| 21 | not representative of those at Plant Farley. |
| 22 | A [Witness Paulk] It is representative of 14 |
| 23 | splices at Farley, not all. |
| 24 | Q You cannot say that; can you, sir? |
| 25 | A [Witness Paulk]" I cannot say that, but neither |

- can APCo demonstrate to the NRC that it encompasses 2 everything. 3 Q Listen, I know that we can't demonstrate much to 4 the NRC while you are going to be one of the inspectors, but 5 the issue is you cannot say that; can you? Weren't those 6 the words you just used? 7 [Witness Paulk] I said that I could not say that that was all. 8 9 All right. 0 [Counsel for APCo conferring off the record.] 10 11 BY MR. MILLER: Mr. Luehman, you were asked questions about SECY 12 13 paper 85-20; is that wrong? Didn't you tell us that this was the Staff 14 15 position? 16 [Witness Luehman] Yes. And can't I look at Staff Exhibit 6, an exhibit 17 18 that you sponsored, and understand that you thought it was 19 important enough to be included in this hearing. A [Witness Luehman] For historical purpose it has 20 some importance. 21 Okay. But you are certainly not telling this 22
- Board to ignore SECY paper 85-220; are you? 23
- [Witness Luehman] No, I would not do that. A 24
- Q In fact, because you introduced it as an exhibit, 25

- you want them to read it and read it carefully; do you not?
 - [Witness Luehman] I assume they will read it.
- And apply to it the weight that its due, whatever 3 that weight might be? 4
 - [Witness Luehman] That is correct.
- And you are not denying that what I have highlighted in yellow and what we have here was the Staff position on or about June 18, 1985, the date which this 8 exhibit shows?
 - [Witness Luehman] I am not denying that that was the position that the Staff put forth for the Commission.
 - All right. I thought you told -- well, strike that, and I'll ask it to you this way: Did you tell us that the Commission rejected SECY paper 85-220?
 - (Witness Luehman) I think I said -- I may have used that word, but I think that I followed on to say that the Commission ultimately adopted alternative language.
 - Okay. Now, by that you mean 86-15 and 88-07?
- [Witness Luehman]" Ultimately, 88-07. 19
- We can say, can't we, that as of the deadline; 20 21 that is, November 30, 1985, this represented the Staff position, this being Staff Exhibit 6, the SECY paper at 22
- issue here? 23

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[Witness Luehman] The -- that paper did not 24 represent the Staff position. The only position that was 25

- put out to the industry were the Generic Letters.
- Q Wait a minute. Didn't this paper represent the Staff position as of the date it bears?
 - A [Witness Luehman] The Staff position is -- that's the Staff's proposed position. Until the Commission approves it, the Staff doesn't have a position.
 - Q All right. Well, then, we can say, can't we, that as of the deadline, the most current version of the Staff's proposed position is what we see here at staff Exhibit 6, and exhibit you sponsored?
 - A [Witness Luehman]" I don't think that that's correct.
- 13 Q Well, --

- A [Witness Luehman] I think that the Generic Letter was issued prior to the deadline, and Generic Letter 85-15 represented the Staff position.
- Q All right, okay. And that Generic Letter was explained, in whole or in part, in this SECY letter?
- A [Witness Luehman] That's correct, but it's not unusual for the Staff to adjust the bacis, based on discussions and Staff Requirements Memorandums from the Commission, so I can't say that at the time the Generic Letter was issued, that everything that's encompassed in that paper, based on the discussions between the Staff and the Commission, that none of that negated some of the parts

- of this SECY paper.
- Well, you can say that you don't have any other 2
- piece of paper and you didn't sponsor any other exhibit on 3
- that issue; can't you?
- [Witness Luehman] That's true. 5
- [Counsel for APCo conferring off the record.] 6
- MR. MILLER: No further questions. 7
- JUDGE BOLLWERK: Anything further from Staff? 8
- MR. BACHMANN: I have a few clarifying questions. - 31

FURTHER REDIRECT EXAMINATION

11 BY MR. BACHMANN:

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- The words, Staff position, have been used. Would Q it be more correct to say that that SECY paper represented an internal Staff position, as opposed to one that would be 15 used in dealing with licensees?
- [Witness Luehman] Yes, I think that that's a 16 correct statement, because the Staff position -- we would 17 not issue an interim Staff -- an interim Staff position 1.8 would not go out to the licensees. They wouldn't see that. 19
- Q So, the inspectors would not pay any attention to 20 21 the statements made in the SECY paper?
- [Witness Luehman] I think, by and large, I would 22 be surprised that very many inspectors even saw this -- the 23 SECY paper, and so I don't know how they could have been 24 influenced by it in any way. 25

MR. BACHMANN: I have no further questions.

MR. MILLER: We learned that today. Mr.

3 Merriweather not only never saw it, he disagreed with it. I

4 have nothing else.

1.4

JUDGE BOLLWERK: All right.

MR. MILLER: We're done with this panel.

JUDGE BOLLWERK: Questions from the Board. Judge 8 Carpenter?

EXAMINATION BY THE BOARD

JUDGE CARPENTER: Mr. Paulk, you made a point of correcting your testimony to read on page 16, instead of self-vulcanized, that the T-95 tape wis unvulcanized or (uncured) and was highly viscous at room temperature because it lacked peroxides. In all innocence may I ask why you tell us that? What does that tell you, in your judgment, about this T-95 tape?

from another licensee during an inspection effort. They had some testing performed on the T-95 tape. They had purchased or obtained, rather, the test report that Farley had, the one we've been referring to here, to try and demonstrate qualification for some of their splices. It was rejected for their use, so they attempted to do some additional testing.

And this statement came out of the results of that

- testing. The tape started melting and flowing as the temperature increased.
- 3 JUDGE CARPENTER: Well, as I understand it, the
- 4 way these splices or connections were made in the Okonite
- 5 test report, which is Alabama Power Company Exhibit 25,
- there was this T-95 tape and then for some reason, they
- 7 chose to wrap the splice with another kind of tape.
- 8 WITNESS PAULK: Yes, sir.
- g JUDGE CARPENTER: Could it have been that the
- 10 first tape had good insulating properties and the second
- 11 tape didn't flow at high temperature?
- 12 WITNESS PAULK: The T-95 tape does the flowing.
- Okonite has told the licensees and the purchasers that the
- 14 T-95 tape is good only if it's encapsulated so that it will
- 15 not run. The No. 35 tape was a tape that they tested it
- 16 with in the Okonite report. It provided adequate sealing to
- 17 keep the T-95 encapsulated.
- 18 The Scotch 33 tape that Arkansas tested back in
- 19 1989, 1990 timeframe, shrank. As the T-95 was expanding, it
- 20 ripped and the T-95 leaked out.
- JUDGE CARPENTER: What I am trying to get a feel
- 22 for is whether you would sort of by inspection question the
- 23 possibility of qualifying the splice that used the T-95
- 24 tape?
- 25 WITNESS PAULK: I didn't understand it, sir.

- JUDGE CARPENTER: You told us that it is 2 unvulcanized, uncured tape. And I am simply saying does it 3 follow that in your opinion therefore any splice using that 4 tape probably won't be able to be qualified? 5 WITNESS PAULK: No, sir. It was qualified by the Okonite NQRN-3 Report. I believe that is Staff Exhibit 21, 6 7 I believe, sir. 8 JUDGE BOLLWERK: I think Staff 21 and APCo 25 are the same, under the same label; is that correct? 9 10 JUDGE CARPENTER: Backing away and trying to 11 understand that specific sentence in your testimony, I would 12 like to ask and still from all that I've read, it is not clear to me whether Staff's skepticism about these V-splices 13 14 comes from the material or the geometry. That is sort of 15 the fundamental division. What is wrong here? WITNESS PAULK: I think I understand now. 16 17 JUDGE CARPENTER: I get a linear splice that is 18 qualified and that material was qualified and that geometry. 19 Now, what happens when somebody makes -- and I am not sure 20 that this is a qualified splice -- but something that grossly looks like it. 21 22 WITNESS PAULK: Using the splice you've got there, 23 sir, hold up the two loose ends and pull it apart and you
- 25 JUDGE CARPENTER: Only with a knife.

can look down the center.

WITNESS PAULK: Well, moisture can get down in there.

at the midpoint. I am very frustrated that there is no drawing of the devices at issue this afternoon that we can look at, because it is clear that as there is a transition from the individual conductors being wrapped to their being wrapped together, it depends very critically whether there is overlap.

WITNESS PAULK: A V-type splice can be qualified if it is wrapped as if it were an end-line splice. The way they wrapped it there is no sealing mechanism down the length of the conductors to prevent moisture intrusion or seepage of the T-95 out. I can demonstrate by drawing.

JUDGE CARPENTER: I accept what you said, but what I am trying to find out on this record is which is the case?

WITNESS PAULK: The case for them is that they did not wrap it as if it were a single end-line or a straight splice.

JUDGE CARPENTER: Did you discover that by looking at some drawings that was in their qualification file?

WITNESS PAULK: They didn't have a drawing of what was out there. All they had was they were either supposed to use RayChem or straight connections. And they were using V connection. We asked for documentation for the V and they

- 1 had none.
- JUDGE CARPENTER: But you say you are of the
- 3 opinion -- and it is certainly a sound one -- that there
- 4 could be wraps that are qualified and there could be wraps
- 5 that are not qualified?
- 6 WITNESS PAULK: Yes, sir. They look different.
- JUDGE CARPENTER: All right, now we are getting
- 8 there.
- 9 How did you come to the conclusion that the
- 10 particular ones at Farley were in the class that you would
- 11 question, as you say almost by inspection?
- 12 WITNESS PAULK: A V-type splice that is wrapped as
- an end-line will be more bulbous on the end. And the two
- 14 lines will be sticking out further apart rather than close
- 15 together.
- 16 JUDGE CARPENTER: So that the materials
- 17 accumulated between the two branches?
- 18 WITNESS PAULK: Yes, sir, to seal the connection.
- 19 JUDGE CARPENTER: Now, I puzzled about this for so
- 20 long and the answer is so simple.
- JUDGE MORRIS: Could I follow up on that for just
- 22 a moment?
- 23 WITNESS PAULK: Yes, sir.
- JUDGE MORRIS: Is the device that you described
- 25 which could be qualified represented by one of the

photographs in the report and it's not? 2 WITNESS PAULK: No. JUDGE MORRIS: And it's not. So, Wyle did not 3 have such a configuration? 4 5 WITNESS PAULK: As far as I know they didn t. 6 JUDGE CARPENTER: If I may continue with that 7 line. Therefore, why did they splice this shown in the photographs of Alabama Power Company 95, this Wyle Report, 8 9 September 28, 1987. Why did those splices -- the second photograph is not very good, the first photograph I would 10 11 say is reasonable -- there is some suggestion there that some of them show that spacing that you described as being 12 13 critical might be the same diameter as the cable diameter. 14 Would you have guessed looking at those that they were of 15 the type of construction that you would expect to be 16 successful? 17 WITNESS PAULK: These are similar to the ones that were destructively opened at another plant that I inspected. 18 19 JUDGE CARPENTER: I am looking at Page 0066949 of the Wyle Report. 20 21 WITNESS PAULK: I do not have those numbers, sir. 22 [Document proffered to witness.] 23 WITNESS PAULK: I am looking at the wrong exhibit. 24 I am sorry.

These are still the same. They are similar in

- shape and construction as ones of another site that I
- 2 inspected, and the licensee cut them open to determine how
- 3 they were wrapped and they were not wrapped in accordance
- 4 with how I described as an end-line splice, filling the void
- 5 between the cables.
- 5 JUDGE CARPENTER: Well given that, and given that
- ' the test series doesn't necessarily include all of the
- B geometries of all the splices at Farley, still these 14
- 9 which don't meet your visual criteria pass the test. That
- 10 surprises me considering what you just testified to.
- 11 WITNESS PAULK: They completed a 45-hour test,
- 12 sir. That was supposed to have been 30 days or more, but
- 13 there were more problems than just geometry, I believe. The
- 14 reviews that we did for another site -- we did not review
- 15 this report --
- 16 JUDGE CARPENTER: I accept the limitation that
- 17 this was a 45-hour test.
- 18 With respect to developing a leakage path
- 19 sufficient to cause a short to ground that would disqualify
- 20 them, would you expect them to occur early in a local
- 21 environment or only towards the end of the 30 days?
- 22 WITNESS PAULK: Can't tell. We have seen failures
- 23 that have happened early and we have seen them happen just
- 24 at the end of the test.
- JUDGE CARPENTER: Mr. Walker, from your

- 1 perspective of oversight and sort of sitting on the side, 2 would you agree about this ability to look at V-type splices and tell whether they're likely to be qualifiable or not? 3 4 WITNESS WALKER: Well, I can accept his 5 determination. I personally have not reviewed a test report 6 with V-type splices that I concluded was, had demonstrated 7 the splice was qualified. 8 JUDGE CARPENTER: So you have not seen any 9 successful V-splices? 10 WITNESS WALKER: Taken to full term for the 11 purpose for which they were being tested for, I have not; 12 taken to full term meaning completed qualification for the 13 required time. 14 JUDGE CARPENTER: And yet as a layman these are 15 quite commonly used when there isn't an issue of 16 qualification, right? 17 WITNESS WALKER: Well, I don't know if I would --18 I know they are used. I don't know how common they are. I've seen over the years I guess I've seen other 19 type splices a lot more frequently than I have seen these. 20 JUDGE CARPENTER: So in your opinion Farley 21 22 perhaps has a greater abundance of those that you are familiar with? 23
- 24 WITNESS WALKER: You are going to get me in 25 trouble. I don't know. I really don't know if they have

- 1 more than --
- JUDGE CARPENTER: I withdraw the question. Thank
- 3 you very much.
- JUDGE BOLLWERK: Judge Morris.
- JUDGE MORRIS: Mr. Paulk or anyone else, it's not
- 6 clear to me exactly who performs this operation of making
- 7 the splice, whether it is an electrical worker or some other
- 8 kind of craft worker or is there some standard person that
- 9 does it?
- 10 WITNESS PAULK: I am not sure exactly how Farley
- 11 did it. Most places it's either an electrician or an
- 12 instrument and control technician making splices.
- 13 They divide their equipment up. I'm not sure --
- 14 at Farley we talked to electricians who made some splices.
- 15 JUDGE MORRIS: And did you question them as to
- 16 what kind of instructions or guidance they had in performing
- 17 that operation?
- 18 WITNESS PAULK: Yes, sir.
- 19 JUDGE MORRIS: And what was typical?
- 20 WITNESS PAULK: Typical was lay the wires back to
- 21 back and wrap the tape around them as if it were a -- you
- 22 were rolling a cigar leaf.
- Two electricians told us that, well, we can only
- 24 use T-95 only in containment; we don't have to put any
- 25 jacketing equipment on because that's the way we were

- trained -- we don't have to do that.
- JUDGE MORRIS: Did the workers have pieces of
- 3 paper in their possession while they were doing this kind of
- 4 work or did they just look at a blueprint and go out and --
- 5 WITNESS PAULK: Skill of the crafts.
- 6 JUDGE MORRIS: Pardon?
- 7 WITNESS PAULK: They relied on skill of the craft.
- 8 I believe there were some notes and details available. I am
- 9 not sure -- you know, I was not there when the splices were
- 10 being made so I do not know if they had that with them and
- 11 that's my recollection. The detail did not address a V-type
- 12 splice. It was an in-line splice or a Raychem heat
- 13 treatable splice.
- 14 JUDGE MORRIS: Would this kind of operation be
- 15 subject to quality assurance control?
- 16 WITNESS PAULK: Yes, sir.
- 17 JUDGE MORRIS: Under the QA program or under the
- 18 EQ program?
- 19 WITNESS PAULK: Well, first of all, you've got to
- 20 understand that Farley is a little unique. They do not
- 21 really have a QA program or a QC program per se. They have
- 22 Peer OC.
- I can go out and do a splice and my buddy or my
- 24 foreman can come over and sign for it -- a lot of room for
- 25 error in there. A mechanical person could come and sign for

it. 2 JUDGE MORRIS: What kind of guidance does he have? 3 WITNESS PAULK: Skill of the craft. 4 JUDGE MORRIS: Nothing in writing? 5 WITNESS PAULK: Nothing -- unless they had the note and detail out there, but coming up after the fact you 6 27 can't, you wouldn't be able to tell. 8 JUDGE MORRIS: Is there any other material inside 9 this splice termination besides the wrapping? 10 WITNESS PAULK: I'm not sure if Farley uses the 11 Okonite cement or not on theirs but some licensees even go so far as adding that in. That was included in the Okonite 12 NOR N-3 report as a filler on the high voltage splice. 13 14 Some licensees -- I did evaluations and decided 15 they didn't need the cement as long as they made the splice 16 properly. 17 JUDGE MORRIS: Would the presence of the cement 18 make a difference in the qualification? WITNESS PAULK: No, sir, not in our opinion. 19 JUDGE MORRIS: Would it make a different in 20 21 performance in the environment of DBE? 22 WITNESS PAULK: I don't believe so, sir. WITNESS LUEHMAN: Sir, the one thing that I think 23 24 should be added is that some of the splices at Farley were

not made with T-95 or T-35. There were some electrical vinyl

- tape used in a number of the splices that was neither of
- those kinds of tape, which were the tape I guess based on
- 3 the inspector's review were the types of tape that were
- 4 called for.
- JUDGE MORRIS: On page 17, Mr. Merriweather, you
- 6 state, "The fact that unqualified V-type splices were
- 7 installed is a breakdown in the EQ program"
- 8 WITNESS MERRIWEATHER: Excuse me, could you repeat
- 9 that?
- JUDGE MORRIS: Yes. Your answer, A-15, on page
- 11 17.
- 12 WITNESS MERRIWEATHER: Okay.
- JUDGE MORRIS: "The fact that unqualified V-type
- 14 splices" et cetera.
- 15 WITNESS MERRIWEATHER: Okay, hold on just a
- 16 minute.
- 17 Yes.
- 18 JUDGE MORRIS: You characterize this as a
- 19 breakdown in the EQ program.
- 20 WITNESS MERRIWEATHER: Yes.
- JUDGE MORRIS: And I guess people are sensitive to
- 22 a breakdown in the program as opposed to some number of
- 23 violations.
- A breakdown in a program suggests a real pervasive
- 25 problem in the overall program. Is that what you had in

- 1 mind?
- WITNESS MERRIWEATHER: What I am saying is that
- 3 they did not adequately address the qualifications for the
- 4 splicers. That's what I meant. They didn't address it as
- 5 part of their program.
- 6 JUDGE MORRIS: And that, in your mind, constituted
- 7 a breakdown --
- 8 WITNESS MERRIWEATHER: Yes.
- 9 JUDGE MORRIS: -- in the overall program?
- 10 WITNESS MERRIWEA "HER: Yes, it's in one area of
- 11 the program there's a breakdown, yes.
- 12 JUDGE MORRIS: So it's not an all-pervasive
- 13 breakdown of the entire EQ program?
- 14 WITNESS MERRIWEATHER: Right. I don't think I'm
- 15 trying to indicate that, no.
- 16 JUDGE MORRIS: Okay, thank you very much.
- 17 WITNESS MERRIWEATHER: Okay.
- 18 JUDGE BOLLWERK: Anything else? All right, I
- 19 don't have any questions. I think at this point we may have
- 20 some exhibits, or you have something you want to say, Mr.
- 21 Miller?
- MR. MILLER: I would like to say that we
- 23 appreciate the opportunity to have the Board ask our
- 24 witnesses those questions at the appropriate time. I would
- 25 like to be able to respond to that.

JUDGE BOLLWERK: All right. If the Board members 2 feel it's appropriate, then we'll certainly do that. MR. MILLER: Thank you, sir. 3 JUDGE BOLLWERK: Do you all have some exhibits you 4 want to move into evidence? 5 MR. BACHMANN: Yes, sir. If I could have a little 6 water here before I do that. 7 JUDGE BOLLWERK: Sure. I recognize you have a 8 9 little reading to do here. I appreciate that. MR. BACHMANN: I suppose we could excuse the panel 10 now, so they don't have to sit and listen to me read this. 11 JUDGE BOLLWERK: Why don't we go ahead and do 12 that. We don't have anything else for them. 13 14 You all are excused. I guess all of you are on 15 the next panel, so we'll see you tomorrow. 16 WITNESS WALKER: Weather permitting. JUDGE BOLLWERK: Weather permitting. We'll have a 17 discussion about that after we're finished here, and we'll 18 19 go off the record. MR. BACHMANN: Maybe it's appropriate to do that 20 now so they'll hear it. 21 JUDGE BOLLWERK: I don't want to do it on the 22 record, but if they want to stick around for a second, you 23 can relay the information to them. 24

[Whereupon, the panel was excused.]

- MR. BACHMANN: The staff moves the Board to accept 2 into evidence Staff Exhibits 16 through 26. And I will
- identify them individually. 3

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- 4 Staff Exhibit 16 is Licensee Event Report LER 87-5 012-00, with enclosure, dated July 30, 1987.
- Staff Exhibit 17 is Inspection Reports Docket 6 Numbers 50-348 and 50-364, and Report 87-17, concerning the 7 inspection conducted from July 10 to August 18, 1987. 8
- Staff Exhibit 18 is entitled EQ Solenoid Valve 10 Splices - Justification For Continued Operation, Bechtel File E-91AP-13169, with enclosure, dated July 21, 1987.
- 12 Staff Exhibit 19 is Justification For Continued Operation, Energized Solenoid Valves And Environmental 13 14 Qualification Scope, dated July 21, 1987.
- 15 Staff Exhibit 20 is entitled -- and these are initials -- CECO Splice Qualification Test Information, "ith 16 17 attachments, dated January 9, 1987.
 - Staff Exhibit 21 is Nuclear Environmental Qualification Report For Okoguard Insulated Cables T-95, and Number 35 Splicing Tapes, Okonight Report NQRN-3.
- Staff Exhibit 22 is entitled Environmental 21 Qualification Meeting Of September 24, 1987, it's a letter 22 from J.N. Grace -- excuse me, a letter to J.N. Grace from 23 R.P. McDonald, dated September 30, 1987. 24
- Staff Exhibit 23 is NUREG 0588 REV 1, which is 25

| 1 | entitled Interim Staff Position On Environmental |
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| 2 | Qualification For Safety-Related Electrical Equipment. |
| 3 | Staff Exhibit 24 is IE Bulletin 79-01B |
| 4 | Environmental Qualification Of Class 1-E Equipment, and |
| 5 | parenthetically we have for identification that the DOR |
| 6 | Guidelines is enclosure 4, and it's dated January 14, 1980. |
| 7 | Staff Exhibit 25, Nuclear Environmental |
| 8 | Qualification Test Report From Wyle Laboratories, dated |
| 9 | October, 1987, concerning qualification test program on |
| 10 | splices. |
| 11 | Staff Exhibit 26 is Qualification Of Tape Splices |
| 12 | For Use In Instrument Circuits Subject To Harsh |
| 13 | Environments, Waterford Steam Electric Station Unit 3, with |
| 14 | enclosure, it's a memorandum to Samuel Collins and Leonard |
| 15 | Callan from Gary Holahan, dated May 16, 1990. |
| 16 | Staff moves that these be admitted into evidence. |
| 17 | JUDGE BOLLWERK: Any objections? |
| 18 | MR. MILLER: No objections. |
| 19 | JUDGE BOLLWERK: Staff Exhibits 16 through 26 are |
| 20 | received into evidence. |
| 21 | [Staff Exhibits 16 through 26 |
| 22 | were received into evidence.] |
| 23 | MR. MILLER: Alabama Power Company moves the |
| 24 | admission of Alabama Power Company Exhibits 93, 94, 95, |
| 2.5 | which have previously been identified for the record. |

| 1 | JUDGE BOLLWERK: Any objection? |
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| 2 | MR. BACHMANN: No objection. |
| 3 | JUDGE BOLLWERK: Alabama Power Company Exhibit 93, |
| 4 | being previously received into evidence Alabama Power |
| ŏ | Company Exhibits 94 and 95 are now received into evidence. |
| 6 | [Alabama Power Company Exhibits |
| 7 | 94 and 95 were received into |
| 8 | evidence.] |
| 9 | JUDGE BOLLWERK: Is there anything else that |
| 10 | counsel would like to talk about on the record today? |
| 11 | No? All right. Why don't we consider ourselves |
| 12 | adjourned until 9:00 tomorrow morning. |
| 13 | [Whereupon, at 4:20 p.m. the hearing was recessed, |
| 14 | to reconvene the following day, Thursday, February 13, 1992 |
| 15 | at 9:00 a.m.] |
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REPORTER'S CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

NAME OF PROCEEDING:

Alabama Power

DOCKET NUMBER:

50-348-CivP

PLACE OF PROCEEDING: Bethesda, Maryland

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

Official Reporter

Ann Riley & Associates, Ltd.