# ORIGINAL

# UNITED STATES NUCLEAR REGULATORY COMMISSION

#### IN THE MATTER OF:

DOCKET NO: 50-400-OL 50-401-OL

CAROLINA POWER & LIGHT COMPANY and NORTH CAROLINA EASTERN LIGHT TOWARD AGENCY

(Shearon Harris Nuclear Power Plant, Units 1 and 2)

LOCATION: RALEIGH, NORTH CAROLINA

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WEDNESDAY, NOVEMBER 14, 1984

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#### UNITED STATES OF AMERICA

#### NUCLEAR REGULATORY COMMISSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Bankruptcy Courtroom
Fayetteville Mall
Old Post Office Building
Raleigh, North Carolina

Wednesday, November 14, 1984

The above-entitled matter was resumed, pursuant to recess, at 9:19 am.

BEFORE:

JAMES L. KELLEY, ESQ., Chairman Atomic Safety and Licensing Board U. S. Nuclear Regulatory Commission Washington, D. C., 20555

GLENN O. BRIGHT, Member. Atomic Safety and Licensing Board U. S. Nuclear Regulatory Commission Washington, D. C., 20555

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#### PROCEEDINGS

JUDGE KELLEY: We are on the record this morning. First, let me introduce two distinguished visitors from the Federal Emergency Management Agency, Mr. Steve Rochlis, at the counsel table, and Mr. Spence Perry, on the rail.

There are two or three things to take up this morning prior to resuming the cross-examination but we do want to spend time first on the question of scheduling for the emergency planning contentions. We initially had a motion from the Applicants moving for changes in the previously established times. We deferred action on that pending certain developments.

Now, we know that the parties and the FEMA representatives met last evening to discuss the scheduling questions. This morning we have a document entitled "Applicants' Proposed Schedule" which lays out a pretty specific schedule setting forth at least the major milestones on the emergency planning litigation.

And the Applicants have taken quite a bit of initiative on this. I am going to ask Mr. Baxter, as an initial matter, to describe what got accomplished last night from your perspective and where you think things stand, and then the other parties can add to or modify or whatever they want to say on the same topics.

Do you want to go ahead, Mr. Baxter?

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Federal Reporters, Inc.  MR. BAXTER: Thank you, Mr. Chairman. Last night, the parties in attendance were Dr. Wilson and Mr. Eddleman, representing themselves; Mr. Reid on behalf of Change; Mr. Runkle, on behalf of CCNG; and, the representatives here today of the NRC Staff, FEMA, and Applicants. So, everyone was there.

And we discussed the --

JUDGE KELLEY: I saw Mr. Reid earlier but I don't see him now.

MR. BAXTER: The other parties will not -- I'm not sure they are going to be here, because this schedule represents the agreement that was reached last night --

JUDGE KELLEY: Go ahead.

MR. BAXTER: -- unanimously by all the parties.

And it has been typed up overnight, and I hope it accurately reflects -- I think it does -- what we agreed to last night.

Essentially, the major elements are that there is an extension of filing deadline for motions for summary disposition. And along with that, since there is more room in the schedule, we have agreed to additional time for the Staff and the Intervenors to respond to motions over what has been the practice on safety and environmental contentions and what is currently the practice on emergency planning contentions.

And this schedule reflects the fact that the emergency planning exercise has been moved from December 1984

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to May 17 and 18, 1985. The parties agree that it was desirable to have the hearing take place after that exercise.

And while we don't think there is any reason why that exercise would be delayed, this schedule contemplates that if it is delayed the filing of testimony and the hearing would be delayed by a similar period of time.

The June 18th, 1985 date --

JUDGE KELLEY: On that point about the exercise, if I can just interject -- maybe the Staff would be better to ask, but I will put it to you anyway, the litigation over whether the exercise has to be factored in, where does that stand at this point?

MR. BAXTER: The utilities have filed a petition for cert with the Supreme Court around the 1st of November.

And that's --

JUDGE KELLEY: It's a precedent sitting there.

It doesn't bind anybody but the parties. Of course, the NRC was a party.

MR. BAXTER: We have some reason to think that the Court of Appeals decision is stayed. I'm not absolutely certain of that. But --

JUDGE KELLEY: Your schedule here tries to work the exercise into litigation anyway, right? The way it's set up now.

MR. BAXTER: It certainly makes it feasible for the

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FEMA witnesses to be able to incorporate into their testimony, which is filed after the exercise, whatever they have learned as a result of that; and, therefore, the parties will have access --

JUDGE KELLEY: And the parties, too. Okay. So, it's really not an issue at this point.

MR. BAXTER: I don't think it should be. If there are additional contentions Intervenors want to propose, we will be operating under whatever the ground rules are --

JUDGE KELLEY: Yes.

MR. BAXTER: -- at that point.

JUDGE KELLEY: Right.

MR. BAXTER: I would like to mention that the

June 18 date was selected because the FEMA personnel and

the Region have conflicts with other drills beginning July 10;

and, therefore, it is the parties' hope that we will be able

to complete the hearing in that time period.

And, therefore, I think we would also urge the Board to schedule as many hearing days between June 18 and July 10 as the Board could support.

And I think that's it. I don't expect Dr. Wilson or the others to be here today, because this represents the stipulation of the parties. And if the Board concurs in the schedule, I would ask that the Reporter incorporate it into the record.

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JUDGE KELLEY: Let me just -- Mr. Eddleman, does this represent your stipulation, too, I take it?

MR. FDDLEMAN: Yes. I would like to just comment a little bit on the scheduling of the exercise.

JUDGE KELLEY: Sure.

MR. EDDLEMAN: In our discussions, I and some of the other Intervenors were concerned that we be able to have the results of this exercise that FEMA reports on in as expedited a manner as possible. And informally, as I understand it, the FEMA people will try to get that out as fast as they practically can, but there is no way that they can promise a certain date on it.

The moving of the hearing, if the exercise moves, is basically designed to make sure that the exercise takes place in advance of filing testimony and in advance of the hearing.

I'm just looking this over. I think it does cover the agreement as we worked it out.

JUDGE KELLEY: Do you want to take a minute? It's important that we all understand it.

MR. EDDLEMAN: Yes.

(Pause.)

Yes, the substance of this reflects the agreements that were reached as best as I know. And the only other thing I would point out is this little December 24th through

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January 2nd item on the responses to motions. That's sort of our holiday protection act.

JUDGE KELLEY: Right.

(Laughter.)

MR. EDDLEMAN: And if that extension extends a Staff deadline it would not automatically extend an Intervenor response deadline falling outside that. So, I just want to note at this time that if that happens, if the Staff deadline gets extended to where I would only have two or three days or four or five days to respond to it and not have it in hand, I may have to seek relief on that.

But it would only be a few days.

JUDGE KELLEY: Okay. Understood. Perhaps you were going to comment on this anyway, but I wanted to ask about the FEMA -- well, there will be FEMA testimony in advance, as I understand it.

Are there going to be FEMA interim filings? And, if so, when? And do you want to speak to those kinds of things or can you at this point, Mr. Rochlis?

MR. ROCHLIS: There is some kind of gap as far as the time frame is concerned, as to how fast we can get findings out after the exercise. I think it would be anywhere from three to five weeks, and that might cause a little bit of a problem.

MR. BAXTER: Are you talking about the plan review

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or the exercise?

JUDGE KELLEY: Well, let's take it one at a time. One of the things that is not in here is anything that says FEMA is going to do anything, and we assume -- I know you have been factored into this, but it would be good to have an idea, if not a date, in the schedule on what's going to happen and when.

We have talked about this before in prior prehearings but now that we are coming up closer to the real
time, are there going to be FEMA findings as distinguished
from -- on the exercise, as distinguished from the plan review?

Let's take the plan review first of all. Are there going to be findings in the plan review?

MR. ROCHLIS: There will be interim findings.

JUDGE KELLEY: On the plan review? Okay. And I think we all understand the kind of document that is.

Approximately when would that be available?

MR. ROCHLIS: I will get back to you on that. I

don't have a specific date at this time. J will have to talk

to the program people today when I get back.

JUDGE KELLEY: Okay. Then, separate and distinct from the findings -- correct me if I'm wrong -- there would be a witness coming to the hearing who would testify and file prepared testimony, correct?

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MR. ROCHLIS: That's correct. At this time, we are planning a panel of witnesses to address the issues.

JUDGE KELLEY: Okay. Now, we do have a day here, June 3rd, filing direct testimony. Is it contemplated that that's FEMA's filing date, too?

MR. ROCHLIS: That's correct.

JUDGE KELLEY: Okay. That's of the testimony?

MR. ROCHLIS: That's correct.

JUDGE KELLEY: But you will get back on the question of when we would get plan review findings. But they would substantially antedate the testimony at least?

MR. ROCHLIS: They should.

JUDGE KELLEY: Some time in the Spring would be the date for that. So, would there be three different FEMA documents? Interim findings on the plan, testimony on June 3, and then findings on the exercise as well? That's a separate document?

MR. ROCHLIS: Either findings or interim findings on the exercise.

JUDGE KELLEY: Okay. But the exercise coming in mid-May, it would quite possibly be -- if that takes five or six weeks, that could be right up on the hearing date; is that right?

MR. ROCHLIS: That might be the crunch. Hopefully, we will be able to get those out before the hearing date.

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end #1 oe flws JUDGE KELLEY: I realize you can't set all these things in stone at this time because you are working with a lot of other people, among other reasons, but we do want to get I think as good an idea as we can as to how this would work.

Then, would those three documents comprise the FEMA written filings as you envision it now?

MR. ROCHLIS: That's correct.

JUDGE KELLEY: Okay. Excuse us just a minute.

(The Board members are conferring.)

This schedule seems reasonable to the Board. I would make a couple of observations, maybe just one. We agree with the hope expressed in the last sentence about the Board being able to rule on summary disposition motions as they become ripe for decision if they are filed in advance of the deadline, and just more generally getting rulings out on such motions as soon as we can.

What we may very well do as we get into the case of several -- I think two or three anyway -- safety contentions, we may just announce the results and then the reasons for the result would come at some later point. Now, the virtues in that are obvious. The parties will know what's in and what's out and can go ahead and plan accordingly.

We frankly don't see any real disadvantage in that approach.

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JUDGE KELLEY: I can't see that anybody is really prejudiced by deferring the announcement of reasons. Is there something we are missing here? Is that approach okay with you, Mr. Eddleman.

MR. EDDLEMAN: Well, I think in principle it is okay. The only thing you lose by lack of reasons is if you want a motion to reconsider right fast, and I haven't often been able to do that, or had reason to, I guess.

JUDGE KELLEY: Mr. Barth, any problem with that?
MR. BARTH: No, Your Honor.

JUDGE KELLEY: You know, thumbs up or thumps dow, because the parties want to know, and we haven't had time to write up all the reasons. We may do that.

Mr. Baxter?

MR. BAXTER: That approach is fine with us. We prefer to get the news as soon as we can.

JUDGE KELLEY: That is what we thought. Well, it is proposed then, and we understand endorsed by all that this Applicants proposed schedule, dated November 14, 1984, -- you propose putting it in the transcript, Mr. Baxter?

MR. BAXTER: Yes, sir.

JUDGE KELLEY: As written, with the approval and knowledge of all parties and the approval of the Board. So ordered.

(Document follows)

#### Applicants' Proposed Schedule

January 14, 1985:

Last day for filing motions for summary disposition.

February 13, 1985:

Last day for Staff to answer summary disposition motions filed on January 14, 1985.

February 25, 1985:

Last day for Intervenors to answer summary disposition motions filed on January 14, 1985.

March 29, 1985:

ASLB ruling on summary disposition motions filed on January 14, 1985.

May 17-18, 1985:

Emergency planning exercise. If the exercise date is extended, dates for filing testimony and commencement of hearing to be extended by a proportionate time period.

June 3, 1985:

Filing of written direct testimony and exhibits to be offered as evidence. Testimony and exhibits filed on June 3 to be served by expedited service.

June 18, 1985:

Commencement of evidentiary hearing.

Where a summary disposition motion is filed in advance of the "last day" set in the schedule, the response times from service of the motion are 25 days for the Staff and 35 for intervenors. Any responses to motions that would otherwise be due between December 24, 1984 and January 2, 1985, inclusive, will be due on January 4, 1985. In addition, it is Applicants' hope that the Board would be able to rule on summary disposition motions as they become ripe for decision if they are filed in advance of the deadline.

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MR. EDDLEMAN: I think there was one other item that didn't actually make it in here. We had sort of an informal --

JUDGE KELLEY: Try the other mike.

MR. EDDLEMAN: Okay. There was another item about this that was an understanding of all the parties, I think, and I just wanted to mention it here, and that was that barring an Act of God or Acts of God that prevent filing by the the 14th of January that all pa-ties would adhere to the date of January 14th for filing motions for summary disposition.

JUDGE KELLEY: Okay. He has shown very little interest in this case so far, so that will probably hold.

MR. EDDLEMAN: At least with a signature on a document, that is true.

JUDGE KELLEY: Anything else? Okay. The other parties already have this, right? There is no need to serve, is that correct?

MR. BAXTER: No, we will send it to the other parties. We had a draft -- typed draft that we discussed, but then we agreed to changes, and we typed this overnight.

JUDGE KELLEY: Could you simply recite in your cover letter that was discussed and approved, and the Board is not going to put out a separate order. It will just be there.

MR. BAXTER: Certainly.

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JUDGE KELLEY: Thank you. We have a couple or three other things, I guess. Mrs. Moore?

MRS. MOORE: Yes. I would like to just make one request, and that is that the service list be amended to include Mr. Rochlis specifically on that list. It facilitates getting documents to Atlanta.

JUDGE KELLEY: Fine. So ordered. I know Mr. O'Neill had some information for us this morning on the subject of diesel generators. Should we turn to that next? I believe he mentioned it to the parties.

MR. O'NEILL: Mr. Chairman, what I would like to do this morning is to address a -- two proposed contentions which are outstanding, in that they are deferred, and update and provide to the Board and the parties updated information on the status of the Applicants' program on the TDI diesel inspection, and to make a motion as to how Applicants' would propose that the Board deal with these deferred contentions.

On March 8, 1984, in a conference call, the Board deferred ruling on two proposed contentions, Eddleman 178 and 179. These two contentions were filed on January 17, 1984 with other contentions that were based on information, or lack of information, in the SER. Both of the contentions cited as its -- as their basis, a pattern of QA failures

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at TDI manufacturing facility, and argued -- alleged first that the SER failed to deal with this, and then secondly, that Applicants had failed to deal with these alleged deficiencies.

The Board in its conference call ruling, the ruling deferring any consideration, noted that these were generic contentions. That the Staff had an on-going program, and the Board noted its intention of reviewing the contentions again as more light was shed on the subject.

And emphasizing the generic nature of these contentions, Mr. Eddleman's pleading in response to the Staff response to his contentions indicated that these were V-20 engines, and indeed they are V-16 engines, so that he really was not putting forth any specific information about the Harris plant diesels.

On July 31st, the Applicants, in a letter at the Board's request, submitted information on the TDI generators owner group program plan, and the satus of the Applicants program to deal with the identified deficiencies in the TDI QA of their diesel generators.

On August 21, 1984, Staff counsel filed with the Board and the parties copies of the Staff's SER on the program plan. The Staff found that the steam -- the diesel generator owners group program plan incorporated the essential elements needed to resolve all outstanding

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concerns relating to the reliability of the TDI diesel generators for nuclear service, and to ensure that the TDI diesel engines comply with general design criteria 1 and 17.

Furthermore, the Staff established an interim

basis for licensing plants prior to completion of all phases

of the program plan, and indeed, 3 V-16 diesel generator

plants have undergone operating licensing considerations

already, including Grand Gulf, Commanche Peak, and Catawba.

The owners group program plan has three phases, and in our letter of July 31, we reported on the Applicants efforts on all three phases and I would like to update that information now.

Phase I was resolution of 16 generic problems.

Phase I reports at that time had been provided to the NRC on all 16 of the problems, and indeed, there have been a number of supplemental reports. I have provided today to Mr. Eddleman, a copy of all of the Phase I reports submitted by the owners group to the Staff that deal with the V-16 engines. This does not, by the way, include all of the owners group Phase I reports, but just those that are relevant to V-16 engines.

There may be one or two additional supplemental reports, and if there are, I will provide them to Mr. Eddleman in the way of informal discovery.

The Phase II --

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JUDGE KELLEY: V-16, by the way, is a V-shaped block with 8 cylinders on each side, is that what that means?

MR. O'NEILL: I will admit that I have not reviewed in detail the engines. That is my general understanding, but I don't know if that is the distinguishing characteristic between V, 16-V, 12, and V-20. That is my guess.

JUDGE KELLEY: Okay.

MR. O'NEILL: Our diesel generator expert isn't here today, and I can't turn to him immediately. Probably like a V-8, though.

Phase II of this program plan is a design review quality revalidation program. This involves a very detailed inspection of the engines, and report on that inspection, a testing program, and a status of what changes need to be made to the engines in the way of replacing parts or verification of maintenance.

I reported in July that this Phase II report from the owners group and the consultants to the Company would be due the end of October. That date has slipped by about a month. The Applicants will then review the Phase II draft report, and will clarify it, and will incorporate the results of their pre-operational inspection and submit it to the Staff probably at the beginning of next year.

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And that date has slipped about a month or so from our report in July.

The pre-operational inspection has been essentially completed. There are a few follow-up inspections that will be left. As far as the engines are concerned, they will be reassembled, tested, and after testing they will be partially disassembled again, and inspected again.

And all this will occur during the first and second quarters of 1985.

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I have been authorized by applicants to state that applicants will commit to meet each of the applicable requirements set forth in Section 4.6 of the Staff's owners group program plan SER.

This provides an interim basis for licensing and is the same plan that the other applicants are following in order to license their plants prior to the completion of all phases of the program plan.

Indeed, it may be possible for applicants to complete the entire program plan before they start up because of the slip in the schedule.

But by reviewing the Phase I documents that

Mr. Eddleman has and the SER with this commitment to meet

all of the requirements in the SER, Mr. Eddleman is now in

a position to know essentially all of the details of applicants'

program to ensure the reliability of the TDI diesel.

Furthermore, applicants continue to extend the offer that we previously made to Mr. Eddleman to discuss the results of inspections to date and the details of the program in an attempt to satisfy him that the program is adequate.

We have previously extended this offer to him and due to his schedule we have not yet actually had such a meeting, but we would be happy to do that.

In light of this information, applicants propose the following in the form of a motion as to how this Board

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should deal with the deferred contentions. We believe that sufficient information is now available in order for the Board and for Mr. Eddleman to make some determination as to where we should go with the previously filed rather generalized generic contention.

We would move that Mr. Eddleman have 30 days from the date of the conclusion of this hearing within which to withdraw, amend or restate Contentions 178 and 179, and at that time also to make the required showing pursuant to 10 CFR Section 2.714A.

In light of the information that is now available in the owners group program plan and the SER that demonstrates that there is a way of ensuring the reliability of the TDI diesels, even with the admitted problems with the QA at the manufacturing facility, we believe that Mr. Eddleman now has a burden to plead a contention that finds fault in that program and not just to generally state that there has been some problems with the QA of the diesel generators at the manufacturing site.

This is a program that has had intense industry and NRC cooperative effort to try to resolve this program.

Indeed, Mr. Denton and top NRC staff have had a considerable amount of involvement in ensuring that this identified problem did not advsersely affect the reliability of nuclear plants.

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This is a vast body of information already publicly available and Mr. Eddleman has indicated that he has been involved in obtaining information from the Public Documents Room with regard to this. But the amount of information, that is just simply a very, very small sampling of what is publicly available on these programs.

What we are suggesting is that Mr. Eddleman must now come forth with a contention that sets forth a thesis as to why this program plan will not satisfy all of the concerns that have previously been identified about TDI diesels rather than simply to allege that there has been a deficiency at TDI and we now have to come forward and demonstrate that our diesels will operate properly.

We believe that we have a program plan that in effect is there and we ought to litigate what is wrong with it rather than to put forward a case that shows the program plan and discusses it in some detail in a hearing.

I mentioned to Mr. Eddleman and to Staff counsel that I would make this motion. I have not previously asked for their consent, but that is our motion

JUDGE KELLEY: Okay. Just one qustion. We have heard the motion and I think we understand it. Do you know whether the Commission itself has in some fashion passed on the adequacy of any other set of V-16's? Where is Grand Gulf, what happened there?

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MR. O'NEILL: I do know they have an operating license, full-power license, and I know that -- I am not sure exactly what status Comanche Peak is and you are certainly in a better position to say on Catawba, but the fact is that these issues have been raised in various ways before the Commission in three previous plants and they have been resolved in some cases in a proceeding and in other cases it became a contention and therefore wasn't specifically litigated. But I think that this is additional information that the Board should consider when it reviews any proposed contentions if Mr. Eddleman decides he wants to continue to pursue this.

JUDGE KELLEY: In connection with your motion, if we could just ask you could you briefly, and I don't mean in elaborate detail, but could you briefly supplement the motion by telling us the extent to which the Commission or the Appeal Board or other Boards have signed on the safety aspects of other V-16's, except Catawba. We know about that one.

MR. O'NEILL: I will be happy to.

JUDGE KELLEY: Maybe a letter to do a follow-up.

MR. O'NEILL: I will be happy to submit that in

JUDGE KELLEY: Thank you.

a filing as soon as possible.

I think, Mr. Eddleman, it seems to us, given the

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ce-Federal Reporters, Inc.  history of this, it is perfectly appropriate to hear a motion at this point, and we don't expect you to answer it at this point.

MR. EDDLEMAN: I would like to make some comments, whenever the appropriate time is, but I don't have a complete answer because obviously I have just received these domains.

JUDGE KELLEY: Right. You could, it seems to us, have the usual time. You could file a written response. You might want to comment in a day or two, and we can loan you a transcript and you can reread it, if you want to do that. What is your preference along that line?

MR. EDDLEMAN: Well, I think I would prefer to be able to look at a transcript and make a written response, what is it 10 days?

JUDGE KELLEY: Oh, why don't we just set a date. (Pause.)

MR. EDDLEMAN: How about the 26th.

JUDGE KELLEY: That week of Monday?

MR. EDDLEMAN: Yes.

JUDGE KELLEY: The 26th a written response. The Board may have a couple of observations to make before we quit here I expect which will be just by way of guidance and so on, but reaction, if you will, but it is certainly not a ruling. And whatever we have got to say, we will say maybe Friday before we go. But we would then look for your

written response on the 26th.

Does the staff want to respond now orally or in writing? What isyour preference? Ms. Moore.

MS. MOORE: The staff will also file a written response.

JUDGE KELLEY: You will file a written response.

Do you want the same date?

MS. MOORE: Sure.

JUDGE KELLEY: Okay, fine.

Did we have other things before going back to Contention 41 this morning?

Oh, we did have just a word to say. We received yesterday, you will recall, the parties filed responses to the Chan VanVo. We have looked them over and that is really all we have done is looked them over and read them rather quickly. The immediate issue was do we want oral argument on those motions at this point, and the answer is no. The pleadings do raise some subtle points, and I will say things we vay want to get into and ask some questions orally, but we don't really feel in a position todo that today. With further study we may satisfy ourselves that we don't need oral argument.

In any event, it is not fair to ask Mr. Eddleman who just received them to be able to respond in full. I think our bottom line is that we we will not call for oral argument

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on those contentions now.

It may be useful before we break up in the next day or two to set a time, at least a tentative time, to do a phone conference discussion of the motions. We won't try to do that right now, but the idea would be to just go ahead and pre-establish some time in a week or so to answer any of the questions that we have got and give Mr. Eddleman some more time to read the papers. Is that approach satisfactory?

We want to go ahead and rule on these contentions pretty quickly. On the other hand, time isn't of the essence between today and tomorrow and next week as we see it. So that is the approach we would rather take.

MR. EDDLEMAN: That is perfectly acceptable. Let me just note that Mr. Runkel I think has a conflict with the utilities commission hearings. I think that is where he is, but I will inform him of this. I think we would, I know I would like to be able to respond to this big stack of paper, but I haven't really been able to read it over yet.

JUDGE KELLEY: Well, let's just remember to raise it as a point to be resolved before we break up and we may set a time and everybody will know about it in advance.

MR. EDDLEMAN: Excuse me, Judge ---

JUDGE KELLEY: Yes.

MR. EDDLEMAN: --- I was just wondering, I had a couple of kind of off-the-cuff comments on Mr. O'Neill's

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motion that I would ike to make and I just wanted to know when it is appropriate to do that.

JUDGE KELLEY: Go ahead.

MR. EDDLEMAN: Okay. What I have been trying to get and have had some help from the folks with the Freedom of Information Act of the NRC and so on, is test results on the Harris TDI diesels. It seemed to me that if you are going to say well, there is something wrong with these diesels, the best thing to do would be to examine the results of a test and see what that is.

And, if I understand Mr. O'Neill correctly, they won't be completing those tests until sometime next year. On the other hand, the schedule has slipped. So that is my off-the-cuff reaction to it. I don't really know what is in this big stack about a foot high of documents that he has handed to me, but I will review them just as soon as I can and try to respond.

JUDGE KELLEY: Do you want to respond to that, Mr. O'Neill?

ME. O'NEILL: It is fair to say that the results of the tests will not be available, the actual operational tests until probably the second quarter of next year. There has been an inspection and those results will be available perhaps the first of the year.

But it would be our position that it is not

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Ace-Federal Reporters, Inc.  necessary to find out what the actual test results to determine whether or not there is a program to ensure the reliability of the diesel generators and, indeed, in all cases there hasn't been a complete testing program before some of the cthers have been licensed.

JUDGE KELLEY: Well, both sides are heard.

Anything else, Mr. Eddleman, at this point?

MR. EDDLEMAN: Nothing except when we got back
to 41, I think I am supposed to supply some information.

JUDGE KELLEY: Okay. Is that everything between

us and resuming No. 41?

MR. BARTH: I think so, Your Honor.

JUDGE KELLEY: Well, why don't we just take a

short break and resume in 10 minutes.

(Recess.)

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(The hearing is resumed at 10:15 a.m. after a short recess.)

JUDGE KELLEY: Okay. We are back on the record.

We can pick up now with the cross-examination of the Applicants
panel by Mr. Eddleman.

And yesterday we asked for two things from Mr.

Eddleman. One was an estimate of about how long you expected this cross would take on this particular panel; and, secondly, we wanted some reasonably specific indications of where Mr.

Eddleman expected to be going with this panel. And so we will turn to him at this point.

MR. EDDLEMAN: Okay. If I might just note, I remembered what Mr. O'Neill was saying about my pleading about the diesel generators and V-20s. That information that they were probably V-20s was supplied to me by someone on the Staff, whose name -- NRC Staff -- I have mercifully forgotten. But I believe they are V-16s.

Det's see, as to timing I don't want to be too optimistic, but I was thinking that if we move reasonably expeditiously -- I've got the documents here indexed now, and they are labeled by numbers, all the documents have been distributed -- I'm thinking on the order of three hours real time more for this panel. So, that would be finishing some time early this afternoon with my part of it.

I also just kind of sketched out, I think it would

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be less than a day on all the subpoenaed witnesses together, and I think certainly less than half the day on the Staff panel. And if Mr. Maxwell is going to appear with them, then integrating them in, which would probably be half a day or less.

So, I'm even thinking that it's conceivable that we could finish this up on Thursday, although I don't want to commit to that.

JUDGE KELLEY: Okay. That sounds reasonable.

MR. EDDLEMAN: Okay. The request was basically to say what's the problem on 41. I would like to note that I still haven't been able to find my original notes on an annotated copy of the Applicants' testimony. I've done a hundred percent reinspection of the documents I've got, and I can't find it. I have no explanation for where it is.

But I did last night rework things and am prepared to go forward. The problem, as I see it here, is basically how do you interpret all of these problems that they've had, CP&L has had, at the Harris Plant with pipe hanger inspections, the repeated problems, extensive failures of QA, things that they found that they either blundered into or the Staff caught and basically pushed them to address, or the Staff's investigations led them to address.

The documents that I filed on the 9th and referenced on the 9th, I think are also pretty basic to my case. #4-3-SueT

They, and the answers I hope to elicit from them, are based on them from the panel. And the other witnesses I think help show that the pattern of extensive problems with the QA on the pipe hangers at Harris undermines confidence in the QA program.

I also think that there are things, problems that have not been fully addressed yet. There is a lot of inspection to go. I believe that the training has been inadequate, at least in results that they have had to retrain and retrain and retrain welders and inspectors and others.

I think there is laxity in the weld inspection criteria. I think the permanent waivers or field change requests, other things that are used to basically approve something that doesn't conform to the design as set up, have not been adequately analyzed. I think there is a real question as to why with such pervasive problems there hasn't been more of a shake up in who is running the hanger inspection program.

I think there are questions about the degree of knowledge of the people who are running the program. I would also like to mention a few other things that I hope to get into in the cross.

Possible destruction of documents, having had to hve extensively revise basic procedures, not only once one problem was found but again and again and again. The allegations

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ederal Reporters, Inc.  of harassment. I understand, by the way, that -- I don't know if there has been a Board notification on this, but I understand that the NRC Office of Investigation, OI, is now inquiring into harassment of people who have reported problems with pipe hangers on the Harris Plant, and questions about work outside of procedure. For example, in the recent INPO audit. And I think those things need to be examined.

Some of them, the information was not available, at least as far as I had public access to it until after August 9th. But I think I was asked what I think the problems are now. And that's basically what I think that they are.

The contention is, as written, that CP&L's QA program fails to insure safety-related equipment is properly inspected. And, although the Board has limited that to looking at the pipe hangers, I think it has to be taken as an examination of at least that aspect of the Harris QA program and its adequacy over the years.

And I think the pattern is the key thing.

JUDGE KELLEY: Well, I think it's helpful to get a listing of some specifics. I guess we should just pick up and go. It strikes me like an awful lot to bite off in terms of topics and some potential for hitting a lot of things lightly and not enough to really get very far.

MR. EDDLEMAN: I think I have already done a good

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bit of this stuff.

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JUDGE KELLEY: Okay. Go ahead.

MR. BAXTER: Might I comment, Mr. Chairman, on where we stand at this point?

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JUDGE KELLEY: Yes.

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MR. BAXTER: One of the problems with yesterday's

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facts as to deficiencies uncovered, reinspections taking place,

examination, and we perhaps will be raising it again, the

retraining taking place, are addressed in the testimony.

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factual history is there.

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If all we are talking about is putting Mr.

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Eddleman's interpretation and conclusions on that versus

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ours, it seems to me it is almost something he can do in his

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proposed findings. And I would hope that we don't have to

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spend all of our time doubling up the record on other docu-

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ments that simply prove what we have already acknowledged in

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our testimony.

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That's just a comment. The latter part of his list still seems to me to be not a specification of things he can prove based on what he knows now, but still further exploration here in the hopes of uncovering something when he says -- he wants to know why there is not a shake up on people running the program, their degree of knowledge. He wants to explore destroying documents, harassments, work outside of procedures. I think we are still back to what had #4-6-SueT

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been bothering at least me, and I thought the Board also earlier, and that is fishing and exploring for theories here and not advancing ones that he thinks he can prove based on the documents he has got and the discovery that has taken place.

JUDGE KELLEY: I think what I was assuming when you listed some of the things you listed, my assumption was that you had in hand some evidence or solid indications that such and such was so, and that you would simply be looking into it here and not asking questions thinking that might pop up. That was my assumption.

MR. EDDLEMAN: Well, I have some information. The INPO audit, I believe I was first informed I think some time around September 14th, right at the end of the management — right after the end of the management hearing, I spoke to a person who informed me that this audit existed.

Very soon thereafter, a Freedom of Information Act request was filed with the NRC to try to obtain it. There hasn't been any resonse to that as far as I know yet. It's very difficult to get some of these things in a timely fashion.

JUDGE KELLEY: Let me ask if this is an INPO audit by an INPO team of inspectors?

MR. EDDLEMAN: As I understand it, that's right.

And I --

JUDGE KELLEY: Just on pipe hangers or on the whole

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thing?

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MR. EDDLEMAN: I think it included more than pipe hangers. And I was informed, although I don't have any proof of this since I don't have any response from the NRC, that NRC inspectors were also involved. But I don't have available a report of an NRC inspection covering the same thing either.

The problem, as I see it, is if I know something that I think indicates a problem I have to at least try to pursue it insofar as I can. Most of these matters I think would be quite brief. And it just strikes me that if I have information concerning something I need to try to follow it up, that's the only way I can make a case through cross-examination.

As to what Mr. Baxter said about the admission in the testimony of certain problems, I think that the key thing is the interpretation of the problems. And some of these actual documents I think would shed a different light on them than the witnesses did. And I think that's part of crossexamination.

That's what I intend to do.

JUDGE KELLEY: Let me just make a comment on the INPO report you referred to. And this is the first I've heard of this INPO report, but I will just make an observation and try to keep it brief.

I am aware of the fact that INPO, the Institute for Nuclear Power Operations I believe it is, has been going around

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the sites doing assessments of their QA programs with rather large teams of people. And they generate rather large reports citing various deficiencies and what's wrong with the plant, on what they thing ought to be improved at least. And this happened in a case I was involved in, Duke Power.

And they had an INPO report. It was an inch and a half thick. And it was turned over to the Intervenors in discovery, and then the Intervenors said: We want further discovery so we can really probe into the INPO report.

And that Board went to the extent of bringing in the INPO team, all of them, and holding a whole day hearing on the INPO report, and concluded that there was no basis for reopening discovery to get into the INPO report.

So, if we have nothing more here than some information that there is an INPO report that exists somewhere,

I don't think we are in any kind of shape to get into it, if
it's anything like the one I'm familiar with. Some sort of
rather comprehensive review by an outside organization. We
will probably find out here pretty soon just what it was.

But I just pass on my most recent experience in trying to put INPO reports into a QA contention. And that wasn't done anyway.

MR. BAXTER: Mr. Chairman, I hate to interrupt, but I've been advised by our QA personnel that the INPO inspection that we think Mr. Eddleman is referring to was in

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September and there is no report yet.

JUDGE KELLEY: Was this a team of INPO people?

I'm asking the QA Manager or Director, and he's nodding that that's true. This is rather informal, to say the least, but we are just trying to get some information.

Are they to produce a report based on their visit to Shearon Harris; is that correct?

Could you give your name again, sir? I'm sorry.

MR. BANKS: Harold Banks.

JUDGE KELLEY: Mr. Banks. Mr. Banks is a previous witness in the case. And there was an INPO team here, you say?

MR. BANKS: Yes. We had an INPO team that did a complete site construction audit by them.

JUDGE KELLEY: An INPO andit of QA, essentially?

MR. BANKS: The complete site. It included QA,
everything.

JUDGE KELLEY: Beyond QA?

MR. BANKS: It's an evaluation of the total construction project which includes the QA.

JUDGE KELLEY: Which includes pipe hangers?

MR. BANKS: That's correct. The final report has not been issued.

JUDGE KELLEY: Thank you. That's an example I think, Mr. Eddleman, of something that you can't get at in

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this hearing.

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MR. EDDLEMAN: Well --

JUDGE KELLEY: Not this week.

MR. EDDLEMAN: Well, I was informed of some things about the results of the inspection that I may try to ask about. If there are objections, there are objections, you know. I will deal with it when it comes up.

JUDGE KELLEY: All right.

Whereupon,

JAMES F. NEVILL,

ALEXANDER G. FULLER,

KUMAR V. HATE

and

## DAVID R. TIMBERLAKE

resumed the witness stand as witnesses called by and on behalf of the Applicants, Carolina Power and Light Company and North Carolina Eastern Municipal Power Agency, and having previously been duly sworn, were further examined and testified as follows:

## CROSS EXAMINATION

BY MR. EDDLEMAN: (Continuing)

Gentlemen, if I could refer you to this selections from Notebook 5 that has been previously marked as Eddleman Exhibit 20.

Do you have that?

4-11-SueT	1	A (Witness Hate) Yes.
	2	(Witness Fuller) Yes, we are ready.
	3	Q All right. I would like to refer you to about the
•	4	middle of the document to some pages relating to hanger in
	5	Unit 1, RAB, elevation 236, component hanger CC-H-344, if
	6	you could locate those sheets, please.
	7	A (The witnesses are going through documents.)
	8	Q The hanger number is CCH-344. The sheets are in
	9	about the middle of this document. I believe it's like the
	10	ninth, tenth and eleventh pages down in the document.
	11	JUDGE KELLEY: We have that.
	12	MR. EDDLEMAN: I'm waiting on the Staff. I believe
•	13	I handed the Staff an extra copy of this notebook yesterday.
	14	It had also been served on the 9th of August.
	15	MR. BARTH: Is that the Exhibit 20?
	16	MR. EDDLEMAN: Yes.
	17	MR. BARTH: We were not served on the 9th of August
	18	with Number 20. No wonder we can't find it.
	19	And this is the wrong one you gave us yesterday as
	20	Number 20.
	21	JUDGE KELLEY: You may have this one.
•	22	MR. BARTH: Thank you kindly, Your Honor.
	23	BY MR. EDDLEMAN: (Continuing)
	24	Q Gentlemen of the panel, do you have those sheets?
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A (Witness Fuller) Yes, sir.

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Q Okay. The first thing I would like to refer you to is what I believe is the last one relating to hanger CCH-344 which is a QA-34 form of -- well, it's QA-34-725-79, Revision 1 up on the top left.

Do you have that?

- A (Witness Timberlake) Yes, we do.
- Now, this is headed "Reinspection," is it not?
- A (Witness Fuller) Yes.
- Q Okay. And it shows acceptance with remarks of weld oversize, referencing FCR-286 and other pieces missing, correct?
  - A That's correct.
  - Q Okay. And the date there is January 20, '81?
- A That's correct. Now, then if we go back to the page previous to that, the facing page in this front and back copy, this is a seismic weld data report, QA-34, Revision 3, correct?
  - A That's right.
- MR. BARTH: Objection, Your Honor. This is what we have done time after time, is read this thing. This is in evidence already.

According to my notes -- the Applicant doesn't agree, but my recollection is that Number 20 has been taken into evidence. The document speaks for itself. Why read this thing?

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JUDGE KELLEY: I think the general point is that we are still trying to make sure we are on the right page.

We need the identification.

MR. EDDLEMAN: That's what I'm trying to do.

MR. BARTH: Thank you. I withdraw the objection.

MR. EDDLEMAN: One thing, to clarify, I'm not certain this thing is in evidence but I think I should probably move it in at the end of this questioning.

JUDGE KELLEY: We are not certain about this, Mr. Eddleman. You are on Revision 3?

MR. EDDLEMAN: In other words, the one that I first referred to is a front page. And the one I'm now referring to is the back of the page facing it.

JUDGE KELLEY: Can you give a little more descriptive data so we will know what --

MR. EDDLEMAN: Okay. It's a seismic one weld data report. In the upper left, it says "QA-34, Revision 3." It's dated 4/27/81 by the discipline engineer up towards the top.

JUDGE KELLEY: Okay. I think we've got it.

MR. EDDLEMAN: Okay.

BY MR. EDDLEMAN: (Continuing)

Q Now, what I'm trying to figure out here, gentlemen, down in Block 4 there is a reference about four lines down from the top there, to twelve fillets, and it appears the

number twelve was struck through.

Do you see that?

- A (Witness Fuller) Yes, sir.
- Q What do you interpret this to mean?

A It looks like it was a writing over another number when you should line through it and rewrite the number and initial it and date it, which I see that he has done.

Q Okay. And that refers to repairs of a previous problem identified above.

A That's correct.

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Q Then if we could turn over to the previous page, the previous two pages, to pages facing I am talking about, and these are also QA 34 Revision 3's.

Now, on this -- on these two sheets, there are a very large number of rejectable problems that are identified, are there not?

A (Witness Fuller) That is correct.

Q Okay. I represent that this Notebook 5, Eddleman Exhibit 20, is excerpts from discovery material of weld data reports supplied to me by CP&L, and that where a particular item, particular hanger is referenced in here, I have included all the sheets that relate to that hanger that were supplied, and I would move this into evidence.

MR. BAXTER: Applicants object, Mr. Chairman.

This brings to light the problem I alluded to on the last day of the management hearing, and again earlier in this hearing.

These documents are ours. They are, therefore, not challenged for authenticity, but these weld data reports out of this particular snapshot of time, do not represent a complete story on the inspection of these pipe hanger welds.

We have got simply excerpts and no way of telling from these documents what subsequently occurred with respect to the reinspection and approval of these hanger

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welds. They are also subject to interpretation, which I don't think necessarily that the Board or Intervener counsel representative is -- should be doing on their own without the assistance of witnesses, and just dumping construction documents into the record I don't think is going to produce a reliable record.

We have them marked for identification, so that the Appeal Board or anybody reviewing this can understand the questioning that is just taking place of the witnesses. These will be in the file, but they should not be admitted as substantive evidence, because they are incomplete.

JUDGE KELLEY: Can we get it a little clearer for my benefit anyway, in what sense are these documents excerpts. Mr. Eddleman said that he had put together all the pieces of paper that related to a particular weld, as I understood him. They were given to him. In what sense are they incomplete. Let's speak about the one that is before us here.

MR. BAXTER: May I ask one of the witnesses to explain that to the Board. Mr. Fuller?

WITNESS FULLER: I don't believe that we ever portrayed that this was a complete historical sequence of events for any particular hanger, and as we have mentioned from the reinspections that we have gone through in 1980 and 1982, there have been reinspections and WDRS generated,

under the enhanced program, that all of our hangers are included in that, being weld maps, so there are subsequent WDRs to the ones that we have here.

The fact that we have got hangers that appear

some of which we have here, and we have also mentioned that

The fact that we have got hangers that appear to be accepted at one time and rejected, that very possibly could be the case. In reading through the document here to determine if we are even talking about the same joints, we don't even know. So, all we just got is incomplete history on that particular hanger to date.

JUDGE KELLEY: Could you tell us further just how this history came into being in the discovery process. It may well be there laid out, but just for our benefit here and now, why are we looking at these particular documents?

MR. BAXTER: Let me try first, and you can supplement, Mr. Fuller, because he was involved. We were asked an all-encompassing request for every record of every weld inspection on a seismic Category 1 pipe hanger.

JUDGE KELLEY: On one particular pipe?

MR. PAXTER: No, all of them.

JUDGE KELLEY: Every piece of paper you have ever had on every weld at Shearon Harris?

MR. BAXTER: Every seismic Category 1 pipe hanger weld. That is eighteen thousand pipe hangers. We objected

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as burdonsome, and we offered to produce what we had at that given point in time.

MR. EDDLEMAN: There were 36 numbered notebooks, one unnumbered notebook, and three additional notebooks.

So they were all produced in a period around the summer of 1983.

JUDGE KELLEY: You asked for all the pipe hangers, and you got instead these 36 notebooks, plus what you just described, is that right?

MR. EDDLEMAN: That is essentially right. They were supposed to be complete documentation up to the point at which they were produced, or within a couple of months thereof. I asked about that in the discovery.

MR. BAXTER: Two things. We represented at the time that they weren't complete historically, because to research the history of every inspection on every hanger was a massive effort, because the documents weren't at that time organized that way.

We did say here is 36 notebooks of material we already have put together right now. They are not complete historically, but since we have got them together, you can look at these, and that is what was made available.

But, of course, there has been a lot of inspections since then.

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JUDGE KELLEY: I it is important we get this as crystal clear as we can, even though maybe one could reconstruct it by reading all the discovery papers.

These 36 notebooks at that time, did that represent every piece of paper about seismic welds at Shearon Harris up to that point?

MR. BAXTER: No.

JUDGE KELLEY: What did it represent?

MR. BAXTER: Do you want to try, Mr. Fuller?

MR. FULLER: As I recall from the fellow that told me that had put it together, it was the last year or two they were trying to have an office copy of the records for easy format, and when they do an inspection their secretary would go out and xerox a copy of it and put it in the notebook. It was just an office copy.

JUDGE KELLEY: A piece of time, so to speak?
WITNESS FULLER: Basically.

JUDGE KELLEY: But is that all the documentation in the welding area for that period of time?

WITNESS FULLER: Not necessarily.

JUDGE KELLEY: Not necessarily. Well, what is not included?

WITNESS FULLER: Once again, you know, like I say, it is not a proceduralized thing. It is: Hey, let's keep a copy of what is going on here.

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So, how diligent they were of keeping copies of everything, I don't know. Exactly what period of time they began, I don't exactly know that either.

JUDGE KELLEY: But the general idea was to make a copy.

WITNESS FULLER: Was to make a copy, right. And
I think we acknowledged it was around 12,000 pages in
interrogatory responses that we discussed with you we
agreed that that was probably representative.

JUDGE KELLEY: Wait just a minute. Off the record.

(Off the record discussion ensues)

JUDGE KELLEY: Back on the record. But these were the eld data packages, so to speak, and they were supposed to be copies of everything in the package pertaining to a particular weld, and Mr. Hate is saying, no.

WITNESS HATE: No, Your Honor. Those were not weld data packages. They were singular sheets of paper that were xeroxed.

As we said in our testimony, when we went to the enhanced program, when we started putting all the pertinent documentation into packages, that was one of the improvements that went with the enhanced program.

So, these don't necessarily represent all the data that existed at a particular point. It was just a

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sample of data that was available.

JUDGE KELLEY: Because at that time you weren't making packages, is that right?

MR. FULLER: I think maybe this is getting more confused. What Mr. Hate is referring to, when we began with the enhanced program, the QC package of WDRs was no longer kept by QC. It was all integrated into one construction work package. When they were made, were back in the days of when there were the QC packages, there was information in our package that may have some relevance to this that was not included in here.

JUDGE KELLEY: These are just QC packages.

WITNESS FULLER: This is from the QC information.

JUDGE KELLEY: From the QC Department.

WITNESS FULLER: These are just WDRs.

MR. BAXTER: These are inspection documents, essentially. Not everything about a hanger.

MR. EDDLEMAN : The notebooks were generally labeled WDR Notebooks, weld data reports. And I think that is what these consist of, just the weld data reports that they had.

JUDGE KELLEY: The so-called travelers.

WITNESS HATE: We call them travelers also.

JUDGE KELLEY: That go along with th weld. The history of the weld.

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WITNESS HATE: History of the weld, that is right.

JUDGE KELLEY: Okay. Now, Mr. Barth?

MR. BARTH: For the record, Your Honor, I would like to state that the Staff joins with the Applicants motion on the Applicants grounds, and we would like to state a further grounds.

If you will look at the documents to which Mr.

Eddleman is referring, he is referring to welds in July
of 1982. The Company then formed an enhanced program.

They use those terms, which we refer to, in very late 1983.

These welds and inspections took place before the program which is now in place.

The contention states that the Applicants QA/QC program fails to assure. These welds were not subject to inspection of the program which was under consideration of the contention, and they go way beyond the contention. They have no relevance to this contention whatsoever.

So, we put that as an additional ground, Your Honor.

JUDGE KELLEY: Are you arguing that anything prior to the most recent enhanced program is irrelevant?

MR. BARTH: No, Your Honor, we are not. There is no connection that these welds would not be picked up or fixed or detected if there is anything wrong with them under the new program. There is no connection between

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the document which Mr. Eddleman wants, and the contention and the program now in place.

He has got to make that connection that these welds would show a defect in the present program. There is no connection whatsoever. This is merely a pile of data, as Mr. Baxter pointed out, from all the welds before the program which is now in place.

There is no connection made between these welds which are in the --

JUDGE KELLEY: What kind of a connection do you mean exactly?

MR. BARTH: That is what Mr. Eddleman must undertake, Your Honor. I am not here to try his case for him.

JUDGE KELLEY: But you are taking a position, it seems to me, that anything prior to December '83 is just not in the picture.

MR. BARTH: I have not done that, Your Honor.

I said he has not shown the connection which would make this reliable probative evidence relating to the contention that the present program is defective in some way. This is merely a telephone book of weld histories.

JUDGE KELLEY: But it shows all kind of defects.

Doesn't that have some bearing on the adequacy of the present program?

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MR. BARTH: No. They were not inspected under the present program.

JUDGE KELLEY: Well, I still think you are saying that that -- you are saying in a practical matter, don't talk to me about anything prior to December of '83, that is what I hear.

MR. BARTH: That is maybe what you hear, Your Honor, but that is not what is being said.

JUDGE KELLEY: Okay.

MR. BAXTER: The point is, does the Board -- is this the way to accumulate reliable evidence on whether we have a good inspection program.

As we indicated, Mr. Eddleman had access to 14,000 pages of these. This exhibit has -- I haven't counted them, mayb 40. Would it be useful if we put in the other 13,960. I don't think so. I am sure he has picked out some that have what he considers to be deficiencies.

JUDGE KELLEY: Sure. Are you saying, then,

-- we are going on at some length, obviously, but here
is Mr. Eddleman saying I have this weld data sheet that
shows a weld that had all sorts of problems and a long
history, and you kept fixing it, and fixing it, and fixing
it, and it still wasn't right, and I want to put that in
showing that there were problems with welding.

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Are you saying that data of this kind is just out of the case entirely, that we just have a programmatic discussion of the question.

MR. BAXTER: No. I think if the witnesses are going to be asked about the information, you have reliable testimony coming from the witnesses.

My concern is just dumping the paper into the record without discussion and then everybody going home and writing proposed findings on information that the Board has no idea as to whether the interpretation being made of the document is accurate, or whether you have got a complete record.

If I have to anticipate, if I have to review all these documents tonight, and take a guess at what Mr.

Eddleman is going to argue from them, and come back and put on rebuttal in response to every considerable argument that he might make on these, it could take an extremely long period of time to do that.

That is not a threat. I just don't know how else
I am supposed to deal with this kind of material going into
the record without discussion.

JUDGE KELLEY: Isn't it partly a function of how much gets put in the record; whether it is the history of one weld or five welds or fifty welds.

MR. BAXTER: Certainly.

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JUDGE KELLEY: Right now, you have offered exactly how much of this, Mr. Eddleman. Is this all of Notebook 05, or just -- which pages are you offering?

MR. EDDLEMAN: No, sir. This -- I don't remember how thick Notebook 5 was. Some of them were fairly thin. But this would not be more than about five percent of one of the thinest notebooks. These are clearly --

JUDGE KELLEY: I guess what I was asking, could you tell me pages. What exactly is being offered now.

Maybe you said this before, but would you please say it again.

MR. EDDLEMAN: Let me try to explain this as I understand it. When I got these things on discovery, they came with a cover letter to Steve Mountcastle, who was one of the people that I asked to voluntarily appear and whose address they sent back and said they couldn't forward.

Anyway, the letter said that these weld data reports were being assembled in connection with trying to find the problems with the pipe hangers at the Harris Plant.

Okay. And that I would get all these notebooks, and I would go through them and indicate which parts I wanted copied. They had not onlt xerox sheets in them, but also they had some pink sheets which actually came off a form which had, you know, several copies that it

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made when the person wrote it out. And some of those were in there, and I was told that those were the most current ones, and they do cover a period of about two years.

And out of that, for this exhibit, which I did

prefile the 9th of August, it was certainly noticed that

I wanted to get it in the record by prefiling it, I selected

some of them that I do think indicate problems, and they

indicate basically we will find the problem, try to fix

that, maybe the fix doesn't work, find more problems,

find more problems, and so on, and that seems to me to be

indicative of things that were going on in the program.

I don't represent that this represents all 13,000 pages by a long shot, but it represents what happened with these specific welds that are dealt with in this exhibit.

JUDGE KELLEY: What I am trying to narrow this down to is what exactly am I talking about? Is this what has been offered, this twenty some pages, or is is it the middle four pages or what, that is what I am unclear on.

MR. EDDLEMAN: Well, I am offering all 20 odd pages of this, I guess. I haven't counted the number of pages that are in it.

JUDGE KELLEY: Well, we should do that, for openers. You have to know. There are mountains of paper. What exactly are you talking about?

I have got 18 pages.

MR. EDDLEMAN: 18 pages, fronts and backs.

Approximately 35 sheets and the cover page, which is not a report.

JUDGE KELLEY: Now, how many welds do these
18 pages, or 35 fronts and backs refer to? We have only
talked so far about one.

MR. BAXTER: We talked about one hanger.

JUDGE KELLEY: One hanger, having many welds, I assume.

MR. EDDLEMAN: Right, and we talked about one yesterday, and again, the reason I didn't want to go through point by point, by point, by point, is that the thing does speak for itself. It says, you know, looked at this piece. This is the welder symbol, and here is what the problem is, or it says it was accepted, and it gives dates when all these things were done.

And we did also inquire about the other one,

CCH 105 yesterday. I had some questions about that.

But --

JUDGE KELLEY: I am not sure I agree with your point that it speaks for itself. I can look at this, and I am not sure what a lot of these things mean. On the one hand, I am just speaking for mtself, and I haven't even conferred, and I am sympathetic with your wanting to

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get in some exhibits of this general sort that show actua problems as opposed to sort of programmatic testimony.

On the other hand, Mr. Baxter makes the point of it we just dump in a lot of paper that hasn't been talked about that doesn't speak for itself, what are we going to do with it, and that is a problem that we have to some how balance out.

You talked about Number 344, right?

MR. EDDLEMAN: Right. CCH 344, and we also yesterday went through CCH 105, which is the one up toward the front of it.

JUDGE KELLEY: 105 and 344. May I ask a question of the witnesses. 105 and 344, if those are ways of referring accurately to particular hangers or welds, hangers?

WITNESS FULLER: Hangers.

JUDGE KELLEY: Okay. Now, are there subsequent histories of those particular hangers? I assume there are?

WITNESS FULLER: Yes, sir.

JUDGE KELLEY: If they are reinspected at some later date, there is another piece of paper that talks about the same weld, right?

WITNESS FULLER: Yes, sir.

JUDGE KELLEY: Okay. If we were to admit 105 and

344 from here, we might want to the other piece. You may not want to introduce it, Mr. Eddleman, but we may want it anyway.

MR. EDDLEMAN: Well, I haven't seen it.

JUDGE KELLEY: I know. It is just for the sake of completeness. What ever happened to 105, maybe we can find out.

So, there are subsequent histories. Well, we have a motion that this be admitted, and the motion is for the entire package. Do we need to hear anything else before we retire to rule on the matter.

MR. BARTH: Your Honor, I would like to make one last attempt. At the conclusion of yesterday's hearing, Your Honor, at transcript page 6827, you made a direction to Mr. Eddleman to make a proffer today, and you asked him to give a fairly explicit description of where you want to go, and what you think is wrong.

And from my point of view, Your Honor, to make the connection he must say that here is a bunch of weld data, and they show that something is wrong with the present program. They don't do this.

For our point, we will stipulate every inspection report, every defect in the world, but what is the connection to whow what is wrong. What is your -- ask Mr. Eddleman, if you accept this document, Your Honor, and free to examine

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it, what is your conclusion going to be about the present program? What does it show that is wrong with it?

That is what is missing, in my view.

JUDGE KELLEY: Does the Staff say that everything that happened prior to December of '83 is irrelevant, and your answer is, no, right?

MR. BARTH: No, Your Honor.

JUDGE KELLEY: Your testimony goes on at great length about problems they had at Shearon Harris. That must have some significance to this case, and I just assume that Mr. Eddleman is pursuing the same point.

MR. BARTH: The significance, Your Honor, is that it stimulated Carolina Power and Light to enact a new program which they refer to as their enhancement program.

JUDGE KELLEY: I understand about that.

Anything else, Mr. Baxter?

(Note: No response.)

JUDGE KELLEY: All right. Mr. Eddleman?

MR. EDDLEMAN: Let me respond briefly to that.

I think that have had a number of new reinspection programs in the past, and this is one of the things that by these data, by their dates and all, relate to. I would also, if we are going to talk about chopping out just pieces of this as a possible alternative, I would like to bring out one other hanger at this point.

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JUDGE KELLEY: Well, I think the Board ought to just make a ruling at this point on this where we think we ought to go, and then we rule in your favor, or partly in your favor, maybe then we can move on. We would like to just step out for a moment.

MR. BARTH: Could I ask your indulgence for one more thing. I do feel I have been ineffective, and this does effect my own peoples testimony. If I might ask for your indulgence for one more comment.

JUDGE KELLEY: Sure, go ahead.

MR. BARTH: You asked what kind of connection must be make, are they all bad. I think the connection from my point of view as a lawyer is "at Mr. Eddleman has to show that the program that was intact, and against which these were inspected in 1982, has elements 1, 2, 3, 4, and those elements are in the present program, and that is why they were not picked up.

He must show that the inspection program which goofed on these welds, if I may use that term, would also goof on the welds under the present program, and therefore we have to discuss what kind of weld inspection programs were intact in July 1982, which are also intact today to show the similarity, and that we have never discussed these programs.

All we discussed is the bad weld. It picked up

bad welds.

We do not know what the criteria was by which that was picked up, which is similar to the present criteria, and therefore the present criteria we can assume is wrong or defective.

That is the kind of connection, in my mind as a lawyer, I feel should be made prior to discussing individual bad welds.

We do not know what kind of criteria in July 6,

1982 was intact which is similar to the present one, if it

was, which would then show a similarity in defect, or a

continuity of defect, or a remedy. That is what I meant

by, 'connection' Your Honor. Thank you for your indulgence.

JUDGE KELLEY: Thank you.

MR. EDDLEMEN: Judge, if I might briefly comment.

I have asked a lot of questions about the criterion effect at various dates. Counsel is practically asking me to make my findings right now, which I can't do, but I think my position on this whole matter is on record.

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JUDGE KELLEY: Okay. Let's take a short -- we are not going to take a break, but we are just going to retire a minute and talk about this.

(Brief recess.)

JUDGE KELLEY: Back on the record.

What number would this be, Mr. Eddleman?

MR. EDDLEMAN: This has been marked as No. 20.

JUDGE KELLEY: We have a pending motion to admit Eddleman Exhibit No. 20 into evidence which is an exhibit comprised of some 18 stapled pages printed on both sides, 35 or so pages altogether, and that motion has been opposed by the applicants and by the NRC staff.

We won't restate all the arguments pro and con.

We have considered all those arguments and we are going to

grant the motion in part and we are going to sustain the

objection in part.

By way of granting the motion, we are going to allow in documents concerning welds on which cross-examination directs the contention to a particular part.

By way of example, No. 344 I think was one of the numbers on three or four pieces of paper pertaining to No. 344. We would let in that paper pertaining to 344 because it has been crossed on to some extent.

Now we would allow into evidence all of those documents, but it would be understood that the main purpose

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of the admission would be focus on the matter that was brought out on cross and not some footnote on page 3 that nobody paid any attention to.

And, conversely, we are going to sustain the objection and exclude those portions of this numbered exhibit pertaining to welds on which no cross-examination has been had leaving open the possibility for perhaps another one or two. But consistent with the concept set forth, we are only going to put in the record documents that have been spoken to.

Beyond that -- the reasoning on this I think is fairly apparent from the arguments and we won't repeat that, but let me just state a few more corollaries of the point we are making.

In the first place, we believe that only a limited number of welds and documents relating thereto ought to be brought in on this basis. They are there we take it to show problems of inspection and reinspection in the past, and I think a few for that purpose would make the point in view of the fact that it is conceded by the applicants that there were problems of this nature.

If there is some particular document pertaining to some particular older weld that has some special claim to be in the record, we can consider that separately. But as a general matter, we think a limited number should suffice.

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Upon the admission of course the applicant would be able to do two things and/or the staff. There are, we are told, at least in some of these cases other papers bearing on particular welds. The subsequent history of these welds might include a reinspection that is not in this package.

So the applicants would be in a position, if they chose, or the staff to show the whole picture by bringing in that related documentation.

There will be an opportunity for the applicants to have redirect. Of course, the staff will have their opportunity for cross on this panel. The redirect or cross would be an opportunity to have further questioning from the perspective of the questioning party on the document.

We also think it reasonable under these circumstances if the applicants or staff wish to bring in additional information or questioning through rebuttal, then within reasonble time limits that is fair enough, too. After all, the exact welding materials to be brought forward were not known until this time and they can't be expected to put everything they have to say within an hour or two after they first hear about it.

So we can preserve an opportunity for rebuttal on particular welds if that is desired. So that is our ruling.

Mr. Eddleman, tell me again, it is weld No. 344?

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MR. EDDLEMAN: CCH-344 and CCH-105 are the ones that we have had examination on.

(Eddleman Exhibit No. 20, previously marked for identification, was admitted into the record with directions from Judge Kelley as to specific parts being admitted.)

JUDGE KELLEY: And those comprise particular pages within this document, and if you could, at your convenience, give the reporter exactly what pages they are. I think the others of us can find it.

MR. EDDLEMAN: All right. May I ask a couple of clarifications. I didn't ask about the dates and certain things that these things show. I mean it shows dates when the inspections were done and dates when certain signatures were put on. I would like to be able to refer to them, you know, from them being in the record on the ones that are admitted.

JUDGE KELLEY: I said these forms weren't selfexplanatory. Those particular things sound pretty close
to it. You mean you want to ask some further questions now?

MR. EDDLEMAN: No. What I am saying is I would rather, rather than have to ask isn't this date so and so ---

JUDGE KELLEY: Okay. I misunderstood your question. I think that is fair enough. I mean why take the

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Our main point is one of focus. If you have got several pages about a particular weld, then the question is why is this in, and it is in for particular reason one would assume, and there is a place on the form that shows it. But things like dates and other things to refer to for an orientation purpose, that is fine.

MR. EDDLEMAN: Okay. Also, I would have no objection whatsoever to bringing in, you know, the current and up-to-date weld data reports on any of these hangers.

The only thing I would ask is I think it would only be fair to bring in the entire history since it has been stated that none of these weld data reports were ever discarded. They are required to be retained. So if the history is not complete back to the beginning, and some of these start off with reinspections of the things I have received, I would simply just note, and I am not trying to make a motion or anything, but I would just note at this time that that is what I would expect to see, the whole thing.

JUDGE KELLEY: Well, let us just make this suggestion. As a matter of informal procedure you will put in what you want to put in and then Mr. Baxter and Mr. Barth can consider whether they want to put anything else in. If they don't, then that is the end of that. Then if they do, they can show you off the record what they have got and what

they want to do with it and see if you can't work it out.

And if you can't, we can discuss it.

MR. EDDLEMAN: All right.

JUDGE KELLEY: Do you want to go ahead?

MR. EDDLEMAN: Yes. I would like to ask about two other reports in this package, if I might.

JUDGE KELLEY: All right.

CROSS-EXAMINATION (Resumed)

## BY MR. EDDLEMAN:

Q Gentlemen, on the back of the third page I believe you will find a seismic weld data report for component hanger CCH-499. Now I am not reading the other part of the identifying number that comes before that, but it is on the form.

JUDGE KELLEY: Right.

MR. EDDLEMAN: I think it is self-explanatory from the document.

(Pause.)

WITNESS FULLER: Yes, we have got it.

BY MR. EDDLEMAN:

Q Okay. What I want to ask you about this is in sort of the left-hand column which I think you already testified can be used for comments in addition to problem descriptions. There is an indication of both oversize and extra welds, and I believe that shows that those were approved

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by way of FCR-286; is that correct?

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(Witness Fuller) That is correct.

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the third page from the back, the front of the third page from the back of the thing that is called Exhibit 20. What

Okay. Now I would like to also refer you to

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we are using here is the whole stapled item, and this is

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a weld data report on QA-34 of the 1979 revision for hanger

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CCH-110.

(Pause.)

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Do you have that?

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(Witness Fuller)

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(Witness Timberlake) Yes.

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(Witness Nevill) Yes.

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(Witness Hate) Yes. A

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Okay. Down at the bottom in the remarks there is a notation concerning lack of fusion. Can any of you explain what the problem of lack of fusion is and how it

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would be resolved by one of these RRs?

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(Witness Fuller) RR stands for reinspection rework. It was a document used during the 1980 reinspection to instruct the craft on what to do. Typically what that one probably said was there is lack of fusion on a certain joint out there, fix it, and this is simply a note by the QC inspector that it was fixed. He is explaining what was going on during that particular documentation up above.

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Q Okay. Is there any particular weld noted on this reinspection form here that we are looking at that indicates which weld had the lack of fusion?

A Not that I am aware of.

MR. EDDLEMAN: I would request that the ---

JUDGE KELLEY: I thought we had this and now

I am not sure. This lack of fusion notation we don't seem
to be able to find.

MR. EDDLEMAN: It is down at the bottom of the remarks section of the QA-34 7/25/79 Revision 1 for hanger CCH-110. It is a different looking form that the later ones. It has a remarks section at the bottom.

(Pause.)

May I show it to you?

JUDGE KELLEY: CCH-110?

MR. EDDLEMAN: Yes, sir, three pages from the back.

WITNESS TIMBERLAKE: It is actually four pages from the back.

MR. BARTH: The fourth page from the back.

(Mr. Eddleman showed the document to Judge Kelley.)

JUDGE KELLEY: Okay.

MR. EDDLEMAN: At this time I would request that the two pages, the one we have talked about and the one facing it on CCH-110, and I am asking for the one facing it

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just for completeness, and also the page that was discussed earlier concerning CCH-499 also be part of the admitted part of this exhibit.

MR. BAXTER: No objection.

JUDGE KELLEY: Mr. Barth?

MR. BARTH: No objection, Your Honor.

JUDGE KELLEY: The motion is granted.

CROSS-EXAMINATION (Continued)

BY MR. EDDLEMAN:

Q Gentlemen, I passed out this morning a Xeroxed copy of FCR-H-286, field change request, permanent waiver, consisting of four pages I believe. Could you locate that, please.

A (Witness Fuller) We have got it.

Q Is this to your knowledge, or any of you alls knowledge the FCR-H-286 that is referred to in some of the documents we were just discussing from weld data reports?

A It is.

Q All right.

JUDGE KELLEY: We are having difficulty. Sorry, excuse me.

MR. EDDLEMAN: I believe I distributed to copies to the Board.

JUDGE KELLEY: I am sure it is here. Just give us a moment.

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(Pause.)

JUDGE KELLEY: Maybe you can give us a hand, Mr. Eddleman.

(Mr. Eddleman shows Judge Kelley the document he is referring to.)

JUDGE KELLEY: I am sure I have got it here.
(Pause.)

BY MR. EDDLEMAN:

Now, gentlemen, is this field change request made up on a standard form that was used for the purpose of making and documenting the approval of field changes or premanent waivers for the Harris plant?

- A (Witness Fuller) That is correct.
- Q Okay. And it is in the area of pipe hanger welding?
- A That is the subject of the FCR, yes.

MR. EDDLEMAN: I would like this marked for identifiation as Eddleman 29, please.

JUDGE KELLEY: Very well.

(The document referred to was marked Eddleman Exhibit No. 29 for identification.)

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A (Witness Fuller) That's correct.

Q And the -- in the justification it says that this

FCR is required to permit, and then double underlined, the

words "prompt corrective action" continuing to resolve open

I want to call it the middle block -- the lower large block

on this page and then continues over on Page 3, correct?

Gentlemen, the recommended action as stated in --

A That's correct.

NRC items, correct?

Q On the second page of this, we have a design organization approval, approved as recommended per a telephone conference.

Is that how you read that?

A That's correct.

Q And also an approval by Harris Plant engineering section, and a document distribution list, correct?

A Are you referring to, under second distribution?

Q Yes, sir.

A Yes.

Q Okay. On Page 3, it gives some notes. Are those, to your knowledge or in your mading of this document, the description of the -- the continuation of the description of the problem from that block on Page 1?

A Yes.

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0 Okay. In Item 4 of those notes, why are the words "excluding flexible connection joints" struck through, do you know?

I'm not sure that it's struck through. I think it's the xeroxing here.

Let me see if I can -- what I'm trying to do is locate the original that that was copied from.

(Mr. Eddleman is searching through papers.)

The flexible connection joints are referred to in Item 6 also on Page 3, stating an itemized list of them is attached. And that is the list on Page 4, correct?

That's correct. A

Okay. Now, it says in Item 6 that the flexible joint is indicated by a notation in the weld system such as, and then it gives a welding symbol with a notation back on the tail of it, one-half inch return flexible joint connection, correct?

A Correct.

Okay. Now, in this document as a whole, what analysis of the appropriateness of approving this field change is there, to your knowledge?

(Witness Nevill) Okay. The -- I may jump back up to the two design organizations that are indicated, the first being part of the logistics and the procedural control for a resolution of a change request.

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Q Uh-huh. Are you referring to Page 2 here?

A Yes. I will go ahead in that direction to answer your question --

Q Uh-huh.

A -- so I think it will be a better understanding.

Ebasco being the A checked off by logistics. There was a telephone resolution with them because of the location, them being in New York City. That's why you see a telephone.

That way we keep the original document on site just to assure further control.

The design resolution would then be documented in accordance with the procedures by the Ebasco design organization.

The signatures in the second block by the Harris

Plant engineering group is just a follow-up on our part to

agree with the Ebasco resolution. The actual documentation,

engineering calculations, or whatever may be associated with

the analysis is done by Ebasco.

Q Well, this is dated in 1980. Was there any requirement at that time that you attach documentation of analysis to a field change request approval form?

A No, sir.

Q Is there a requirement that that be done now under the enhanced program?

A No, sir, there is not. The documentation that we

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have for an approval, you know, has always been documented separately within the design organizations for our control. Any notes or any clarification that may be required, as in a conditional approved SCR, would be noted on the document.

Q All right. Gentlemen, I would like to refer you to what's Document Number 51 in the Eddlemen Exhibit 21 list. FCR-H-979, Revision 3.

JUDGE KELLEY: Could we have a little more description of that?

MR. EDDLEMAN: Judge Carpenter has it, I know, because we just went over it. It's one of the ones I handed out this morning. It consists of I believe five pages.

JUDGE KELLEY: Okay.

BY MR. EDDLEMAN: (Continuing)

Q And I would like you also to obtain the document on the Eddleman 21 list is Number 52, CP&L, George White, FCR-H-979, Revision 3 - Justification.

This is a document of some thirty-nine pages in total, including the attachments.

Do you have those?

A (Witness Fuller) Yes, sir.

Q All right. Now, is the -- let me see -- do you have that?

A Yes, sir.

MR. EDDLEMAN: I would like to have these marked

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respectively as Eddleman 30 for the FCR-H-979, Revision 3, itself; and, Eddleman 31 for the FCR-H-979, Revision 3 - Justification, with attachments.

JUDGE KELLEY: Very well.

(The two documents just referred to, FCR-H-979, Revision 3, and FCR-H-979, Revision 3 - Justification, are marked as Eddleman Exhibits 30 and 31, respectively, for Identification.)

BY MR. EDDLEMAN: (Continuing)

Q This request was initiated by you, Mr. Fuller, wasn't it?

A (Witness Fuller) That's correct.

Q Okay. Were there any reasons beyond those stated on the document why you initiated this request?

A I'm sure there is a difference between this and Rev 2, and all we were trying to do is make whatever changes that we wanted, and we wanted to make them official.

Q All right. Now, this would then be, as it states, the third revision of an original FCR-H-979 that had been approved earlier; is that correct?

- A That's correct.
- Now, I would like you to look at Page 2, if you will. In the design organization approval block at the top,

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is a

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is any approval indicated?

A (Witness Nevill) No, sir, not by Ebasco. It's indicated to be the CP&L engineering section.

Q Okay. Was Ebasco not consulted about this?

A Well, yes, sir, they were. The normal process in an FCR is that on-site we have a choice, either to do it within the CP&L organization or do it in combination with Ebasco.

If we elect to do it in-house, we still in all cases submit a copy to Ebasco so they can be aware of the changes that we made.

Q Uh-huh. Okay. Now, the third sheet gives the visual inspection eriteria of field and shop welds, correct?

A (Witness Fuller) Correct.

Q And Sheets 4 and 5 -- I believe they are out of order in these xeroxes, but they -- on Sheet 5 of 5 there is an illustration of certain weld joints and how to gauge them, and on Sheet 4 of 5 illustrations of weld profiles; is that correct?

A That's correct.

Q Okay. I would like to ask you about Sheet 3. Was that basically the criteria that were implemented by this Revision 3?

A (Witness Nevill) Yes, sir, it was. And the criteria that is on this particular FCR is that used by

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Bergen-Paterson in their QA program.

Q So, are you saying that you had -- CP&L changed their criteria to conform to the same as Bergen-Paterson's, is that what this did?

A Yes, sir.

Q All right. Now, the justification, if I might refer you to that, now this is on a CP&L form, correct?

A Yes, sir.

Q Okay. And this justification was prepared by CP&L to support Revision 3 of FCR-H-979?

A Yes, sir, that's correct.

Q Okay. Now, the justification, as I'm reading it here, the statements made on the first page of this document, and then down at the bottom it says: See also BP/Ebasco infro attached for additional justication.

Correct?

A Yes, sir.

Q Now, the first part of the attachment is a Bergen-Paterson nonconformance report, correct?

A Yes, sir, that's correct.

Q And there then follows some copies of some disposition tags on I gather parts that had this problem that FCR-H-979, Revision 3, is intended to resolve?

A Yes, sir, it does. And if I recall, back in this time period this particular issue was raised by the Ebasco VQA

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and it related to potential weld defects on standard parts.

Q Uh-huh.

A And that's why these nonconformances apparently were generated.

Q Okay. Do you recall whether Ebasco VQA raised this problem before or after CP&L initiated a hundred percent reinspection of the vendor supplied shop welds for Harris pipe hangers?

A There is particular times on here. So, I guess if you just took the date off of some of the nonconformances, you assume it would be after. But I recall it being completely independent and completely separated from inspections on site to the hangers that we installed, and that Bergen-Paterson uniquely fabricates.

This relates purely to their standard parts, catalogue parts. I'm saying that because it's independent of what they fabricate through the fabrication process that we talk about in Contention 41.

- Q Well, now aren't these parts that this referred to welded parts?
  - A Yes, sir, they would be.
  - Q And are they used in pipe hangers?
- A Yes, sir, they are. They are considered catalogue parts.
  - Q Well, didn't the NRC in reviewing this FCR-H-979

find that the use of it was improper?

A Not that I recall.

MR. EDDLEMAN: All right. I would request at this time that Eddleman 30 and Eddleman 31 be admitted into evidence.

MR. BAXTER: The Applicants have no objection.

JUDGE KELLEY: Okay, Staff.

MR. BARTH: No objection.

JUDGE KELLEY: Okay. The motion is granted.

(The documents previously marked as Eddleman Exhibits 30 and 31 for Identification are received into evidence.)

The Board would like to take an earlier lunch than usual. If we are going to do that, we might as well do it right now to beat the lines at the various places. Why don't we just stop now and, since it's ten of 12, let's start at one.

And we will start promptly. Maybe you can be here a minute or two before. And we can get going right away.

Thank you.

MR. EDDLEMAN: Thank you.

(The hearing is recessed for lunch at 11:50 a.m., to reconvene at 1:00 p.m., this same day.)

(1:00 p.m.)

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AFTERNOON SESSION

JUDGE KELLEY: Back on the record. Mr. Eddleman can resume his cross.

MS. MOORE: Your Honor, before Mr. Eddleman resumes, the Staff has a preliminary matter.

MS. MOORE: At the beginning of this session of the hearing, I handed out to the Board and parties an affidavit of Everley and Dennis J. Kubicki. This affidavit concerns the Staff's position on SER Open Item No. 8, which relates to fire doors.

JUDGE KELLEY: Right.

MS: MOORE: There was extensive discussion of this subject with Applicants witness Mr. Venesque in the evidentiary session on Contention 116, and this discussion took place at approximately transcript pages 4392 to 4454.

The Board also expressed some interest in the issue during cross examination of Staff witnesses at 4786 to 4804. This item was left open in the SER of 1983, and Applicant submitted some information on the item on October 10, 1984. They have also submitted some additional information on November 8, 1984. The Staff has reviewed the information and the results of the review are contained in the affidavit.

I would like to move that the record be supplemented

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by the incorporation into the transcript of this affidavit.

JUDGE KELLEY: Just so I am clear, it is Mr.

Everley and Mr. --

MS. MOORE: -- Kubicki.

JUDGE KELLEY: Now, were those two gentlemen, or were one of them witnesses?

MS. MOORE: Mr. Everley was a witness in the proceeding. He is no longer with the agency, and Mr. Kubicki is also a fire protection engineer who participated in this particular aspect of the review.

At the time this item was discussed with the Board, the Staff argued that the particular item of the fire doors was not relevant to Contention 116, but since the review was completed, we have prepared the affidavit to give the Board the Staff's position on a matter that was covered during cross examination of both Staff and Applicants witnesses.

JUDGE KELLEY: And you are moving to include it, right?

JUDGE KELLEY: Okay. Mr. Eddleman?

MR. EDDLEMAN: I have been supplied with a copy of the affidavit, and I would object to its being admitted unless the yield point of the steel used in these fire doors and the temperature at which that yield point would normally be reached, and a definition, for example, in BTU per square

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feet, or definition stating that the ASTME-119 curve on combustable loading determines significant fire exposure, to cause the door to yield and I also think that the Affidavit should state the assumptions, for example, whether the assumption about the fire brigade arriving to deal with the problem is part of the analysis, or what other assumptions are there. Whether the door itself would actually stand up to a fire in the adjacent areas or area for three hours, as the ratings require.

Mrs. Moore and I had some informal discussions about this, and I want to emphasize that I am not asking to bring the witness back or bring the new witness or the new affiant down here to cross examine them on this. I just think that it is very difficult to argue from a record that doesn't define these terms, and they are important to the determination of what it is that they mean in their affidavit.

JUDGE KELLEY: So, you are saying that you object subject to that information being provided; the information you described?

MR. EDDLEMAN: Yes, sir.

JUDGE KELLEY: Let me get the Applicants position on this.

MR. O'NEILL: Mr. Chairman, we certainly do not object to this affidavit being part of the record. We also

argue, however, that the fire doors were not relevant to the contention as that contention was stated, although clearly the contention is ambigious enough that you can argue a number of things are within its bounds.

The Board did indicate it had some question about a record where there was an open item from the Staff's point of view.

Certainly this affidavit could be accepted if, for no other purpose, than for the proposition it is not an open item. The Staff is satisfied, for whatever reason that they are satisfied. That point need not be subject to intense cross examination as to the assumptions that go into that.

We also would not object to having additional information inserted into the record, except for the proposition we don't think it is necessary to simply corroborate the hundred and some pages of discussion on this issue by Mrs. Serbenesque, where she indicated in some detail why these doors were equivalent to a rated fire door.

I just simply don't think any of this is necessary for the Board to make its findings on this contention, but we certainly wouldn't object to it.

JUDGE KELLEY: We haven't discussed the affidavit yet. We got it, I guess, yesterday, so the Board has no

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position on this now. I am just searching for options.

I am not sure that is always a good idea, but let me just ask Mr. Eddleman the kind of information that you indicate you would want to have. Could we do that just as well on the telephone, if we had the people on the phone, or one of them anyway?

MR. EDDLEMAN: Well, I am just concerned to have it -- the additional information be as much a part of the record as the affidavit.

JUDGE KELLEY: Well, it would be. What I am thinking about is this, and again, I am not sponsoring this at all, it is just a thought. Suppose we were on a telephone conference in the near future, and one of the two people here -- one is gone, I understand -- but the other one gets on the phone and he has read over the transcript and he knows what you are interested in and he provides that information, and then you ask him a few questions, and that is transcript material that is in.

Would that satisfy you? Do you think that would satisfy your concern?

MR. EDDLEMAN: Sure, as long as I get a copy of the phone transcript a few days at least in advance of when the proposed findings are due.

JUDGE KELLEY: Maybe that is an option.

MR. EDDLEMAN: All I am saying, I don't even --

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as long as it can be submitted for the record. I don't care what form it is in as long as it supplies that information.

Mr. Eddleman's -- I will call it conditional opposition and the Applicants do not oppose it. The Board will have to consider that and make a ruling in the near future, and we will do that.

Anything else before we pick up?

(NOTE: No response)

JUDGE KELLEY: Okay. Mr. Eddleman?

BY MR. EDDLEMAN: (Continuing)

Q Gentlemen, if we could refer again to Eddleman Exhibit 28, which I believe is Document No. 96, on page 11 and following in the Eddleman 21 master list?

MR. BAXTER: These are the pipe hanger problems?
MR. EDDLEMAN: Right.

BY MR. EDDLEMAN: (Continuing)

Q And as I understand it, if I give a problem number, they have an independent reference system for finding it.

JUDGE KELLEY: This is previously marked as Eddleman 28?

MR. EDDLEMAN: Yes.

JUDGE KELLEY: Could you give us a description?

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MR. EDDLEMAN: The cover is Carolina Power and Light Company, PHP Transmittal Sheet, upper right side, WP-110, Exhibit 1. It is a fairly thick thing. It is over a quarter inch thick. It consists of a number of these pipe hanger problem sheets.

JUDGE CARPENTER: What was that again?
MR. EDDLEMAN: 110, Exhibit 1.

JUDGE KELLEY: My documents are in total disorder today. I can't find it. I need all the help I can get. Why don't you go ahead, Mr. Eddleman.

BY MR. EDDLEMAN: (Continuing)

Q I would like to refer to PHP-1246, please.

Now, this transmittal sheet notes that the hanger is built. Does that mean it has already been constructed?

A (Witness Fuller) That is correct. Or at least there is some steel up and welded.

Q Okay. Do you read this thing as attempting to resolve previous problems, the PHP-895 and PHP-1146, for example, that are referenced in the problem description?

A Without reading 895 and 1146, I really don't know what the problem is.

Q Okay. At any rate, this proposes to put certain welds at certain parts of various pieces which are identified by numbers, right?

A That is correct.

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Q Okay. When you do weld mapping under your enhanced reinspection program, does the weld map identify the various pieces in the same way that these pipe hanger problems do; that is, by numbers?

A Weld maps are by welded joints. We call them things like field joint 1, field joint 2, field joint 3, et cetera. If you were to put this particular PHP into the weld map sequence, I would once again have to have the drawing. For argument sake, let's assume there is only one piece, three to four; that might under the new weld map sequence, be called field joint 1.

- Q And if there were another one, that might be field joint 2, or 3, or --
  - A That is correct.
- Q Okay. Now, is the weld mapping process simply assigning a unique number to each weld on the hanger?
  - A To each joint on the hanger.
- Q Each -- okay, so a joint might have more than one weld, is that what you are saying?
- A A joint could have welds on opposite sides, or all the way around, and it would still be the same joint.
- Q Okay. Could I call your attention to Document
  No. 49 of the Eddleman 21 sequence. This is fronted by
  a sheet Carolina Power and Light Company, Shearon Harris
  Nuclear Power Plant, Procedure Change Notice for Procedure

8-9-Wal WP-139. 1 It consists of about 20 or 25 pages attached. 2 JUDGE KELLEY: Can we have that just once more? 3 MR. EDDLEMAN: Yes, sir. JUDGE KELLEY: That is prefiled, correct? 5 MR. EDDLEMAN: Yes. It is Procedure WP-139, 6 Procedure Change Notice is on the front sheet. That is 7 Exhibit 13 AF-IV-03, up in the upper right corner. 8 MR. BARTH: Does this have one of your numbers 9 10 on it, Mr. Eddleman? 11 MR. EDDLEMAN: It is number 49, I believe I 12 said. Excuse me. Down at the bottom, if it helps, there is the stamp designation on the lower right, 000619. 13 14 JUDGE KELLEY: 000619? 15 MR. EDDLEMAN: Yes, sir. 16 JUDGE KELLEY: WP-139? 17 MR. EDDLEMAN: Right. JUDGE KELLEY: Okay. 18 19 MR. EDDLEMAN: Pipe hanger work package preparation 20 is the procedure title. 21 JUDGE KELLEY: Okay. Right. 22 BY MR. EDDLEMAN: (Continuing)

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Q Gentlemen, do you have that?

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A (Witness Fuller) Yes, we do.

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Q Okay. Now, is this the procedure for preparing

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work packages for pipe hangers that was rut in place as part of the enhanced inspection program at Harris at the end of 1983?

A Yes, it is.

Q Okay. And the two front sheets are the changes that were implemented on the dates shown?

A That is correct.

Q Okay. Now, this describes all the parts of the work package, and how they are supposed to be generated and used for Harris hanger under this program?

A I believe it gives a brief description of a lot of the documentation in the hanger packages, but it doesn't give all the information of how it is to be used, such as, I believe, an SWDR is attached to the back of this as one of the exhibits, and it talks about who is filling out what, but it certainly doesn't supplement or supersede any of the QA procedure requirement of filling it out.

Q So, this procedure establishes what has to be in the package, but does not change the requirements for how the various reports like the seismic weld data report would be filled out, is that correct?

A That is correct.

MR. EDDLEMAN: I would like this marked for identification as Eddleman 32, I believe is my next number.

JUDGE KELLEY: Very well.

MR. EDDLEMAN: And I would move that it be admitted into evidence.

MR. BAXTER: No objection.

MR. BARTH: No objection.

JUDGE KELLEY: Motion granted.

(Above referenced document is marked and received in evidence as Eddleman Exhibit No. 32)

MR. EDDLEMAN: Now, I am trying to do a little document control here myself to keep these in order. I would like to next refer you to documents 33 through 35 of the Eddleman 21 list, and the front one is the document No. 35 on the list, a letter to John Harris, Southwest Feabricating and Welding Company, concerning fabrications isometrics. And I request that this be marked as Eddleman No. 34.

JUDGE KELLEY: Just looking for it.

MR. EDDLEMAN: Would include all three of the items, 33, 34, and 35 of the Eddleman 21 list.

JUDGE KELLEY: A letter to whom again?

MR. EDDLEMAN: John Harris. It is Ebasco letterhead, January 18, 1982. Very dark print, if that helps. It is about five pages.

JUDGE KELLEY: Okay.

MR. EDDLEMAN: Gentlemen, do you have this 1 letter and attachments? 2 MR. FULLER: Yes. 3 BY MR. EDDLEMAN: Okay. JUDGE KELLEY: Are you proposing to number this 5 -- which number? 6 MR. EDDLEMAN: Eddleman 34. I will point out 7 that the file number is 5QP1, and 5QM30 that are listed 8 as 33 and 34 are all on this letter. It is really one 9 document. 10 11 JUDGE KELLEY: Well, I have a cover, one page letter, and then I have five pages --12 MR. EDDLEMAN: -- attachments, as noted on the 13 letter. 14 JUDGE KELLEY: Five pages, right? 15 MR. EDDLEMAN: Five page attachment, correct. 16 JUDGE KELLEY: And that is, again, 34? 17 MR. EDDLEMAN: Yes. What I am trying to point 18 19 out is that 33, 34, and 35 are really all the same document. MR. BARTH: The next document for identification 20 from Mr. Eddleman's list is No. 33. 21 MR. EDDLEMAN: Oh, I am sorry. It should be marked as Eddleman 33, that is what it is. 23 24 JUDGE KELLEY: All right. 33. Ace-Federal Reporters, Inc.

(Above mentioned document

End 8. MS fols.

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is marked Eddleman Exhibit No. 33 for identification.)

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## BY MR. EDDLEMAN:

Q Gentlemen, are any of you familiar with this document?

MR. BAXTER: Objection. This document on its face appears to deal not with pipe hangers, but with piping manufactured by Southwest Fabricating and Welding Company. We are dealing with pipe hangers here manufactured by Berg and Patterson.

MR. EDDLEMAN: What I am trying to find is a reference to piping on the letter.

(Pause.)

MR. BAXTER: We are doing from the basis of knowing who the fabricator is. I would be happy to have the Board ask the witnesses is that correct.

MR. EDDLEMAN: Will you let me ask the witnesses? I will ask them.

JUDGE KELLEY: Go ahead, Mr. Eddleman, if you want to.

## BY MR. EDDLEMAN:

Q Gentlemen, does this document, to your knowledge, have anything to do with pipe hangers for Shearon Harris?

A (Witness Fuller) No, it doesn't.

MR. EDDLEMAN: Okay. That takes care of that.

JUDGE KELLEY: So we withdraw No. 33 then from

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-Federal Reporters, Inc. 25 It has never been moved into evidence.

JUDGE KELLEY: If it is obvious it has never been and it is never going to get there, why don't we just keep the 33.

MR. EDDLEMAN: Well, it has just been marked.

MR. EDDLEMAN: All right, we will just knock it off.

(The document referred to, previously marked Eddleman Exhibit 33 for identification, was WITHDRAWN.)

BY MR. FDDLEMAN:

Q Mr. Timberlake, I would like to call your attention to a few of the training documents which are referenced on my list.

The first one I would like to refer to is numbered No. 71 on the list. It is a memo dated December 9, 1980 from you to a Mr. R. Hanford, and with attachments to a thickness of about a quarter inch. It is stated as 44 pages total.

Do you have that?

A (Witness Timberlake) Yes, I do.

MR. EDDLEMAN: Okay. Now let's mark this one as Eddleman 33, if we may.

JUDGE KELLEY: Let us catch up with you.

MR. EDDLEMAN: Okay.

JUDGE KELLEY: Will you repeat the description

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MR. EDDLEMAN: It is dated December 9, 1980. It has got like a dark bar across the top of the date. Memo R. Hanford from D. Timberlake, subject: Welder Craft Training Bimonthly Update.

JUDGE KELLEY: Just a minute.

(Pause.)

All right. 33?

MR. EDDLEMAN: Yes, sir.

JUDGE KELLEY: Okay.

> (The document referred to was marked Eddleman Exhibit No. 33 for identification.)

BY MR. EDDLEMAN:

Mr. Timberlake, I believe that your attachment to your testimony giving your resume shows that you transferred to the Harris Site Mangement Section on August 1st, 1980.

At that time period, yes. That is right.

Okay. Did you take up welder craft training at that point or after you moved to the Harris plant?

Well, for the first week and the third week of August of that year I was in training to get my required reading requirements completed for the Harris site. The second week I was transferred back to Brunswick for about five dats for a project there.

Then after that time, after that reading period

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requirement was completed, I was working with craft welding and was involved in training.

Okay. And was it a regularly established thing then that you would provide a bimonthly update on welder craft training as part of those responsibilities you took up in late August of 1980 at the Harris plant?

That is part of our unit's program, yes.

Okay. And were you the person that was designated to make these reports, that is what I am trying to get at?

A Not always, no.

Well now, it it states on this memo that all welders and welding foremen received this training class, correct?

> A That is correct.

Was this a class that was set up or required in part because of the problems with pipe hangers that the NRC inspector identified in September of 1980?

That is correct.

When it says a two and a half hour training class, does that mean that all of this material would be covered normally in two and a half hours?

It means that the information covered in this letter was covered in individual training clases which lasted approximately two and a half hours.

Okay. A person would take one of those classes

or would they take all of them?

A Just one.

Q All right. Now the attachment -- would you look back at about the 7th or 8th page in this stapled document. There begins an apparently handwritten sheet, outline for welder training class, do you have that?

A Yes.

Q Now was this the outline that you used for those classes that are referenced in the memo?

A That is correct.

Q Okay. That page and the following pages consist basically of instructions as to the standard welding symbols, correct?

A Correct.

Q Okay. And then after that, and this is about another seven pages back, there is a printed sheet with the title "Standard" in the upper right corner. Do you have that?

A Yes, I do.

Q And is this the handout that you used in the class?

A I think that is correct, yes. I need to refer back to the letter. It doesn't state there that a handout was given out.

Q I believe if you look at the introduction of the outline for welder training class under Item 1-A ---

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- A Right, the handout was given out.
- Q Okay. And the handout is listed as attached, right?
- A That is correct.
- Q There are actually two pages of this handout of basic welding symbols and their significance to supplementary symbols and elements of welding symbol and so forth as shown here, right?
  - A That is correct.
- Memo to welding supervision from B. B. Issum concerning controlled welding material and a handout attachment. Did you also cover that in these classes?
  - A Yes.
- Q And the test that is the next page titled "Test Welder Craft Training November '80," has down in the bottom right-hand No. 000511. Was that the test that was used in your class?
  - A That is correct.
- Q Was this administered as part of the class within the two and a half hours or was that afterwards?
- A Well, as I recall, it was done at the end of the class.
- Q Okay. The prequalified joint welding procedure procedure specification beginning right after that with page 1 of 26 and continuing through page 26, was that also

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Sim 9-7 covered in your class? 1 Yes, it was. A 2 MR. EDDLEMAN: At this time I would move that 3 Eddleman 33 be admitted into evidence. 4 MR. BAXTER: No objection. 5 MR. BARTH: No objection. 6 JUDGE KELLEY: Motion granted. 7 (Eddleman Exhibit No. 33, previously 8 marked for identification, was admitted into evidence.) 10 BY MR. EDDLEMAN: INDEX 11 Q Mr. Timberlake, I would now like to refer you to 12 document No. 61 of the Eddleman 21 list which I believe is 13 14 noted on page 6 of that list. File SHP-1/2 is in the upper left. Title "QA/QC Harris Plant Personnel Training," dated 15 16 April 5, 1984. This is a fairly thick set of attachments, 17 over a quarter of an inch. Down at the bottm right is the designation "000616." Do you have that? 18 19 A (Witness Timberlake) Yes, I do. Has everybody got it? 20 (Witnesses nodding affirmatively.) 21 Now this first sheet here, let's see --22 (Pause.) 23 24 MR. EDDLEMAN: I guess I should asked that this

be marked as Eddleman 34.

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JUDGE KELLEY: Very well.

(The document referred to was marked Eddleman Exhibit No. 34 for identification.)

## BY MR. EDDLEMAN:

Q This top sheet on personnel training, is this a standard form that is used to describe the content of personnel training for the Harris plant and detail the people who receive the training?

A (Witness Timberlake) It is used in that manner by the QA/QC organization.

Q Okay. Mr. Nevill, could you please look at the third page in this document, QA/QC Harris Plant Personnel Training, 3/29/84.

A (Witness Nevill) Yes, sir, we have got it.

Q I can't read the signature of the instructor there. Is that you?

A No, sir, it is not. I was not involved in this at all, in the training aspect of it.

A (Witness Timberlake) Mr. Eddleman, that is my signature.

Q It is.

(Laughter.)

In fact we could establish this if we looked over on the next page of the document, couldn't we?

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That is correct. A

Mr. Timberlake, have you done a number of such training classes in 1984?

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I have done some.

And in fact if we look over at the next page beyond the memo that you signed, that is down to the fifth page, we have a class where the instructor is listed as David Timberlake, do we not?

That is right.

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I would like to refer you a little further on, a few more pages down there is a company correspondence letter of CP&L dated March 26th, 1984 to Ray Hanford from you concerning a half hour training class on the requirements of site spec 034, Revision 12, related to structural and hanger welding for QC inspection personnel with outline and

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That is correct. I have that.

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The outline consists of the next how many pages,

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(Pause.)

if you can help me out there?

attendance sheet attached, right?

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It is nine pages I believe.

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Okay. And you covered all this in half an hour? 0

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Yes, I did. A

And then we have got some more training records 0 of apparently some other classes, one of which was instructed

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by yourself that immediately follows this class outline?

If you look right behind the outline on the next page.

A Yes.

Q Okay. I would like to refer you back about 10 pages further in this. There is a SHP one-half file, personnel training sheet dated 2/16/84 concerning qualifications of I think it is welders and welding operators?

A That is correct.

O Okay. The attendees, their names are typed out and signed off except for five it appears on this sheet that have N/A after their names, correct?

A That is right.

Q Now have you ever had a class attendance sheet where the names of the people to receive training are printed on it and they have to sign off by their names?

A I don't recall any classes that I have ever taught where that was true.

Q To your knowledge, are any of these people welding inspectors who inspect piping at Shearon Harris?

A Yes, some of them are.

Q Okay. The next page begins a description of this training, does it not, that these people received?

A Yes.

JUDGE KELLEY: I am out of sync, Mr. Eddleman.

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Could you locate me here again? What page are you on?

MR. EDDLEMAN: Following the page we were discussing, the typed names and the N/A's on it, the next page ---

JUDGE KELLEY: I have got one of those, but I am not sure it is the right one. Is that dated 3/6?

MR. EDDLEMAN: No, sir, it is dated 2/16.

JUDGE KELLEY: 2/16/84.

MR. EDDLEMAN: There may be anotherone dated 3/6 in here, but I am on the one that is 2/16.

JUDGE KELLEY: All right. Now what date are you on now?

MR. EDDLEMAN: I had just turned with Mr. Timberlake to the next page, which is CP&L Company correspondence dated February 7, 1984. It has a designation over toward the top right of WE-754.

JUDGE KELLEY: These papers are not in chronological order, are they?

MR. EDDLEMAN: I don't believe so.

JUDGE KELLEY: About how far are you into this particular piece?

MR. EDDLEMAN: Just a little shy of the middle, Judge.

JUDGE KELLEY: Now the one that you want to talk about now is dated when?

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MR. EDDLEMAN: February 7, '84.

JUDGE KELLEY: Okay. This is a memo to Hanford

and Forhand from Shake?

. MR. EDDLEMAN: Correct.

BY MR. EDDLEMAN:

Q Is that correct, Mr. Timberlake?

A (Witness Timberlake) Yes, that is correct.

JUDGE KELLEY: All right.

BY MR. EDDLEMAN:

Q And this is the training that was done in that class that is the training sheet -- as noted on the previous sheet, right, right?

A That is correct.

Q And, in fact, if we go back through this, there are some other training sheets, for example, inspection criteria. I don't want to have to go through every one of these with you, but just let me ask you this. There seems to have been a lot of training going on in this time period fo early 1984. Would you say that is correct?

MR. BAXTER: These documents are not limited to 1984.

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BY MR. EDDLEMAN: (Continuing)

2 Let me ask it this way. In the period from 0 3 January through April of 1984, as documented in various parts 4 of this exhibit, there is a substantial amount of training 5 for various personnel including welders and weld inspectors

(Witness Timberlake) Well, I think -- I'm not really sure how you intend your question to be taken.

(Witness Hate) Maybe I can clarify that we have a continuing training program going on, whether it be in 1980 or '84 or '85 it's a continuing training program.

Well, now, the training that is going on here though, as I understood Mr. Timberlake, was connected with the revised -- I can't remember the word that you characterized it by --

MR. BAXTER: Enhanced.

for the Harris Plant, is it not?

BY MR. EDDLEMAN: (Continuing)

Yes. The enhanced pipe hanger inspection program; is that correct?

(Witness Timberlake) I never said that.

Well, Is any of this related to that enhanced program?

Some of it may be. I don't think there is a direct correlation.

Q All right.

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A The training of the QC personnel, as Mr. Hate was explaining, is just part of their ongoing training program.

Q Okay. Let me refer you to -- this is -- I don't know any better way to specify it, it's about two-thirds of the way to the back of this, maybe three-quarters, this is another Corporate QA/QC Section Personnel training sheet, dated 11/29/83, Class Title Site Specification 033.

Do you have that?

A Yes, I do.

Q And, then also following that there is a handwritten sheet referring to a training class held for latest revision to WP-110.

Now, would that have been Revision 9 in late '83?

A (Witness Fuller) Yes.

Q Okay. Let me refer you to further back here, another personnel training sheet, dated 10/25/83, topic, NVEP605, Revision 1, and so on.

MR. BARTH: Your Honor, at this time I would object. We have been for half an hour on this piece of paper. I would object. It's just not relevant. It doesn't tend to have any tendency to make the existence of a fact that is of a consequence to the determination of this contention anymore probable than that. It's just not relevant.

We just sit and read this piece of paper, though

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it's very interesting -- I'm learning a lot -- I think it's irrelevant. I object, Your Honor.

MR. BAXTER: I join in --

MR. BARTH: To both the question and the line.

MR. BAXTER: I join Mr. Barth, Mr. Chairman. We are sort of cataloguing this document. The witnesses have testified that there is nothing unique about this training. It's part of the ongoing training program.

If Mr. Eddleman's purpose here is to demonstrate that we've done inadequate training I don't see how we are getting at that point through this cross-examination.

MR. EDDLEMAN: Well, let me pursue that if I might.

I want to get out of the objection, because I don't see the

need to go through every part of it.

JUDGE KELLEY: Now, we have an objection to the line as so far developed, right? It's along the lines of relevancy, and I would like you to respond to it.

MR. EDDLEMAN: Sure. Okay. Some of these outlines are quite extensive and the amount of time that the stuff is covered in is stated on some of these documents, how much time it takes to instruct in all these areas. And I think that, on its face, raises a question of the adequacy of the instruction.

And what I would like to do to tie this up is to simply ask if these are fairly typical of the documentation of

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the training programs that have been ongoing at Harris in late '83 and early '84.

JUDGE KELLEY: But your submission on the relevance point is, if I understand it correctly, is that the outlines compared with the time devoted suggest a sort of slap-dash approach to training, superficial, pick your word, but that's the idea?

MR. EDDLEMAN: Yes, sir. And this after years and years of having problems with these particular kinds of things.

MR. BAXTER: What we are doing here then is looking at a snapshot without having established what other training has already been provided to these welders and welding inspectors. You've proved nothing about whether they were adequately trained to take a look at one month or two month's classes, the length of time devoted to a given subject, without knowing what they have already heard about that subject.

That's pure speculation, Mr. Eddleman's thesis that this represents inadequate training on these subjects.

JUDGE KELLEY: Isn't it pretty common for a party to put in his version of reality and then the other party to fill it out? I mean, I think this proves what they say it proves.

Isn't it up to you to come in and fill in the picture? Is that a reason to keep it out?

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MR. BAXTER: We are not talking about keeping anything out at this point. We are talking about what we are accomplishing with this line of questioning, of going through page by page talking about each -- and we've heard for the first time just now that that's what he is attempting to show.

Yeah, we can respond to it once we know what the thesis is. We haven't known up until we raised this objection what it was.

JUDGE KELLEY: But the objection is raised. I thought I was ruling on an objection to a line of questioning on the ground that it was irrelevant. And now we are determining whether it's relevant or irrelevant. And Mr. Eddleman offered that reason for its being relevant, and so that would suggest that the objection be overruled, which it is.

MP. EDDLEMAN: I intend to wrap this up.

JUDGE KELLEY: Okay.

BY MR. EDDLEMAN: (Continuing)

Q Gentlemen, I represent to you this is discovery documents I received from the Company.

Did any of you have anything to do with preparing the sampling of documents on training produced on discovery for me in this -- with respect to this contention?

A (Witness Fuller) I didn't.

1nc.  (Witness Neville) Neither did I.

(Witness Hate) I didn't.

(Witness Timberlake) I don't recall being involved in it, no.

Q Okay. Well, Mr. Timberlake, you do recognize these documents as being the kinds of forms and outlines that are used to document the training of welders and weld inspectors at Shearon Harris, right?

A Yes.

Q Okay. I was going to require about the representativeness of this but I think it might be better to refer to the discovery.

Do you gentlemen have a copy of the Applicants' responses to Wells Eddleman's interrogatories dated April 17,

A (Witness Fuller) Yes, we do.

Q All right. The interrogatory, 41-31, on Page 43 of that document, asking about additional training, do you have that? The interrogatory is in the middle of the page.

A Yes, we do.

Q Okay. That refers to additional training beyond what was done prior to 1983, does it not?

MR. BAXTER: Would you repeat that question, please, Mr. Eddleman?

MR. EDDLEMAN: That question asked about additional

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training beyond what was done prior to 1983.

MR. BAXTER: Okay.

WITNESS TIMBERLAKE: Correct.

BY MR. EDDLEMAN: (Continuing)

Q And the next question, down at the bottom of the page, asks in detail about training related to problems inspecting pipe hangers at Harris. And the answer on the next page says that documents detailing this ongoing training will be produced.

Does it not say that?

A That's correct.

Q Okay. Mr. Timberlake, do you know how much, or how many classes would be offered in training concerning welding or weld inspection that would relate to pipe hangers for the Harris Plant in early 1984?

I mean, was it like one class a week or five classes a week, or can you recall?

MR. BAXTER: For a given welder or on the site?

MR. EDDLEMAN: The number of classes being conducted by the training personnel.

WITNESS TIMBERLAKE: I really don't recall.

BY MR. EDDLEMAN: (Continuing)

- Q Okay. Certainly there were as many as are documented in Eddleman Exhibit 34 for the period, right?
  - A For the period, that's correct.

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MR. EDDLEMAN: At this time, I would like to move the admission of Eddleman 34 into evidence.

MR. BAXTER: No objection.

JUDGE KELLEY: Earlier there was an objection on the line, and we are prepared to admit the exhibit. In the light of the discussion of it, however, in terms of what it was designed to prove, and on that basis we will admit it.

(The document previously marked as Eddleman Exhibit Number 34 for Identification is received into evidence as Eddleman Exhibit Number 34.)

# BY MR. EDDLEMAN: (Continuing)

Q Mr. Timberlake, if I could refer you to Handout Document Number 26, entitled "Outline for Welder Training Class," that's on the first page of the Eddleman 21 master list.

MR. EDDLEMAN: And I would request that this be marked for identification as Eddleman 35.

JUDGE KELLEY: Give me a little description again, please?

MR. EDDLEMAN: Yes, sir. It's -- the face is a handwritten document entitled "Outline for Welder Training Class." It's Number 26 on the typed copy of my sheet, the Eddleman 21 master list.

JUDGE KELLEY: Is this Mr. Timberlake's outline?

MR. EDDLEMAN: It appears to be.

BY MR. EDDLEMAN: (Continuing)

- Q Is that right, Mr. Timberlake?
- A It's the same outline, that's right.
- Q Okay. Now, if we go past the outline in the handout sheets there, the next things we come to are some lists of attendees for a welding symbols class in 1980; is that right?
  - A The 10/17/80 list?
  - Q Uh-huh.
  - A Okay.
- Q All right. Now, to the knowledge of any of the members of the panel, would this training in welding symbols have been in response to the problems discovered by the NRC in September of 1980?
  - A It was in response to that.
  - Q All right.

JUDGE KELLEY: Excuse me, Mr. Eddleman. I'm in trouble again. This is exhibit number what?

MR. EDDLEMAN: This would -- I asked it to be marked as Eddleman 35. I don't recall whether it has actually been marked yet. And it begins with the handwritten outline for welder training class and has some attachments, approximately 25 pages total.

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MR. BAXTER: It's the same outline that was just included in the Eddleman 33.

JUDGE KELLEY: Is this the bi-monthly update document?

MR. EDDLEMAN: No, sir, it's another document.

MR. BAXTER: Can you explain for us why the outline is in two exhibits, or what the difference is?

MP. EDDLEMAN: Since it appears to be the absolutely identical outline, I think it's an error in either my assemblying the documents or the reproduction.

If it would clear things up, it might be better to mark the part not including that outline and attachment as Eddleman 35. But I've got to tell people what it's in so they can get it.

JUDGE KELLEY: Let's go off the record.

(An off-the-record discussion ensues.)

JUDGE KELLEY: All right. We are back on the record.

This is to be marked as --

MR. EDDLEMAN: Eddleman 35.

JUDGE KELLEY: Now, Mr. Baxter has a question though about having some of the same material in two.

MR. EDDLEMAN: Right. And I said I would be perfectly agreeable to just -- Mr. Timberlake's outline and attachment are the first I think eight pages of this. At any

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rate, the handout sheet, the printed handout sheet, about the welding symbols is a real give away as to what the last part of that is. And what I'm saying is I'm perfectly willing to just mark as Eddleman 35 the portion of this that goes on from there so it doesn't duplicate it.

JUDGE KELLEY: So, if I take this document -- where do I start? This page is gone?

MR. EDDLEMAN: The Timberlake outline in its entirety would be eliminated, since that's already part of another exhibit.

JUDGE KELLEY: Okay.

MR. EDDLEMAN: And the two attached basic welding symbols, location significance, handout sheets attached, those go, too, because they are also in another exhibit.

JUDGE KELLEY: Okay. What then is Page 1 of 35?

MR. EDDLEMAN: The training record from Daniel

Construction Company, 10/17/80, welding symbols class. That

would be the beginning of Eddleman 35.

JUDGE KELLEY: Okay. All right.

(The document referred to above is marked as Eddleman Exhibit Number 35 for Identification.)

BY MR. EDDLEMAN: (Continuing)

Q Mr. Timberlake, after we go through those attendance lists for -- let's see, on the two welding symbols class

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attachments that are there, the length of the class in both #10-12-SueT 2 cases is given as two hours, is it not? 3 (Witness Timberlake) That's correct. All right. Now, the next page here is a speed 4 5 letter to the files from you, is it not? 6 7 That's correct. 7 Okay. Skewed T-fillet weld measurement class, now 8 is this in response to a problem found with the skewed T-fillet 9 welds on the Harris pipe hangers? 10 Yes, it is. 11 Okay. And that's dated February 2nd, 1982, right? 12 A That's correct. 13 With an attachment showing the attendees' signa-14 tures? 15 Right. You might note that the training class was A 16 conducted on January 21st, 1982. 17 As stated on the speed letter, right? 18 A Right. 19 Okay. Now, it says that this class covered the 20 use of parallel lines in measuring skewed T-fillets as out-21 lined in AWS D1.1-81, correct? 22 A That's correct. 23 Joe flws

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I would like to refer you to Document No. 25, 1 on the Eddleman master list, Eddleman 21. And that 2 consists of four pages entitled, Shearon Harris Plant 3 QC Receiving Training Program. 4 It is entitled Shearon Harris Power Plant 5 QC Receiving Training Program that was prefiled, written 6 date is June 18 though 21, 1979. The first page. Got 7 it? 8 JUDGE KELLEY: Okay. 9 BY MR. EDDLEMAN: (Continuing) 10 Mr. Timberlake, do you have that? 11 0 (Witness Timberlake) No, I don't have it yet. 12 Let me see if I have an extra, just for 13 convenience. 14 Okay, we have got it. 15 That is it. Now, on the -- I would request that 16 this number 25 be marked as Eddleman 36. 17 JUDGE KELLEY: Okay. 18 XXXX (Above referenced document is 19 marked Eddleman Exhibit No. 36 20 for identification.) 21 BY MR. EDDLEMAN: (Continuing) 22

Q Mr. Timberlake, in the comment section of that first page, it states that AWSD.1.1 was utilized as some kind of reference. Is that code reference?

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A	(Witness	Timberla	ake) I	believe	it	is,	yes
0	Okav. N	ow, this	is the	training	ı fo	or v	isua

Q Okay. Now, this is the training for visual weld examination for the QC receiving program, correct?

A That is correct.

Q Okay, it is an eight hour class, as listed. And on the next page we have a similar class of August 9, 1979, also using AWSD.1.1 as code reference?

MR. BAXTER: Mr. Chairman, the documents speak for themselves. We are just reading them again. We aren't having questions.

JUDGE KELLEY: Okay.

BY MR. EDDLEMAN: (Continuing)

Q Letting the document speak for itself, Mr.

Timberlake would you turn over to the last page of this.

I am sorry. Strike that.

Is AWSD.1.1 the same thing that is referenced your speed letter of February 2, 1982? Same code?

A It is the same code, maybe a different year reference in both places.

Q Do you know whether the guidelines in AWSD.1.1 for measuring a skewed tee fillet welds have changed from 1979 to 1981?

A No, I don't. I do know that they changed from 1975 and '76 addenda to '77 addenda. That was part of the initial problem that we had. The '75 edition of AWSD.1.1

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is the edition that cite structural welding is done in accordance with, and it did not clearly define skewed tee fillet weld parallel line measurement techniques, which was added in '77 edition to that document.

Q Well, now, the Harris plant actually wasn't under construction until 1978, was it?

A (Witness Hate) That is right, but we still use the 1975 Code to D.1.1, and that training that you referred to, that was done in 1979, and was probably done for the '75 version of D.1.1.

Q But it doesn't say which version was used does it, the '79 document?

A (Witness Timberlake) No, it doesn't.

Q Mr. Timberlake, why was it necessary to use the 1981 version in the training you did in 1982?

A Because the figure that is used in the '81 edition clearly outlines the techniques for using parallel lines in order to measure skewed tee fillet welds, and it also clearly outlines how you handle gaps and increase in fillet weld size for the same measurement. That was the edition that was chosen, and also it was clearer, and it showed the technique that the '75 edition did not show.

Q Was it found to be -- was the '81 edition then found to be applicable to the Harris plant?

A No. The discovery of the skewed tee fillet weld

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problems and not properly measuring it came about as a result of CP&L organization seeing clearning house reports for other plants that were experiencing the same problem.

So, in conversations with our design organization, we discovered that we had that problem. We went out and did some investigation in the field. That is how the problem came about.

Q Mr. Hate, if I could ask you, do you know approximately how many weld inspectors there were who would be working with pipe hangers in the Harris Plant in first half of 1982?

A (Witness Hate) No, I don't.

Q Mr. Timberlake, if you will turn over from your speed letter here in Eddleman 35, the next page, this is a memo from you concerning a welding inspection training class that you conducted in 1982?

A (Witness Timberlake) You are talking about the February 2, 1982 speed letter?

Q Yes, sir.

A Okay, I have that.

Q Next page after that?

A Okay.

Q That is a memo concerning a class for welding inspectors that you conducted on April 7, 8, 1982?

A Well, the memo doesn't specifically state that

it is for welding inspectors. 1 It is a class in welding inspection, is that right? 3 It is a class on the measurement on the skewed tee fillet welds. 5 MR. BAXTER: I think you are both looking -- I am 6 sorry, I don't think you are looking at the same documents. 7 The questioner and the witness. 8 Mr. Eddleman, are you looking at a typed memo 9 of April 14, 1982? 10 11 MR. EDDLEMAN: Yes, I am. MR. BAXTER: Mr. Timberlake is still looking at 12 the speed letter. 13 MR. EDDLEMAN: I am sorry. I thought I referred 14 to the next page after that. 15 16 MR. BAXTER: You did, but you never said what it was. 17 WITNESS TIMBERLAKE: The next page was a list 18 of attendees. 19 BY MR. EDDLEMAN: (Continuing) 20 Q Okay, there may be a single page omitted from 21 your copy. Can I show him the pages? 22 MR. BAXTER: He has got it, just tell him what 23 24 the document is you are asking him about. WITNESS TIMBERLAKE: You are talking about the 25

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April 14th, 1982, typed letter from myself to Jim Trimmer?

MR. EDDLEMAN: Yes, sir.

WITNESS TIMBERLAKE: Okay, I have got that.

BY MR. EDDLEMAN: (Continuing)

Q All right. Now --

JUDGE KELLEY: The problem may be arising from a lack of caffeine, which we will fix in a moment.

MR. EDDLEMAN: May I ask him one question.

JUDGE KELLEY: Yes.

BY MR. EDDLEMAN: (Continuing)

Q This gives the information about that class, as stated on the letter in the attachments, doesn't it?

A (Witness Timberlake) That is correct.

Q All right. Including the length of time that was spent on it?

A Correct.

Q Okay.

JUDGE KELLEY: Ten minutes.

(Short recess taken)

JUDGE KELLEY: We are back on the record now.

MR. BARTH: Your Honor, for a moment may I raise a point of order. I was discussing the proceedings with the reporters, and it has come to my attention that the reporters have not been given three copies of each document which has been admitted into evidence with the proper number

put on it.

This was requested by the Staff, and exceeded to by Your Honor, and we had a long discussion of this at previous hearings, in which Your Honor directed that the reporter be given these copies so we can have a record that makes some sense. I have the feeling this has not been done, and I think we ought to take a look at this matter now before the record is so jumbled no one can figure it out.

MR. EDDLEMAN: That is correct. The reporters have brought the problem to my attention, and I am going to make sure they get the right number of copies and numbered as they should be.

The problem was that I didn't have them numbered when I passed them out.

JUDGE KELLEY: For today, so to speak, the reporter gets one properly numbered, and gets the other two by the time we break camp at the end of the hearing. Won't that be satisfactory. Don't you think so, Mr. Barth?

MR. BARTH: Yes, Your Honor.

JUDGE KELLEY: Okay. Let's operate on that basis, then.

MR. EDDLEMAN: Okay. I will need to borrow the transcript to check those.

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JUDGE KELIEY: Appreciate you bringing that up, 1 Mr. Barth. 2 BY MR. EDDLEMAN: (Continuing) 3 Mr. Timberlake, did I refer you to the back part 4 of Eddleman 35, about six pages from the back, there is a 5 speed letter from you. It has got kind of a gray line 6 logo up at the top, and the date, I believe, is 6/5/81, 7 Training Class for Hanger Welders. 8 A (Witness Timberlake) Yes, I have that. One 9 held on June 4th? 10 Right. A one hour class, right? 11 A Okay. 12 And the attachments there are the matters which 13 were covered in that class and a list of attendees? 14 A That is correct. 15 All right, sir. I would like to refer you to the 16 document that is numbered 23 on the Eddleman 21 master 17 list, which is another file SHP-1/2, Construction QA 18 19 Section Personnel Training Document. It consists of four pages, the first of which is dated 12 September 1980. 20 JUDGE KELLEY: Was 35 moved in? I am not sure. 21 MR. EDDLEMAN: Not yet. I was going to move --22 JUDGE KELLEY: All right. 23 MR. EDDLEMAN: Well, I can do it now. Ace-Federal Reporters JUDGE KELLEY: If you are passing another document, 25

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that is why I questioned it. Maybe you still have questions on that; I leave it to you.

MR. EDDLEMAN: I do want to tie something back to it.

JUDGE KELLEY: Okay.

MR. EDDLEMAN: I would request that the September 12, 1,30 document, the one that the first page is that, be marked as Eddleman 37.

JUDGE KELLEY: This is Construction QA Section,
Personnel Training, September 12, 1980, one and a half
hours, Hanger Inspection and Documentation, marked as
Number 37. Okay.

(Above referenced document is marked Eddleman Exhibit No. 37 for identification.)

#### BY MR. EDDLEMAN:

- Q Do you have that?
- A (Witness Timberlake) Yes, I do.
- Q Okay. Was this training on September 12, 1980 in response to problems identified by the NRC inspection in early September 1980?
  - A (Witness Hate) Yes.
- Q Okay. And as to the outline that is the next page there, in Item C-4, this reference to an RCI if a question occurs in the drawing, what does that refer to and what kind of questions would cause an RCI?

A RCI stands for Request for Clarification of Information. Essentially what we covered in that training course was that if somebody had a question with regards to a drawing, which would include questions on weld symbols, that they were to get that question answered before they proceeded with the inspection.

- Q Okay. Is the RCI a controlled document?
- A Yes, it was. We no longer use the RCI.
- Q Was that change made as part of the adoption of the enhanced program?
- A No, that change had nothing to do with the enhanced program.
  - Q When was that change made?
  - A (Witness Fuller) It was prior to the enhanced

Ace-Federal Reporters, Inc.  Sim 12-2 1 program, but I don't know the date. Do any of you know? 2 3 (Witness Hate) No, I don't recall. (Witness Timberlake) No, I don't. A 4 5 0 Were the matters covered in this part of the training of weld inspectors before the 1st of September 1980, 6 to your knowledge? 7 8 A (Witness Hate) I am not sure I understand the 9 question. 10 Q Were welding inspectors at the Harris plant 11 trained in the matters covered in this outline before the 12 1st of September 1980? 13 I don't know. 14 0 Do any of you know? 15 A (Witness Fuller) No. 16 A (Witness Timberlake) I don't. 17 Let me refer to the back page of that same 18 document which has been identified as Eddleman 37. I just 19 want to ask you if this appears to be an accurate copy of 20 a document describing what training was given for how long 21 and who attended for welding inspectors. 22 (Witness Hate) Are you talking about the outline 23 for retraining? 24 No, the fourth page, 12/10/81, corporate QA/QC

Section personnel training.

MR. BAXTER: Would you ask the question again, please?

BY MR. EDDLEMAN:

- Does that document list personnel attending the above-described training?
  - A (Witness Fuller) Yes, at the bottom
  - A (Witness Hate) Yes.
- Q And are those people, to any of your knowledge, weld inspectors, or were they weld inspectors working on pipe hangers at Shearon Harris?
  - A Yes.
- Q On the first sheet, the people listed there, are they likewise people who are or were weld inspectors working on pipe hangers at Harris?
  - A Which is the first sheet you are talking about?
- Q The first sheet of Eddleman 37, the September 12, 1980 one and a half hours hanger inspection and documentation.
  - A Yes.
  - Q They are inspectors or were?
  - A Yes.

MR. EDDLEMAN: All right. At this time I would move the admission of Eddleman 35, 36 and 37 into evidence.

MR. BAXTER: No objection.

MR. BARTH: No objection.

JUDGE KELLEY: motion granted.

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(Eddleman Exhibits 35, 36 and 37, inclusive, previously marked for identification, were received in evidence.)

## BY MR. EDDLEMAN:

Q I would like to refer to Mr. Timberlake to a document that is numbered 24 on the Eddleman 21 master list, controlled document ASME in large open block letters at the upper right, CP&L Corporate Quality Assurance Department Personnel Training and Qualification, initial issue date Murch 16, 1981, No. CQA-1, please.

A (Witness Timberlake) I have it.

MR. EDDLEMAN: I would request that this be marked for identification as Eddleman 38.

JUDGE KELLEY: Okay.

(The document referred to was marked Eddleman Exhibit No. 38 for identification.)

#### BY MR. EDDLEMAN:

Q Mr. Timberlake, or whoever on the panel can answer, this document on personnel training and qualification first issued on March 16, 1981, did requirements for personnel training and qualification for QA/QC inspectors exist in formal written form for the Harris plant before this document was initially issued?

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A (Witness Hate) I don't know. I don't have that history.

Q Would all personnel inspecting pipe hanger welds at the Harris plant have had to comply with these requirements as of March 16, 1981 and afterwards?

A Yes.

Q All right. And in Appendix A, I believe it is, to this document we have a list of education experience and training requirements for various inspection and testing activities?

A Yes.

Q Okay. And those are in weeks of experience required and also in hours of classroom and is it field training?

A Yes, it is on-the-job training.

O OJT?

A Yes.

Q That is the right column?

A Right.

MR. EDDLEMAN: At this time I would move that Eddleman 38 be admitted into evidence.

MR. BAXTER: No objection.

MR. BARTH: No objection.

JUDGE KELLEY: Granted.

(Eddleman Exhibit 38, previously

(marked for identification, was admitted into evidence.)

## BY MR. EDDLEMAN:

I would like to refer you to documents Nos. 37 and 38 on the Eddleman 21 master list.

No, 37, controlled document, Carolina Power and Light Company, Corporate Quality Assurance Department, Visial Examination of Seismic One structural and Hanger Welds for SHNPP No. NDEP-605, initial issue date, October 20th, 1982.

MR. EDDLEMAN: I would request that this be marked for identification as Eddleman 39.

JUDGE KELLEY: Okay.

(The document referred to was marked Eddleman Exhibit No. 39 for identification.)

MR. EDDLEMAN: And the other document, which is 38 on the master list, weld control, No. CQC-19, initial issue date March 16, 1981, I would request that that be marked for identification as Eddleman 40.

JUDGE KELLEY: Yes.

(The document referred to was marked Eddleman Exhibit No. 40 for identification.)

### BY MR. EDDLEMAN:

Now, gentlemen, do you have both of those documents

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available to you?

- A (Witness Hate) Yes.
- A (Witness Timberlake) Yes, sir.

Q All right. I want to ask you first about CQC-19, or Eddleman 40. This also has an initial issue date of March 16, 1981. Do any of you know whether there were formal requirements for weld control in a written form that would apply to pipe hanger welding at the Shearon Harris plant prior to March 16th, 1981?

- A (Witness Hate) Yes, we had formal requirements.
- Q And what were those requirements?
- A I don't have the procedure number.
- Q You know there were some requirements?
- A Oh, yes.
- Q CQC-19 is the procedure that governed the pipe hanger and some other welding prior to the recent issuance of CQC-18; is that right?
  - A That is correct, for pipe hangers.
- Q Yes, sir. Now the pages in this document -there is a revision record given on the first two pages
  behind the cover sheet, and then on each page of the actual
  document you have got a revision number in the upper-right
  corner and marks down the right side noting where the revisions
  had taken place; is that right?
  - A Are you looking at page 2?

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- Q Well, for example, there is a revision record which has page 1 of 2 and page 2 of 2 at the top.
  - A That is right.
- Q Then there is another page which has a number Roman (i) down toward the bottom, list of effective pages, and then you have pages 1, 2 and so on of the procedure.

What I am looking at is page 1, for example, or any of the actual pages of the procedure. Each of those has a revision number up toward the top right, does it not?

- A Yes.
- Q And those revisions would correspond to the revisions listed on the previous pages?
  - A Yes.
- Q And the vertical bars on the right side of each page indicate what things were changed as of which revision?
  - A Yes, it shows the changes.
- Q Now this revision that we have got here, if we look on the revision record, is Revision 12 of March 19, 1984, correct?
  - A (Witness Fuller) Yes, sir.
- Q Now were any revisions made to this procedure between its -- well, let me ask you this.

Was the initial issuance of this document prompted in any way by the problems found by the NRC with pipe hanger inspection at the Harris plant?

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A (Witness Hate) No.

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A (Witness Fuller) I believe I can answer one of your earlier questions going back to your initial issue of CQC-19. I believe prior to that it was CQC-19, but it was worked out of a quality assurance department downtown. And, as I recall, it remained the same numbers, and it went CQC-19, Rev. 1 through whatever, and then after they changed it to the Corporate Quality Assurance Department, Engineering and Construction Quality Control Control Section, they began over again with Rev. 0 and ran it on up again.

So what you are seeing here is reflecting the change. You are not seeing all the previous revisions of COC-19.

(Witness Hate) And that probably applied also to CQA-1.

All right. Now in the list of effective pages on this copy of CQC-19, if I can just refer you to that, that shows the effective revision number of each of 26 pages in this document, right?

(Witness Fuller) That is correct.

Okay. Now if I understood you right, there would have been an old CQC-19 issued by a different department which preceded this and had its own revision numbers ---

That is correct. A

--- and this would have been issued when the

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new department was set up at Shearon Harris?

I don't know all the specific details, but the gist of it is basically correct.

All right. Now when was that QA department out at the plant set up?

(Witness Hate) We have always had a QA organization on site since the start of the job.

Well, when did it take over responsibility, if any of you know, for issuing these procedures?

They have always been issuing procedures. What Mr. Fuller is trying to explain is that prior to 1981 they had their own site procedures, which was part of -- and this is going back in history now -- but they had their own set of procedures and then all we did was reissue the procedures under a new format. And that was probably associated at the same time that the Corporate QA Department was formed, somewhere in that period.

Okay. Then it is your gentlemen's understanding now that really a similar procedure with probably the same title actually governed these matters before the issuance of this procedure?

Yes, we had a procedure for weld inspections.

All right. Now if I can refer you to Eddleman 0 Exhibit 39, the NDEP-605, is this the NDEP-605 that you gentlemen refer to in your testimony?

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Now this was issued initially October 20th, 1982. Q Well, let me just see here.

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(Pause.)

Yes.

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That is correct, isn't it?

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(Witness Hate) Could you repeat the question A again?

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This was initially issued October 20, 1982, this Q

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A Yes.

version?

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Now is it your understanding as with CQC-19 that there was an NDEP-605 applicable to the Harris pipe hanger

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program before October 20, 1982, but just a different format?

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NDEP-605 was specifically issued as part of a 1982 corrective action. Prior to that we had a similar pro-

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cedure which, if I recollect correctly, was NDEP-601.

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What was the correction that prompted the issuance

terms. NDEP-601 was a procedure that was used by the QA/QC

organization for the inspection of pipe welds and structural

welds, and it was initially written with inspection criteria

primarily to cover ASME code class piping and ANSI B-3011

(Witness Timberlake) I can answer that in general

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of this new procedure?

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piping, and was also used in a conservative manner for structural inspection, and I say conservative manner relative

to the discontinuities that would be allowed by 601. It was more conservative than D-11.

Q Does that mean that 601 had more stringent requirements for what a passing weld would have to be like?

A That is correct.

Q All right.

A And then 605 was written to develop an inspection procedure for structural welding and solely for structural welding.

Q All right. Now this gives the specific requirements that were used for inspecting the hanger welds, but doesn't it also include seismic one structural welds?

A Yes, it does.

A (Witness Hate) Yes.

A (Witness Timberlake) And restraints to structural steel, et cetera, as shown in the purpose of the procedure.

Q But it was the problem with pipe hangers that prompted the issuance of the procedure; is that right?

A (Witness Hate) Yes, that was part of the corrective action.

Q Then, was the problem that too many of the pipe hanger welds were being rejected by the stricter criteria?

A Not necessarily. It was a matter of making sure that we very clearly defined the criteria to our inspection personnel.

Q Well, the criteria of 601 had been in place for some years, had they not?

A Yes. But like Mr. Timberlake explained, that 601 was more oriented towards pipe than structural steel.

MR. EDDLEMAN: Okay. At this time I would move that Eddleman 39 and Eddleman 40 be admitted into evidence.

MR. BAXTER: No objection.

MR. BARTH: No objection.

JUDGE KELLEY: Granted.

(The documents previously marked as Eddleman Exhibits 39 and 40, respectively, for Identification are received in evidence as Eddleman Exhibits 39 and 40, respectively.)

BY MR. EDDLEMAN: (Continuing)

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Q Gentlemen, I would like to refer you to what turns out to be Documents 42 and 43 of the Eddleman 21 master list, down at the bottom of Page 3; they are stapled together, and the top one is an October 3, 1983 letter from Parsons of the Shearon Harris Plant to O'Reilly of NRC, Region II, with the Number NRC-127 toward the top right.

JUDGE KELLEY: Would you say that again?

MR. EDDLEMAN: NRC-127 of October 3rd, 1983,

P. O. Box 101, New Hill, North Carolina up at the top.

JUDGE KELLEY: I'm sorry, Mr. Eddleman, one more time.

MR. EDDLEMAN: October 3rd, 1983, Number NRC-127, a letter from Parsons to O'Reilly. Okay. That's Number 42 on the master list, and then attached to it is FCR AS-4294, which is Document 43 on the master list.

JUDGE KELLEY: Okay.

MR. EDDLEMAN: I would request that these, in combination, be marked Eddleman 41 as they are stapled together here.

MR. BAXTER: They don't have anything to do with each other. They may be stapled together, but they --

JUDGE KELLEY: If the documents aren't related,
I suggest we give them different numbers.

MR. EDDLEMAN: Well, we can separate them and mark the NRC-127 letter as 41, and the FCR AS 4294 as 42.

#13-3-SueT 1 I find that perfectly agreeable. 2 JUDGE KELLEY: 126, right. You said 127? 3 MR. EDDLEMAN: It doesn't start with 126. The one 4 that starts with 126 is a different document, Judge. 5 JUDGE KELLEY: Okay. 6 MR. EDDLEMAN: All right. I would request that the 7 NRC-127 letter and attachments be marked as Eddleman 41; and, the FCR AS-4294 be marked as Eddleman 42. 8 9 JUDGE KELLEY: Okav. 10 MR. BARTH: It must have been my lack of attention. 11 I did not catch the 41. If we could have that again. 12 MR. EDDLEMAN: NRC-127, letter from Parsons to 13 O'Reilly, dated October 3rd, 1983. 14 MR. BARTH: I don't have any NRC-127 letter. 15 MR. EDDLEMAN: Let me see if I can find a spare. 16 JUDGE KELLEY: It's in the set I got from you, Mr. 17 Barth. 126 was on top and then 127. 18 MR. BARTH: Thank you, Your Honor. I must have it 19 somewhere. We found it. Thank you, Your Honor. 20 (The documents referred to above 21 were marked as Eddleman Exhibits 22 41 and 42, respectively, for INDEXXXXXX 23 Identification.) BY MR. EDDLEMAN: (Continuing) Ace-Federal Reporters, Inc.

Now, first with reference to the NRC-127 letter,

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this refers to a second interm report under 10 CFR-50.55(e) which I believe we discussed a good bit yesterday.

I would like to refer you to the interim report at the bottom of the page. That gives the reasons why these Items 96 and 72 were reportable under 50.55(e), as due to extensive -- the extensive evaluation required and the breakdown in the QA program, correct?

A (Witness Fuller) That's correct.

Q All right. Now, the preventive measures listed on the next page include the development and issuance of QCI-19.3, correct?

A That's correct.

Q Additional training classes --

MR. BAXTER: Mr. Chairman, again we are reading documents.

MR. EDDLEMAN: Okay. Let me just ask this.

BY MR. EDDLEMAN: (Continuing)

Q This is dated late October 1983. To your knowledge, gentlemen, were these preventive measures that are listed here on the third and fourth pages of this interim report, were they the ones that were in fact being implemented or had been implemented as of early October 1983?

- A Had been implemented.
- Ω Had been implemented? Okay.

MR. BAXTER: Mr. Eddleman, this same letter is

is that right?

your Exhibit 22 from yesterday.

MR. EDDLEMAN: I didn't realize it was the same.

MR. BAXTER: I mean, the same items. The same two items are addressed. It's an earlier version.

MR. EDDLEMAN: Well, it's a different -- this is a different version. I think this is the second interim report;

MR. BAXTER: Yes.

MR. EDDLEMAN: Okay. At this time, I would move the admission of Eddleman 41 into evidence.

MR. BAXTER: No objection.

MR. BARTH: No objection, Your Honor.

JUDGE KELLEY: Granted.

(The document previously marked as Eddleman Exhibit 41 for Identification is received into evidence as Eddleman Exhibit 41.)

BY MR. EDDLEMAN: (Continuing)

Let me refer you gentlemen to Eddleman 42, the FCR AS-4294. Now, this is a -- was this change in weld inspection criteria generated under the enhanced hanger reinspection program?

(Witness Nevill) No, sir.

Well, what was the reason why this change in the weld inspection criteria was generated?

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A This particular change was done on site purely for clarification of wording. There was no change to the criteria, is what I mean.

On the attachment page, titled 1.0 scope, of this field change request, down at the bottom, it says the visual inspection of welds shall be in accordance with AWS D.1.1 except as modified below, correct?

A Yes, sir.

Q Okay. Then, the acceptability criteria listed on Pages 2 through 5 attached, which I believe are marked Page 4 of 7 through Page 7 of 7 up in the upper right corner, is that right?

A Yes, sir.

Q Okay. And are these the same criteria that were used prior to the establishment of the enhanced hanger inspection program?

A Now, let's see. Let me try to relate the question. This particular document was issued, you know, purely to consolidate the acceptance criteria that we used. Now, it relates from the FCR-H-979 --

Q That we discussed earlier?

A Yes, sir. Yes, sir. So this would be more or less just a continuation process, not related to the enhanced program.

Q Well, do I take it then that the enhanced program

is not part of the corrective action for the matters that we discussed in the NRC-127 letter we were just going over?

A (Witness Fuller) That's correct. The enhanced program is not part of the corrective action of NRC-127 that we just discussed.

Q Okay. It corrects other things; is that right?

A The enhanced program?

Q Yes.

A Yes.

MP. EDDLEMAN: All right. At this time, I would move Eddleman Exhibit 42 into evidence.

MR. BAXTER: No objection.

JUDGE KELLEY: Granted.

(The document referred to above and marked Eddleman Exhibit 42 for Identification is received into evidence as Eddleman Exhibit 42.)

MR. EDDLEMAN: Thank you.

BY MR. EDDLEMAN: (Continuing)

Q Gentlemen, I would like to refer you to Document

Number 22 on the master list --

MR. EDDLEMAN: I can't recall. I think we had some discussion about marking this one and decided not to earlier on. Is that --

JUDGE KELLEY: Which one is it? Let's go off the

#13-8-SueT record. 2 (An off-the-record discussion ensues.) 3 JUDGE KELLEY: All right. 4 MR. EDDLEMAN: Okay. I would request that this 5 be marked as Eddleman 43. 6 JUDGE KELLEY: Okay. 7 (The above-referred to document is 8 marked as Eddleman Exhibit Number 9 INDEXXXXX 43 for Identification.) 10 BY MR. EDDLEMAN: (Continuing) 11 I would like to refer you gentlemen to the Appendix 12 A, notice of violation. These are two violations concerning 13 weld inspections at the Harris Plant on pipe hangers, correct? 14 A (Witness Nevill) That's correct. 15 Okay. And the attachment gives the NRC's details 16 of investigation concerning this problem? 17 A (Witness Fuller) That's correct. 18 Actually, there is more than one problem, but 19 those problems, right? 20 Those were the two items that were on the notice 21 of violation. 22 And, then there is also attached an Enclosure 1 23 which includes among other things some inspections of hanger 24 welds, is it not? 25 MR. BARTH: Objection, Your Honor. Mr. Baxter and

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I have continually pointed out, we are just reading this thing back and forth.

JUDGE KELLEY: I think there is sometimes a fine line between reading and identifying. And I think here we are trying to establish what's going to be referred to.

We will allow that.

BY MR. EDDLEMAN: (Continuing)

- Q There is an Enclosure 1 in this document further back that describes some inspections of hanger welds among other things?
  - A (Witness Fuller) That's correct.
- Q Okay. On Page 2 of that Enclosure 1, Item D, down in the second paragraph, it talks about Region II's conclusion that a larger sample of -- it says pipe welds.

Let me ask you this. Does Item D there, to your knowledge, refer to the problems with the inspection of hanger welds?

- A I believe it's pipe welds.
- Q Okay. Let me see if I can find the -(Pause.)

Okay. Let me ask you this. The problems with the weld inspection that are documented in this report occurred despite previous discovery of problems with weld inspection by both the NRC Staff and CP&L's own QA people, correct?

A That's correct.

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Q And did this discovery of this problem trigger further reinspections of pipe hangers -- of these problems, pardon me, trigger further reinspections of pipe hangers at the Shearon Harris Plant?

A I believe the hangers were reinspected as a result of this.

(Witness Hate) We did look at certain hangers.

Q Which hangers? Do you recall?

A The ones that the inspector was involved in.

MR. EDDLEMAN: Okay. At this time, I would move that Eddleman 43 be admitted into evidence.

MR. BAXTER: We would have no objection if the record is also supplemented with the Company's response to the notice of violation.

MR. EDDLEMAN: I have no objection to that.

MR. BAXTER: We will provide that later today.

JUDGE KELLEY: On that basis, granted.

(The document previously marked as Eddleman Exhibit Number 43 for Identification is received into evidence as Eddleman Exhibit Number 43.)

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Q Gentlemen, I would like to refer you to Item 31 on the master list on page 2. It is Field Change Request, Permanent Waiver, PWAS 414, consisting of six pages.

It is up, near the upper right corner, yoù have Field Change Request, Permanent Waiver Form, then it has AP-IX-05, Exhibit 1, and then down under that is the -- this was prefiled.

JUDGE KELLEY: Your number again?

MR. EDDLEMAN: PWAS-414. It appears on looking at this that we have got a reproduction error, and actually have two of the same thing together. It is only three sheets, one of which is the front and back of the first sheet.

I request that this be marked for identification as Eddleman 44.

MR. BAXTER: I would like to point out at this stage that my information is that this permanent waiver has no relevance to pipe hanger welds.

JUDGE KELLEY: It has six pages, is that right, Mr. Eddleman?

MR. EDDLEMAN: Yes, and I believe they are actually duplicative.

JUDGE KELLEY: It looks that way. Three pages, really.

MR. EDDLEMAN: Three pages.

JUDGE KELLEY: Now, Mr. Baxter's point was whether 1 these relate to pipe hangers. Could you put that to the 2 3 witnesses. MR. EDDLEMAN: Sure. No objection. JUDGE KELLEY: Mr. Fuller, or whoever --5 WITNESS FULLER: It doesn't. 6 JUDGE KELLEY: Does or does not? 7 WITNESS FULLER: Does not. 8 JUDGE KELLEY: Does not relate to pipe. What 9 10 does it relate to? WITNESS FULLER: It is either electrical or 11 HVAC hangers. 12 BY MR. EDDLEMAN: (Continuing) 13 14 Now, I want to be kind of clear on the record. 15 I am not going to pursue this at this point, but I still maintain that a hanger is a hanger is a hanger. 16 JUDGE KELLEY: You mean whether it hangs a 17 pipe or not? 18 19 MP. EDDLEMAN: Yes, sir. JUDGE KELLEY: Okay. Your position is understood, 20 but I don't think the Board agrees with you. 21 BY MR. EDDLEMAN: (Continuing) 22 Gentleman, if we could refer to documents No --23 24 JUDGE KELLEY: Where are we here. It has not

been demonstrated that it is --

MR. EDDLEMAN: I will withdraw the marking. Eddleman 44 will be whatever the next one is.

JUDGE KELLEY: All right.

MR. EDDLENAN: I would request that that marking,
Eddleman 44, be applied to Shearon Harris Plant General
welding Procedure, MPO-8, General Welding Procedure for
Structural Steel, Seismic, Non-Seismic and Hangers.
Latest revision, April 27, 1984. That is document 36.

JUDGE KELLEY: What does that look like.
Off the record.

(Off the record discussion ensues)

MR. EDDLEMAN: I would at the same time request that General Welding Procedure MP-10, Repair of Base Materials and Weldments, which is Item 39, on the typewritten Eddleman 21 list, be marked for Identification as Eddleman 45.

JUDGE KELLEY: These are 44 and 45, respectively?

MR. EDDLEMAN: Yes, sir.

JUDGE KELLEY: Right. Okay.

(The above referred to documents are marked Eddleman Exhibits 44 and 45, respectively, for identification.)

BY MR. EDDLEMAN: (Continuing)

Q Gentlemen, do you have those?

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A	(Simultaneously)	Yes,	we	do.

Q Okay. Is the procedure MP-10, or Eddleman 45, the one that governs repairs to pipe hanger welds where an inspector finds that the weld had not been made properly in the first place?

A (Witness Fuller) That is correct.

Q Would the inspector normally observe the repair process to make sure that this procedure is being followed?

A Not necessarily, no.

Q All right. They are not prohibited from it, but they are not required to do it, is that right?

A They are certainly not prohibited from it, but they are not required to do it either.

Q Okay.

A (Witness Hate) They may monitor the process.

Q All right. I would like to refer you to page 6 of 31 of this same document.

A (Witness Fuller) Okay.

Q Oops, take it back. This appears to be pipe welding instead of hangers.

A This procedure, Mr. Eddleman, does pertain to structural welding, as well as pipe welds.

Q Well, would the requirement for a new WDR whenever the completed weld joint had to be cut out apply to a pipe hanger?

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A No, it would not. If you will look on page 6, paragraph 3.3.2, about half way down the paragraph, it explains that: It shall not be necessary to generate a new WDR, et cetera.

Q Okay. And that is what applies to the pipe hanger.

A That is correct.

Q Okay. Now, do the requirements for repair of weld metal defects on page 13 of 31, this document, do those apply to pipe hangers?

A No, they do not.

Q What requirements for repair of surface defects are there for the pipe hanger welds?

A If you will look on page 22, it starts with paragraph 4.7.

Q Okay. So, the hanger being considered a seismic Class 1 structure.

A That is correct.

Q All right. And does that whole section 4.7 apply to the pipe hangers?

A As well as other structural components at the Harris site.

MR. EDDLEMAN: Okay. At this time I request that Eddleman 45 be admitted into evidence.

MR. BAXTER: No objection.

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JUDGE KELLEY: Granted.

(Eddleman Exhibit 45, previously marked for identification, is received in evidence.)

MR. EDDLEMAN: As to Eddleman 44, the general welding procedure, MPO-8, this is Revision 8 of 1984, and Revision 0 began in November of '79, correct?

WITNESS FULLER: That is correct.

BY MR. EDDLEMAN: (Continuing)

Q Prior to November 9, 1979, was there a welding procedure in writing for the Harris Plant governing the welding on seismic pipe hangers?

A (Witness Fuller) It would have been under MPO-6.

Q And what is MPO-6?

A It is general welding procedure for welding of carbon steel weldments, I believe is its title.

Q And this MPO-8 is specifically restricted to structural steel and hangers?

A That is correct.

Q Okay. The requirements of this procedure are the same for seismic and non-seismic hangers?

A That is correct. There are some minor differences in the procedure, such as inspection organizations are different for seismic and non-seismic components, but that is clearly spelled out in the procedure.

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Q Okay. I hadn't asked you this about Eddleman 45, but as to the repair procedures, do those apply equally to seismic and non-seismic hangers, the ones that we discussed just a moment ago?

A That is correct.

Q All right. Are you gentlemen familiar with any problems of welds being made outside of procedure on pipe hangers at the Harris Plant, and still being approved on inspection?

MR. BAXTER: I am sorry, Mr. Eddleman. Could you give me that again?

BY MR. EDDLEMAN: (Continuing)

Q Are you gentlemen familiar with any problems of welds being made outside of this procedure on pipe hangers at the Harris Plant and still being approved upon inspection?

MR. BARTH: Objection, Your Honor. There is no foundation for the question. It presupposed that there are welds made outside the procedures, and those welds are approved. There is no foundation for the question whatsoever. I object to it, Your Honor.

JUDGE KELLEY: Response?

MR. EDDLEMAN: Well, I think that they are required to do welding in accordance with the procedure. That is what the witnesses said.

JUDGE KELLEY: Sure.

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MR. EDDLEMAN: I want to know do they know anything about welds being made outside of this procedure getting approved.

MR. BARTH: That was not the question, Your Honor.

JUDGE KELLEY: Well, we are sort of working our way around it. I think the question is too general myself.

There are hundreds of thousands of welds made outside of procedure at any nuclear power plant, -- are you talking about pipe hanger welds?

MR. EDDLEMAN: Pipe hanger welds, yes, Judge.

JUDGE KELLEY: What kind of outside of procedures. What have you got in mind?

MR. EDDLENAN: Well, unfortunately, I will have to back up and start through with the INPO audit to get to that. I can do that.

JUDGE KELLEY: Which I understand doesn't exist. I mean, they made this trip and then walked around and made notes, but we don't have any such paper, do we?

MR. EDDLEMAN: Well, I understand that there were some results of it, and I have been informed as to what those results allegedly were, and they include some things that would affect welding in Hærris.

JUDGE KELLEY: Mr. Barth's objection to the

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pending question was that there wasn't any foundation for it, and I think that is a fair enough observation here.

If you want to pursue this line of how good the inspections are, which I gather is what it relates to, I think you can start off in a somewhat more concrete way than this.

MR. EDDLEMAN: All right. Let me try this.

BY MR. EDDLEMAN: (Continuing)

- Q Gentlemen, are any of you familiar with an INPO audit of the Harris Plant that took place approximately September of this year?
  - A (Witness Fuller) Yes.
- Q Did any of you attend any exit interviews or other meetings with the people conducting the audit in which they expressed concerns about welds being done outside of procedure?
  - A (Witness Fuller) I didn't attend the exit.

MR. BAXTER: Let's ask first if anybody was at the exit, rather than saying the exit, where they determined there were welds out of procedure.

MR. BARTH: That really presupposes too much, Your Honor.

MR. EDDLEMAN: I am perfectly willing to ask it they way they want.

JUDGE KELLEY: All right.

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BY MR. EDDLEMAN: (Continuing)

Q Did any of you gentlemen attend an exit interview or otherwise meet with the people conducting this inspection after they had done it?

A (Simultaneously) No.

Q Were any of you gentlemen present at a meeting in which welders and welding foremen were informed that the INPO audit had revealed that there were welds being done outside procedure at the Harris Plant?

MR. BARTH: Objection. The most rank kind of hearsay that I have ever heard in 12 years with the Agency, Your Honor. This really goes pretty far. It is rank hearsay, and it is libal against these people, with no foundation to offer the question. The question could be asked properly, but it certainly has not.

JUDGE KELLEY: I think what we are trying to get at here is whether they particular witnesses at least have any first hand, or if not first hand, what they would -- what we would regard as reliable information about this matter, correct?

MR. EDDLEMAN: That is right.

JUDGE KELLEY: Okay. Let's see if we can establish that first.

BY MR. EDDLEMAN: (Continuing)

Q Do you gentlemen know if there have been any

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meetings at the Shearon Harris Plant, say, after August of this year, in which welders or welding foremen, or both, were warned not to make any more welds outside of procedure?

MR. BARTH: Objection again, Your Honor, because it --

JUDGE KELLEY: Mr. Barth, let me just try this here.

MR. EDDLEMAN: I basically was informed by a person who said they witnessed some of this stuff but didn't want to be identified, and told me some things that happened. That is what I am asking about. Do these people know if that happened or not.

I don't think I have to have evidence of it to ask about it.

JUDGE KELLEY: Not necessarily evidence in the narrow sense, but still, what we are after -- I will tell you quite frankly, I think pursuing the INPO Report in this context is a waste of time. From what I know about it, I gather from what I have been told, if I can be corrected, that this INPO team came to the site not very long ago and went around the site and talked to a lot of people, and looked at a lot of records, and went back home, and they are going to go and write a report some day, and then it will be available.

But as of now, pursuing the INPO report that

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isn't a report, it doesn't exist, doesn't seem very productive.

If it is something short of that, something somebody said to somebody else that we don't know much about, once again, it doesn't seem to be much basis for it, and I think you would have to establish some basis, at least through these witnesses, some basis that they have to talk about it, and if they don't have any basis for talking about it, then they are the wrong people to ask.

MR. EDDLEMAN: All right. I think you are right about the report itself. What I am trying to get at is some fallout from it as I was informed.

BY MR. EDDLEMAN: (Continuing)

Q When there is a meeting of the welders and foremen at the Harris Plant to instruct them as to proper procedures about pipe hangers, or to inform them of policy for construction of these pipe hangers, would any of you gentlemen normally attend such a meeting?

MR. BAXTER: Did you mean the welding of the pipe hangers, or the construction of the pipe hangers.

MR. EDDLEMAN: Welding.

WITNESS FULLER: I generally would not.

A (Witness Fuller) Neither would I.

A (Witness Hate) I would not.

A (Witness Timberlake) If you are referring to the ongoing welder training program where they would be instructed on procedural requirements, then I might be in attendance.

If you are talking about policy matters coming from craft management, I would not normally be in attendance.

Q All right. And, Mr. Timberlake, have you been present at any meeting or been instructed to carry out further training as to making sure that welding on pipe hangers at Harris is done within applicable procedures since about the 1st of September of this year?

MR. BAXTER: Mr. Chairman, Mr. Timberlake has testified that he has been involved for years in training welders on welding within procedures, applicable site procedures. I don't understand the question have you ever been in a meeting or been instructed since September to do what the evidence shows you have been doing for the last three years.

MR. EDDLEMAN: Well, I mean has he received any additional instruction in a meeting or otherwise since the 1st of September.

MR. BARTH: The question is too general, Your Honor. Addition over what? Mr. Hate has testified that they have ongoing training programs to teach these people what

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to do and do it right. He has asked this man have you had instructions to teach programs on how to do them right. We have already got testimony on that. It is repetitious and we object.

JUDGE KELLEY: The Board agrees with Mr. Barth's observation about the question being too general, and this is the reason. They always have to weld within procedures, and there is nothing new about that. Just as such as the sun rises tomorrow, they are supposed to weld within procedure, doesn't tell you anything to ask that question.

If you can narrow it to some specific procedure, some new problem that has arisen, then that might be meaningful. But just to ask about welding within procedures we think is not meaningfu'. So we will sustain the objection.

MR. EDDLEMAN: All right.

BY MR. EDDLEMAN:

Are any of you gentlemen aware of a meeting in September of 1984 in which the welding craft were instructed that all welding outside of procedure had to come to an end because INPO had raised problems with that at the Harris plant?

MR. BARTH: Objection, Your Honor. It is the same objection we have made half a dozen times before. It presupposes facts in evidence. There is no foundation for this question whatsoever.

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I am aware that Mr. Eddleman is not a lawyer and that perhaps with legal training he could ask the question with three or four foundation questions correctly, but it has not been done.

There is no basis to presuppose and to put in this record that INPO found anything wrong. I object, Your Honor, and I think it goes beyond the purview of your previous instructions that at this juncture to challenge INPO to bring it up does not seem fruitful.

think what I just got through saying was if you want to ask about a specific problem, as about it, but if all you are going to ask about is whether INPO told people not to weld outside of procedures, again, Mr. Eddleman, that is not going to get us anywhere. We are always told not to weld outside of procedures.

So I will sustain the objection. Now, frankly, if all you have got is some hearsay that somebody told you somebody did something after the INPO people left, and that is all you have got as a basis for this question, then maybe you are better off just dropping it. Otherwise, we will sustain the objections as appropriate.

MR. EDDLEMAN: Well, let me try to explain as much as I can. I was informed that they had a meeting where they called in all the general foremen, the foremen and all

the craft people and told them in no uncertain terms that INPO had found problems with this, and I am saying what I was told was said, and that they were to stop welding outside of procedure. And I was told further that some people raised a question of what if our foreman tells us to weld outside of procedure and we refuse obeying your order. So how are you going to make sure that we don't get fired ostensibly for some other reason on account of that. That is what I was told.

MR. BARTH: I move to strike Mr. Eddleman's remarks as highly inappropriate.

MR. BAXTER: I join, Mr. Chairman. This isn't appropriate for a representative of a party to be coming here and reguiling the Board with what he was told somewhere. It is not evidence and it shouldn't be here.

MR. EDDLEMAN: I am just trying to explain the factual basis for my question. I have got to protect the source and I can't do much better than that.

JUDGE KELLEY: Well, there are other ways to protect sources. There are such things as In Camera hearings and various other things.

For you to come in here with a confidential nameless source and say something like this which, incidentally, I still don't think gets you anywhere, once again you are saying that the message is weld inside procedures. There

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is nothing new about that. That doesn't prove anything. It is almost irrelevant.

If you are getting into a foreman override case, we did that down the road, you know, last month, and that is kind of new here, too, it seems. That is the first we have heard about that.

Lacking a witness and lacking some better way to raise this, the objection is sustained. Move on to the next subject.

MR. EDDLEMAN: All right.

At this time I would request that Eddleman 44, the general welding procedure applicable to the hangers, be admitted into evidence.

MR. BAXTER: No objection.

MR. BARTH: No objection, Your Honor.

JUDGE KELLEY: Granted.

(Eddleman Exhibit No. 44, previously marked for identification, was admitted into evidence.)

## BY MR. EDDLEMAN:

Q Gentlemen, I would like to refer you to a packet of corrective action and disposition of hanger reinspection reports. I believe it is Item No. 86 of the master list. It begins with HR-030.

JUDGE KELLEY: Let me check on the status again

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as we approach 4. Are you going to make 4, Mr. Eddleman?

MR. EDDLEMAN: I might need 4:15, but I won't go beyond that.

JUDGE KELLEY: Well, let's take short break then, but then finish up 15 or 20 minutes after we get back.

Take 10 minutes.

MR. FOLEMAN: I will try.

(Recess.)

JUDGE KELLEY: Back on the record.

Mr. Eddleman can resume his cross.

MR. EDDLEMAN: I would like to request that some documents be marked for identification.

I would like to mark as Eddleman 46 a letter, NRC-126 of October 3, 1983. Now I see what the problem was with that.

JUDGE KELLEY: Okay.

(The document referred to was marked Eddleman Exhibit No. 46 for identification.)

MR. And as Eddleman 47 ---

MR. BARTH: Which number on our list that is now your list, Mr. Eddleman, is that?

MR. EDDLEMAN: It is No. 1 on the list and it was marked just 46.

JUDGE KELLEY: This is NRC-126, October 3?

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Ace-Federal Reporters, Inc. 25 MR. EDDLEMAN: That is correct.

JUDGE KELLEY: And this is ---

MR. EDDLEMAN: A letter and attachment.

JUDGE KELLEY: Six pages total?

MR. EDDLEMAN: Right.

JUDGE KELLEY: Okay.

MR. EDDLEMAN: I would request that the inspection report 50-400 83-25 of October 19, 1983, and it has got kind of a black slash from the way it was copied up at the right, and it was handed out this morning, I would like to have that marked as Eddleman 47.

(Pause.)

JUDGE KELLEY: What is that number again, if you will?

MR. EDDLEMAN: 50-400 and 83-25 and also 50-401 and 83-25.

MR. BARTH: May we have just a moment while we look for these, please.

(Pause.)

Your Honor, as a preliminary matter we would object to the 83-25. That is Exhibit No. 6 of Joint Intervenors already which is in evidence. And as we look at the rest of them, who knows!

MR. EDDLEMAN: I didn't know that was a Joint Intervenor exhibit.

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MR. BARTH: It pays to talk to your cohorts.

(Pause.)

(The transcript page is 2889 for Inspection Report

83-25.

MR. EDDLEMAN: No problem. That is Joint

Intervenors Exhibit what?

MR. BARTH: Six.

MR. EDDLEMAN: Okay. So I don't have to get that one marked.

JUDGE KELLEY: Just a minute now. Let me just raise a question. Just because that particular report is in evidence on another contention doesn't mean it is in evidence on this contention, does it?

MR. BARTH: It is one record, Your Honor.

JUDGE KELLEY: Oh, well, but wait. We allow in exhibits based on what the issue is. When we let that report back in in September on management we weren't thinking much about pipe hangers.

MR. EDDLEMAN: Judge, I think that is right, but I think I can establish by questioning that this thing has relation to pipe hangers, and I haven't moved that it be admitted yet. I was just trying to get these things marked so I could go through it a little more expeditiously with questions.

JUDGE KELLEY: Well, we can reach the question

I am raising I guess as and when you move it in. But I am
simply saying I don't assume because some exhibit got in on
another issue that is in for equal purposes on this issue.
I am perfectly willing to hear counsel on the point, but it

MR. EDDLEMAN: Well, I haven't raised that point or question.

JUDGE KELLEY: You marked 46. Okay, what was proposed as 47? Is that 83-25?

MR. EDDLEMAN: Well, that was going to be 47, but I would amend that.

JUDGE KELLEY: Okay.

MR. EDDLEMAN: Applicants yesterday kindly supplied me with the missing unnumbered second page of the attachment to the NRC-196 letter.

JUDGE KELLEY: The 196 letter.

(Pause.)

doesn't seem obvious to me.

And the 196 letter, could you give us a little fuller description of that?

MR. EDDLEMAN: I am trying to find where it is in the document list, if I can do that.

(Pause.)

Yes, I can. It is Item 53 of the Eddleman 21 document list. And I would request that just that letter, that Item 53 and attachment be marked as Eddleman 47.

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JUDGE KELLEY: It is dated when? Give me a little bit more description so we can find it.

MR. EDDLEMAN: March 21, 1984. I handed out some copies this morning that I made up or had made up, and it has some instructions to block out some messy looking stuff up towards the top of it, although I think I have gotten all the words out of it.

(Pause.)

JUDGE KELLEY: We are floundering. Again now ---

MR. EDDLEMAN: May I show it to you?

JUDGE KELLEY: Yes, please do.

(The document referred to was shown by Mr. Eddleman to Judge Kelley.)

JUDGE KELLEY: All right, we have got it now. Thank you.

You want to mark that as 47, right?

MR. EDDLEMAN: Yes, sir.

JUDGE KELLEY: Okay.

(The document referred to was

marked Eddleman Exhibit No. 47

for identification.)

MR. BARTH: Your Honor, subject to further checking, I would object because I had in my notes that that was marked as Eddleman Exhibit No. 27 for identification.

MR. EDDLEMAN: No, only part of the attachment

there was marked as Eddleman 27. The part here that is Sim 15-11 being marked as 47 is part of the front. 2 MR. BARTH: Thank you. I understand now, 3 Mr. Eddleman. 4 MR. EDDLEMAN: And I would request that document 5 No. 72 of the Eddleman 21 master list consisting of a single 6 sheet, I would regest that be marked as Eddleman 48. This 7 is No. HR-21, Corrective Action and Disposition of Hanger 8 Reinspection. 9 JUDGE KELLEY: This is a CP&L document? 10 MR. EDDLEMAN: Right, prefiled No. 72 on the master 11 list. 12 JUDGE KELLEY: And the upper-right-hand corner 13 identification once more? 14 MR. EDDLEMAN: HR-21. 15 JUDGE KELLEY: This is a field change request 16 or not? 17 MR. EDDLEMAN: No, it is not. It is a corrective 18 action and disposition of hanger reinspection, No. HR-21. 19 JUDGE KELLEY: All right. 20 (The document referred to was 21 marked Eddleman Exhibit No. 48 22 for identification.) 23 MR. BARTH: Was that 48? NDEXXXXXX 24 Ace-Federal Reporters, Inc. MR. EDDLEMAN: Thatis 48, that is correct.

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JUDGE KELLEY: HR-21, you said?

MR. EDDLEMAN: HR-21.

JUDGE KELLEY: How many pages?

MR. EDDLEMAN: One page, one facing sheet, one

single sheet.

JUDGE KELLEY: 48?

MR. EDDLEMAN: Right.

JUDGE KELLEY: Is there another one?

MR. EDDLEMAN: Yes, Judge?

JUDGE KELLEY: Is there another one for numbering?

MR. EDDLEMAN: No. That is all I wanted numbered.

JUDGE KELLEY: Okay. Go ahead.

CROSS-EXAMINATION (Resumed)

BY MR. EDDLEMAN:

Q Gentlemen, I would like to first ask you about Eddleman 47. This is a cover letter of the third interim report on hanger deficiencies, Items 95 and 72, is it not?

A (Witness Fuller) That is correct.

Q Let me refer you to second page, and I think it is marked second page on this copy, the one I handed to you this morning or handed out for you. It begins with Item 1-D and then Item 2 in corrective action.

A (Witness Fuller) Yes.

Q All right. In Item 2 it says "The welds were reworked and upgranded to meet the acceptance criteria of

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FCR H-979. Is that the same FCR H-979 that we were talking about earier this afternoon?

A Yes, it is.

Q Okay. What kind of upgrading and rework was needed to meet those criteria, do you know?

A If you had porosity, you would fix it. If you had undercut, you would fix it. If it was undersized, you would fix it. Whatever the acceptance criteria of 979 that it didn't meet, that is what would be done.

Q All right. Now on the third page it continues with corrective measures and then comes down to the final report paragraph. It says "Those hangers on engineering hold will be reinspected and reworked when they become active again, or they will be cancelled if they are voided."

How many hangers with these problems are on engineering hold at the plant now, do you know?

A Yesterday in my testimony I corrected a statement about hangers being on hold, which is the reference that you are referring to here. They are no longer on hold and they have been reinspected and accepted.

Q All right. Were any voided?

A I don't know.

Q What does it mean to void? Is it voiding the hanger or is it voiding the report?

A (Witness Nevill) In this case, the reference made

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here, it would actually be elimination of the hanger. It comes through holds in the design process where a pipe may need to be rerouted, where there may be some design change from the original architect/engineer, as in the case where a vendor comes in with some nozzle load and actual analysis of the piping indicates that a hanger either is to be relocated, anew hanger added or a hanger no longer needed.

When this process happens, the particular sketches, if they are no longer relevant to the design, they are voided.

MR. EDDLEMAN: At this time I would request that Eddleman 47 be admitted into evidence.

MR. BAXTER: Is Eddleman 47 this letter we were just discussing?

MR. EDDLEMAN: The letter and the attached interim report No. 3 yes.

MR. BAXTER: No objection.

MS. MOORE: No objection.

JUDGE KELLEY: Granted.

(Eddleman Exhibit No. 47, previously marked for identification, was admitted into evidence.)

## BY MR. EDDLEMAN:

Q I would now like to refer you to the one that is marked Eddleman 46, the NRC-126 letter and attachments.

This, as I understand it, is the cover letter

Sim 15-15 and attachments of the second interim report on the same 1 items; is that correct? 2 (Witness Fuller) That is correct. 3 Okay. And it would cover corrective actions and so on that were being taken at the time it was issues; is 5 that right? 6 The second interim report is an update of the 7 first interim report, like the third interim report is an 8 update of the second. It does not necessarily detail further corrective actions. It tells where we stand on the overall 10 status of the problem. 11 Okay. And if there is a difference in a later 12 update, that could be interpreted as a change in the status 13 of the resolution of the problem? A That is correct. 15 MR. EDDLEMAN: I would move that this be admitted 16 into evidence, Eddleman 46. 17 MR. BAXTER: No objection. 18 19 MR. BARTH: No objection. JUDGE KELLEY: Granted. 20 (Eddleman Exhibit No. 46, previously 21 marked for identification, was 22 admitted into evidence.) 23 BY MR. EDDLEMAN: INDEXXXXX Ace-Federal Reporters, Inc. Now I would like to refer you to what I have 25 0

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been informed is Joint Internvenors' Exhibit 6, the October 19, 1983 inspection reports.

MR. BAXTER: Mr. Chairman ---

JUDGE KELLEY: One moment. Which reports are these now, Mr. Eddleman?

MR. EDDLEMAN: Report Nos. 50-400, 83-25 and 50-401, 83-25.

JUDGE KELLEY: All right.

MR. EDDLEMAN: I think the numbers just refer to the two units.

JUDGE KELLEY: Okay. And in terms of the dimensions here, this is a fairly thick document.

MR. EDDLEMAN: Yes, sir. I had made these copies up and distributed them this morning.

JUDGE KELLEY: It ends on page 35, right?
MR. EDDLEMAN: Yes, sir.

MR. BARTH: Your Honor, I would like to correct one earlier statement I made. The JI-6 was admitted only in part, The entire inspection report was not admitted in its entirety.

JUDGE KELLEY: Okay. Portions of this report,

Mr. Barth advises me, are in the management contention record.

I would appear that it might just be simplest to go ahead

and address this on the merits. We can have an abstract

legal discussion of the point I raised earlier, but why don't

we just -- you are going to move the admission of this Sim 15-17 document? MR. EDDLEMAN: I am once I lay a foundation for 3 it. If we are going to do it this way, I guess the best thing to do would be to mark it as Eddleman 49. 5 JUDGE KELLEY: 49 or 48? 6 MR. EDDLEMAN: I believe 49. No, I think you 7 are right, Eddleman 48. No, I am sorry. Eddleman 48 is the 8 one sheet. So this is 49. 9 JUDGE KELLEY: You are right. This is 49. 10 (The document referred to was marked 11 INDEXXXX Eddleman Exhibit No. 49 for 12 identification.) 13 MR. EDDLEMAN: My document control is getting 14 away from me. 15 JUDGE KELLEY: I sympathize. 16 BY MR. EDDLEMAN: 17 Gentlemen, do you have a copy of this report 18 available to you? 19 (Witness Fuller) I do. 20 Now I would like to refer you first to the very 21 back of this report, the last two pages, Nos. 34 and 35 at 22 the back. 23 A Yes. Now we have here a list in Item 15, index of Q

Sim 15-18

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findings of this report of violations and unresolved items, correct?

A That is correct.

Q In fact, some of these items relate to pipe hanger inspection and pipe hanger installation problems, do they not?

A There is one violation listed for pipe hanger welding.

Okay. Is that Number 832502? #16-1-SueT 1 0 2 (Witness Fuller) Yes, it is. 3 Okay. Now, as to the unresolved items below, is 0 4 Item 09 related to pipe hangers? 5 By the title, it appears to be. 6 All right. What about Item 25-12 at the top of 7 Page 35? 8 A I don't know without --9 MR. BAXTER: Are these items covered in the in-10 spection report? If so, I think the witnesses ought to have 11 it pointed out to them rather than requiring them to guess 12 on the basis of the title in this list. 13 MR. EDDLEMAN: Well, it refers to the sections of 14 the report that we are dealing with. So, let me go back. 15 BY MR. EDDLEMAN: (Continuing) 16 Q Mr. Fuller, if we could look for Item 10-B which 17 is the reference to 25-09 here. 18 JUDGE KELLEY: Page 14 seems to speak to that. 19 BY MR. EDDLEMAN: (Continuing) 20 Q As to the Item-B program there towards the top 21 of Page 14, do you have that, Mr. Fuller? 22 Yes, sir. 23 All right. It says: Pipe support installation 24 and inspection activities were chosen for inspection, correct? Ace-Federal Reporters, Inc. 25 That's correct.

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Q Okay. And this does identify some problems that were designated as a follow-up item on Page 15 toward the bottom, right above Item C?

A I'm not so sure they were problems. They were questions that the inspector had, and they were on non-weld related items.

Q Well, now these were programmatic problems, were they not?

A These were questions. And, yes, they were concerning the procedure.

Q All right. Item 2 on Pag 15 relates to construction tolerances. If a joint is out of tolerance, might that affect the ability to weld it properly?

A No.

Q The -- let's see here. I would like to refer you to Page 4 of the report details section which is up a good deal closer to the front of this document.

A Yes, I've got it.

Q All right. Now, Item 3 there is -- refers to the potential to lose tracking control of identification and correction due to the use of multiple forms to document -- forms and methods to document conditions adverse to quality, correct?

A That's correct.

MR. BAXTER: Objection. Let's find out whether

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this has anything to do with pipe hanger welding first.

BY MR. EDDLEMAN: (Continuing)

Q Do you use DRs, DDRs, at that time, at the time of this inspection were DRs, DDRs, NCRs, and punch lists used for documenting problems with pipe hanger welding?

A DRs, DDRs, and NRCs were used for pipe hanger nonconformances.

- Q Punch lists were not?
- A Not that I'm aware of.
- Q In Item 4, it states the inspector identified that weld define measures to identify and correct conditions adverse to quality were not described or documented in quality procedures.

Was that true, to your knowledge, at this time?

- A No, I'm not aware of that.
- Q It's talking about meetings designed to identify adverse trends.

MR. BAXTER: Mr. Chairman, I object. We are picking sentences out of the middle of inspection reports without establishing any relationship to Contention 41.

JUDGE KELLEY: Well, I think that's what Mr.

Eddleman is doing. I would assume though that you are pretty conversant with the document and prepared to zero in on things that seem to bear on 41, right?

MR. EDDLEMAN: That's what I'm getting to here, I

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think.

JUDGE KELLEY: It's obvious that a lot of this document doesn't have much to do with pipe hangers, if anything.

MR. EDDLEMAN: But some of it does.

JUDGE KELLEY: Some of it appears to. So, the quicker we can isolate those parts the better off we are going to be.

Why don't you go ahead for the time being?
MR. EDDLEMAN: All right.

BY MR. EDDLEMAN: (Continuing)

Q I would like to refer you to Page 13 of the -I believe it's the back section of this report, the back
attachment that is numbered up to Page 25 I think it is.

MR. BAXTER: Are we still on 83/25 inspection report?

MR. EDDLEMAN: Yes.

MF. BAXTER: Page 13 of about a twenty-five page attachment?

MR. EDDLEMAN: The body of the back section of the report. I'm just trying to --

JUDGE KELLEY: It runs to thirty-five pages.

MR. EDDLEMAN: Thirty-five pages. I'm sorry.

BY MR. EDDLEMAN: (Continuing)

Q Do you have that, sir?

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A (Witness Fuller) Yes.

In Item 5 there, it identifies an unresolved item regarding FCR-H-979, Revision 3's compliance with AWS requirements, does it not?

That's correct.

All right. Now, the paragraph just previous to that shows a problem identified in a pipe hanger, CHH-1030, does it not?

It mentions something concerning 1030.

All right. It says that the support was redesigned and -- I'm reading at the top of Page 13. It says, "The support was redesigned and the new design was issued for implementation. However, no design nonconformance was issued and no formal transmittal of the noted condition to Ebasco or B-P was observed."

B-P is Bergen-Paterson, isn't it?

That's correct.

Okay. It says, "This was identified as an example for violation 400, 401/83-25-05," correct?

That's what it says.

Okay. Now, that --

I believe this one is concerning the design organization. It does not have anything to do with the inspection of pipe hangers.

Q Okay. I want to refer you over to Page 14 there.

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In the middle paragraph of Section B it says, "...the licensee issued a stop work order regarding pipe support installation and inspection," on July 22nd, 1983.

Now, was that stop work order prompted by this inspection?

A I believe I answered that question yesterday when I told you why we issued that stop work order.

Q Well, had the NRC conducted a previous inspection in June that identified problems in the area of pipe hangers?

A Not welding related.

Q Well, can you explain to me what the difference is between the stop work order issied on July 22nd and the stop work order used on July 29th, as stated in that paragraph?

A I believe the paragraph contains a typo.

JUDGE KELLEY: So it would appear. It doesn't make any sense.

WITNESS FULLER: I believe the proper word would be "lifted" in lieu of the word "used."

JUDGE KELLEY: Was it in fact lifted on that day? WITNESS FULLER: Yes, it was.

JUDGE KELLEY: It certainly supports that interpretation.

WITNESS FULLER: That's the reason I made it.

BY MR. EDDLEMAN: (Continuing)

Q Was the issuance of the stop work order just

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prompted by the 50.55(e) report that is mentioned in that paragraph?

It was unrelated to the 50.55(e) report.

Okay.

A The 50.55(e) report mentioned in that paragraph was initially sent in -- you see where it says interim report, it was initially sent in a year earlier. So we are talking about a difference of time of a year between that initial 50.55(e) report and this stop work. They are unrelated.

I believe the writer is just giving a synopsis of what's going on at that particular point in time.

Okay. It's talking about problems in the pipe support and inspection program, right?

What are you referring to now?

This whole Item B here, beginning close to the top of Page 14.

The July, '83 report 50.55(e) was concerning weld deficiencies. The stop work referred to later down in the paragraph had nothing to do with weld deficiencies, the reason for issuance of the stop work.

All right. Now, then on Page 15 of Item C, under Program Implementation, it refers to -- about 300 of the 18,000 seismic category I pipe supports having been successfully Phase II inspected.

Is pipe support in that sentence being used in a

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sense that means pipe hangers?

A Yes.

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Q Okay. And then the problems that were found below in that paragraph were concerning these pipe hangers?

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A That's correct.

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Now, the programmatic problems with this -- the hanger program at Harris included the question of the use of multiple forms for reporting discrepancies, as we've already discussed, and as well I would like you to look at Page 3 of

Mr. Chairman. It doesn't resemble any evidence I've heard in

show what I previously asked the witness about the multiple

documentation for conditions adverse to quality.

MR. BAXTER: I didn't understand that observation,

JUDGE KELLEY: Could you restate it, Mr. Eddleman?

MR. EDDLEMAN: Well, I think that the record will

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this case.

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MR. BARTH: I join Mr. Baxter, Your Honor. I move to strike Mr. Eddleman's previous remarks there. Remarks by the counsel -- he's not a counsel to the record -- that are not a question, he is entitled to ask a question and get answers but he is not entitled to testify. And he testified

I would like to refer to Page 3 of this --

and characterized the testimony. I move to strike it.

JUDGE KELLEY: In the alternative, you can rephrase

it so we can --

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MR. EDDLEMAN: That's what I'm trying to do. I'm just rephrasing it.

MR. BARTH: It is not a question, Your Honor. He made a statement --

MR. EDDLEMAN: I never finished the question.

JUDGE KELLEY: It sounds like it's getting late in the day. As I recall, Mr. Eddleman, there is a section of this document that talks about this subject of having multiple document problems. And you referred to it at one point and asked the witness a question or two.

MR. EDDLEMAN: That's right.

JUDGE KELLEY: Now, what is your prior observation intended to be, important or significant? Or, can we just move along?

MR. EDDLEMAN: It's just a note that that's there and then to ask about Page 3.

JUDGE KELLEY: Okay. So, we know that it's there. Why don't you go ahead?

BY MR. EDDLEMAN: (Continuing)

0 Do you have Page 3?

A (Witness Fuller) Yes.

Okay. Toward the bottom of that page in the last dashed item under B(1), it says a situation exists whereby a basically production free CI -- which I take it is construction

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inspection -- and a production oriented engineering staff are both reporting to the senior resident engineer position. Having the responsibility for both engineering and quality control activities can create a conflict of interest.

Is that what it says?

MR. BAXTER: Objection. Mr. Chairman, the witnesses have testified that CI inspects hanger attributes other than welding. Only the QA organization inspects pipe hanger welding, though whether CI has independence or not is irrelevant to this contention.

MR. EDDLEMAN: I think it is relevant. I think if you go back through the testimony you will see that there are connections between CI inspected attributes and the ability to weld properly.

MR. BAXTER: They haven't been established here if there are.

MR. EDDLEMAN: Now, he's testifying.

MR. BAXTER: I'm just responding to what you just said.

JUDGE KELLEY: I think he is arguing.

MR. EDDLEMAN: All right. I will withdraw that.

I'm sorry.

JUDGE KELLEY: All right. Well, we will rule on this. I want to ask a question.

Where do you stand now, Mr. Eddleman?

#16-11-SueT 1 MR. EDDLEMAN: Very near the end. 2 JUDGE KELLEY: Okay. 3 MR. EDDLEMAN: I don't know, one short line away 4 probably. 5 (The Board members are conferring.) 6 JUDGE KELLEY: It's a fairly debatable point. 7 are going to allow the question. 8 BY MR. EDDLEMAN: (Continuing) 9 Q It does read as I stated, doesn't it? 10 JUDGE KELLEY: Yeah, it does. 11 (Laughter.) 12 Beyond that -- now I'm testifying. All right. 13 So, what's the question? Go ahead. 14 BY MR. EDDLEMAN: (Continuing) 15 So, if I can move on now, that was one of the 16 three concerns that are identified as inspector follow-up 17 Item 83/25/12 for the Harris Plant above, right? 18 Look at the end of Paragraph 1 above the dash 19 parts. 20 Yes. A 21 MR. EDDLEMAN: At this time, I would move the 22 admission of Eddleman 49 into evidence. 23 MR. BAXTER: I object, Mr. Chairman. I don't think

we have established the relevance of this document for the

contention. We've had a lot of discussions about general QC,

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the fact -- Mr. Eddleman has tried to link the fact that there were multiple documents reporting discrepancies to pipe hanger problems but that connection has not been made by the witnesses or anybody else.

We have discovered problems with other aspects of pipe hanger installation but not with the welding here.

JUDGE KELLEY: Mr. Barth?

MR. BARTH: I don't think it's relevant, Your Honor, but it's no more irrelevant than the rest of these pieces of paper he has put in. So, I have no objection.

JUDGE KELLEY: Well, gentlemen, it strikes me that it's a long document about a lot of things, most of them have nothing to do with welding or pipe hangers. But there are some things in here that you pointed to that it seemed to me to have some bearing on --

MR. EDDLEMAN: I think --

JUDGE KELLEY: Can you identify again, you know, by page just where these things are? As an alternative, can you move in Pages A, B and C and so forth?

MR. EDDLEMAN: I can do that. I think it would be valuable to have the context in. And this is the Special Regional Construction Assessment Team inspection, as stated on the first part. Okay. So, I think that, Pages 1 and 2, the cover letter, would have to go in.

The Appendix A, notice of violation, that -- no,

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ce-Federal Reporters, Inc. 25 various of the items need to.

I think -
JUDGE KELLEY: Let me ask you to do this, Mr.

argue that that applies to pipe hangers.

Eddleman. Hold on just a minute.

MR. BARTH: Mr. Chairman, may I stick my neck out by offering a possible solution?

(The Board members are conferring.)

I'm not going to argue, you know, about something where it

says the cigarette butts on the RV flange, I'm not going to

context of these things. Some of these things refer here and

there in the report. The listing of follow-up items, Pages 34

and 35, at the back certainly needs to go in. And, then

But I just think it's clearer to have the whole

Previously, we had this problem and you admitted a document over the objections of the Applicants and the Staff only insofar as cross-examination was conducted on it. And that might be a possible solution with regard to this document, that only those matters which were cross-examined should be admitted into evidence.

JUDGE KELLEY: Particular pages and paragraphs, you mean?

MR. BARTH: Yes, Your Honor, and identified by Mr. Eddleman as you suggested.

JUDGE KELLEY: All right. Mr. Baxter, do you have

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any reaction to that approach?

The Board is inclined to let some portions of this document in, but not all of it. And then the question is exactly how that is to be limited. This is a compromise that Mr. Barth is proposing.

How does that strike you?

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MR. BAXTER: Mr. Chairman, it helps to know what we are shooting at. That is my biggest problem with putting the whole thing in.

JUDGE KELLEY: Is that approach, Mr. Eddleman, satisfactory to you?

MR. EDDLEMAN: If I do it, I have to go through the text almost item by item, and go over things with them.

JUDGE KELLEY: Well, the alternative is to do
that anyway, because if we don't do that -- the transcript
will show what that is, and then we can march on. If
we don't do that, then we are going to say to you: Tell
us tomorrow morning exactly what page of what paragraph
you want in, and we will go back and whether we think it
has anything to do with the contention.

So, you know, you can take your pick.

MR. EDDLEMAN: What I am trying to get at in this thing is the role that the NRC played in finding these pipe hanger problems and things that were out of proper procedure, or proper --

JUDGE KELLEY: But your best shot at that is going to be to ask Mr. Bemiss when you get him on the stand tomorrow, right? And others.

MR. EDDLEMAN: Well, I can certainly do that.

I think it is valuable to get the context of this.

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JUDGE KELLEY: Okay, we don't agree with that. We are not going to put in this whole 40 odd pages for context. We reject that proposal, and what we are trying to do is narrow it down now to some material that has some direct bearing on the contention.

MR. EDDLEMAN: I can try to get you a list of pages, or paragraphs, or whatever, tomorrow morning.

JUDGE KELLEY: Why don't you do that, and we appreciate Mr. Barth's suggestion. That is one way we could have handled it. What we will do, if you can tell us first thing tomorrow, just write it down on a piece of paper and xerox it and hand out copies, we will -- I don't think we need further argument on it. We understand the parties position.

Just tell us by page and paragraph of the document what you think is fairly -- directly bears on the contention, and we will look over the material and we will make a ruling. Okay?

MR. EDDLEMAN: All right.

JUDGE KELLEY: Fine.

BY MR. EDDLEMAN: (Continuing)

Q Genetlemen, in assessing the propriety whether it is okay to do a field change request, or permanent waiver on a pipe hanger, is all that analysis done by either CP&L or Ebasco, or are there other people who do the

analysis? Other companies, perhaps.

A (Witness Nevill) If you are talking overall, the only other involvement would be Westinghouse for some of the Class 1 piping systems.

MR. BAXTER: Are we talking about welding here?

MR. EDDLEMAN: Talking about the assessment of
field changes or permanent waivers that change the way the
pipe hanger welding is set up.

WITNESS NEVILL: Ebasco would have been the primary early sources, in addition to Bergen-Patterson.

Bergan-Patterson was involved with the design process of pipe hangers.

BY MR. EDDLEMAN: (Continuing)

- Q No other ouside contracts, or anybody like that.
- A No, sir.
- Q All right. Do you gentlemen have the hanger reinspection, HR-21, that was marked as Eddleman 48 earlier?
  - A (Witness Fuller) Yes, sir.
  - Q Do you have any attached report for it?
- A No, we don't. And we might add that that doesn't have anything to do with pipe hangers.

MR. BAXTER: I was about to object, Mr. Chairman. This deals with electrical supports.

MR. EDDLEMAN: Well, it says hanger reinspection.
WITNESS FULLER: I think it was HVAC, or cable

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tray hanger reinspections.

All right. Let me refer you to your testimony, Question and Answer 15, on page 7, please. This study that you did of hanger erection problems, when was that done?

Spring of '82.

Spring of '82? All right. And how long did the effort take?

A That study was a trip by site management to three other nuclear sites.

Okay. Which sites were those?

MR. BAXTER: Objection, Mr. Chairman. What possible relevance can it have to the litigation of the adequacy of the welds at Shearon Harris as to where the management traveled to look at problems elsewhere?

MR. EDDLEMAN: Want to know if they looked at the ones that had the worst problems.

MR. BAXTER : Well, we are not going to have evidence on which plants have the best hanger welds in the country.

JUDGE KELLEY: We might just -- could we just establish were these plants under construction, or --

WITNESS FULLER: Yes, sir.

JUDGE KELLEY: All of them?

WITNESS FULLER: Yes, sir.

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JUDGE KELLEY: If you have another question, 1 go ahead. 2 BY MR. EDDLEMAN: (Continuing) 3 Which plants are they? Virgil Summer, Catawba, and Palo Verde. A 5 Did any of you gentlemen on the panel go on 6 this trip? 7 MR. BARTH: At this time, I object, Your Honor. 8 This is so far from the Applicants QA program. It makes 9 me sad that we are going to start litigating Summer, and 10 Catawba, and the other power companies now, too. 11 It is just irrelevant, Your Honor. 12 JUDGE KELLEY: Well, we don't propose to do that, 13 Mr. Barth, I may assure you. I suppose it would be 14 legitimate though to find out if Mr. Hate went on a trip. 15 The testimony does speak of the study, and we don't know 16 what the next question is. If there is nobody here who 17 went, maybe we can forget about it, but if he went, we 18 can find out that much. 19 WITNESS HATE: I did not go. 20 JUDGE KELLEY: Oh, you didn't go. Okay. Did 21 anybody go? 22 WITNESS FULLER: I went to Catawba. 23 WITNESS NEVILL: I visited Catawba as well. BY MR. EDDLEMAN: (Continuing) 25

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Q This may have been asked and answered earlier, so I apologize. But how many of the hangers at the Harris Plant are now complete, and have passed final inspection and audit under the enhanced inspection program?

A (Witness Fuller) There are approximately 19,000 hangers; a little bit more than 3,000 have been through CI and QC. 7,000 have been through the engineer verification stage of the hanger engineers and welding engineers.

- Q So three thousand complete, is that right?
- A Through CI and QC.
- Q Well, now, the audit check on QC, that is after that? I am trying to find the section. There is a place in here where you talk about -- Answer 35, page 25, now who is it that checks the acceptability of these attributes as discussed in Answer 35?
  - A (Witness Hate) CI and QC.
  - Q Did CI and QC check on themselves?
  - A What do you mean?
- O Okay. When it says approximately 93 percent of the quality attributes presented by the craft to CI for inspection were found to be acceptable, does that mean that you have a hanger and it has so many attributes, things that have to be checked off, and CI finds 93 percent of those were okay.
  - A That is correct.

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Okay. Now, and the same meaning for QC in the next sentence?

That is correct.

Okay. Now, the independent check of inspector performance by QA Sur willance, that is checking after CI and OC have inspected to see if they did it right?

A That is correct.

And that has those acceptance rates as discussed there?

That is correct.

Okay. Now, my question is, the three thousand that you talked about, Mr. Fuller, that had gone through CI and QC, that doesn't include the results of this QA Surveillance check?

(Witness Fuller) Those surveillances were on part of those three thousand hangers.

Okay. Now, those that were rejected there had to be reworked again?

(Witness Hate) The ones that were rejected during the QA surveillance had -- were minor defects. If you will report to Mr. Jim Nevill's testimony on page 23. If you look at line 5, they fall in that category, they are minor defects and have no adverse impact on structural integrity.

Q Mr. Hate, you reviewed the defects found in the

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QA surveillance? 1 I know the results of it. 2 Did the results describe the defects themselves 3 particularly? 4 Yes, they do. 5 Okay. Are those hangers being reworked? 6 (Witness Fuller) Yes. 7 MR. EDDLEMAN: Thank you very much. I have no 8 further auestions. JUDGE KELLEY: Okay. Just a moment. 10 11 (Short recess taken) JUDGE KELLEY: Back on the record. Mr. Barth, 12 or Ms. Moore? 13 MR. BARTH: The Staff has no questions, Your 14 Honor. Yery terse cross examination. 15 JUDGE KELLEY: I guess the Board would come next. 16 BOARD EXAMINATION XXX INDEX 17 BY JUDGE BRIGHT: 18 Excuse my caugh drop. I thought that the Staff 19 might have a couple of observations to make anyway. In 20 your prepared testimony, on page 6, the sense of your 21 answer to Question 14, I guess this would be Mr. Hate, 22 is that that is one hundred percent in plant inspection, 23 is that true? 24 (Witness Hate) Yes. 25 A

Then on page 23 -- 13. Q

Your Honor, I would like to clarify one thing. A

Please. Q

On page 7, when I said yes, this covers a hundred percent inspection, that is not correct as far as prior to middle of '82.

O I am talking about today. Today you do one hundred percent of the inspection of the vendor's product?

A Yes.

And at the vendor's place of business, before it is shipped?

At the vendor's place, as well as on site.

I will get to the on site. My main problem here is historical information mixed up.

Your Honor, we approve fabrication in the vendor's shop.

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Q I am afraid I didn't understand what you said.

A (Witness Hate) What I said is that we got through with fabricating hangers in the vendor's shop.

Q Did you say that you were through with stuff out of the vendor's shop?

A Yes.

Q But you did institute a hundred percent inspection, vendor inspection?

A Yes.

Q Okay. Now on page 13 you state that you are now doing a hundred percent receipt inspection of vendor welds.

A That is correct.

Q Okay. Just for my edification, would you name a few attributes? This is a great term, but I am not sure what all it encompasses.

A As far as weld inspection is concerned?

Q What you say on page 13 in Answer 35, that approximately 93 percent of the quality attributes presented by the craft, for example, and farther on down, 99.82 percent acceptance rates for CI inspected attributes, and 9.37 acceptance rates for QC welding inspected attributes.

I would just kind of like to get a little feel for what you are really talking about there as far as attributes are concerned. I am not talking about the numbers.

For example, in the CI inspected attributes, we

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would verify the geometry, we would consider that as an attirbute. We would check the clearances, we would consider that as an attribute. We would verify the fasteners, that would be considered an attribute.

As far as QC inspection is concerned on welding, on welding we would consider undercut as an attribute. We would consider size as an attribute. We would consider fusion as an attribute. We would consider base metal reduction as an attribute. Those are some of the examples.

A (Witness Fuller) But in the context of the answer to this question under the QC part, joints are attributes in QC.

A (Witness Hate) That is right.

A (Witness Fuller) What Mr. Hate is describing is the attribute of a joint, and when it says 93 percent of the attributes as far as QC, that is 93 percent of the joints, and all those attributes go into a joint.

Now under the CI point, the items that he was describing, each one of those was an attribute of which 93 percent of say those items he described for CI would be acceptable.

Q Well, that is not readily apparent from your testimony here.

I guess there was one other thing. Early on in your cross-examination, the topic was your non-conformance

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reports and how far did they go, and I believe you said that they stopped at the Harris QA level, or something like that.

- A (Witness Hate) I would like to clarify that.
- Q I would like to get it clarified.
- A Okay. For example, our DDRs, which is a deficiency ---
  - Q Well, what are you using today?
  - A An NCR.
  - Q Then, please let's talk NRC.
- A Okay. An NCR goes to the manager of QA/QC. He is on the distribution, which I mentioned yesterday. In addition to him, the two senior construction managers on site also receive a copy of the NRC, and they are the Project General Manager of Completion Assurance.

In addition to that, they get quite a sizeable distribution.

Q Well, I guess the question was how far up the organization they went. Now I assume when you say the Quality Assurance Manager, you are talking about Mr. Banks?

A No. I am talking about the Manager of QA/QC who reports to Mr. Banks.

MR. BAXTER: You mean the Harris Site Manager? WITNESS HATE: Yes.

Now if it is a significant problem, such as a

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potentially reportable item or a reportable item, then that gets elevated even higher. Those problems, some of our corporate officers are on distribution for letters for those problems such as the Senior Vice President - Nuclear Generation and the Vice President of the Harris Project.

### BY JUDGE BRIGHT:

Is there any kind of, oh, collation or a standard little, say, weekly report, executive type that goes out to top management just for their information?

(Witness Hate) We have a monthly project review meeting, and during that monthly project meeting, which is also attended by the Senior Vice President - Nuclear Generation, non-conformance reports are discussed.

Do you feel that upper management then is adequately informed of the way things are going ---

Yes, absolutely. Yes.

JUDGE BRIGHT: Fine. Thank you.

# BOARD EXAMINATION

# BY JUDGE CARPENTER:

If you would turn to page 13 of your prefiled testimony, please. On 13 through 16 you make reference to the high rejection rate on receipt inspection of vendor welds, describing it to somewhat different weld acceptance criteria. What is the reason for different weld acceptance criteria?

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A (Witness Nevill) I would like to try to answer that. When we talked earlier about the FCR 979, that was part of a mechanism that we used on site to make sure that the weld acceptance criteria was consistent.

Now Berg and Patterson when they completed the original design and fabrication, they have their own acceptance criteria. You know, it is their design process and their QA program. That was somewhat different than what we used on site for field welds. That stemmed some of the earlier problems where Berg and Patterson used their criteria for shop welds and we had a slightly different criteria for field welds.

Now that goes back into the FSAR commitments and the design specifications issued to Berg and Patterson. They did not use AWS D-11. They had their own separate set of criteria they had developed over the years since they are a design and fabrication organization.

The 979 FCRs simply took the Berg and Patterson criteria and issued that on site. And that is how we evolved to resolve the differences in the criteria.

- So it is essentially a change from the FSAR?
- A No, sir it is not, because Berg and Patterson never committed to AWS D-11.
- Q I was just kind of surprised. This seemed like a sort of routine thing and people have been building nuclear

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power plants for a long time and agencies have been trying to regulate them. And I was surprised at this late date that there was some question about weld criteria.

A (Witness Hate) When the contract was initially issued, it was silent and it did not get into this level of detail. It left quite a bit up to Berg and Patterson, and that is where the conflict existed because their designers came up with their own criteria for their inspectors and that necessarily did not match with the criteria that we used in the field. So FCR H-979 was part of that reconsideration.

A (Witness Timberlake) What you sould also keep in mind is that the vendor being a shop is supplying or has been supplying hanger components to various sites throughout the country, and some of those sites work to ASME Section 3, Subsection NF requirements.

And as a vendor, in order to meet those requirements, they felt like they designed to those requirements and set their inspection criteria up to that and were supplying us with components that they had inspected with that basis for their criteria.

However, we were not committed to NF for our site work and we were working to AWS D-11. So you are basically dealing with differences in welding inspection criteria because of two different codes involved.

Q Are both the codoes simultaneously acceptable, or

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it is an option as to which code you comply with?

(Witness Nevill) Well, if you get into later A issues of the NF invokement on ASME, there are problems involved because the NF part of the ASME code, which is after the Harris licensing commitment, kind of encompassed hangers into that program where it previously was purely related to pipe.

So at Harris now we use AWS for structural welds, which includes pipe hangers, and ASME for pipe welds. Future generation plants use the NF criteria which invokes those on hangers themselves.

Can you give me some feel for the magnitude of the difference? Are we talking about a 10 percent difference or a factor of two difference?

A (Witness Hate) I have always considered the D-11 code to be more stringent than the NF code, and that is what we were applying.

See, you are making reference to some things that I have never seen. So I am asking for help. When you say more stringent, I am looking for get some feel for -are there substantive differences or modest differences?

(Witness Timberlake) It is probably better to classify it as more definitive. It does into more detail for the measurement of fillet welds, for example, and has an undersize criteria for fillet welds, and has criteria for

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definition in Section 3.

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inspection.

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(Witness Hate) That is the NF code he is talking about.

undercut based on loading, and you don't find that much

Section is really almost silent on visual

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(Witness Timberlake) Right. AWS D-1.1 also has more information and has an exhibit that discusses weld profiles which is very definitive.

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(Witness Hate) I can give you some feel. If you took the same weld and you inspected it to NF versus D-11, you would probably accept at least maybe 30 percent more welds based on the NF criteria versus the D-11 criteria, in

standardization of the weld acceptance criteria was compatible

with the regulatory commitments since it was made at such

Well, what I was interested in was whether this

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that type of magnitude.

a late date?

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A (Witness Nevill) Yes, sir, it was.

A (Witness Hate) Yes, it was.

#### BOARD EXAMINATION

#### BY JUDGE KELLEY:

I have just one rather general question for the panel, and it may take a few sentences to state it. But it comes down to this. As I see it, there is a rather long

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and complicated background of a problem with these pipe hanger welds at Shearon Harris which you have wrestled with and you have tried some different fixes and the early ones at least didn't work or didn't work very well and you came up with this enhanced program in December of '83 which was designed to fix it once and for all.

And the early returns on that, which you reflect in your testimony look encouraging, and I am thinking of the 99 percent and upward results referred to in Question 35, for example.

But with that background, and I got this feeling, too, reading the NRC staff's testimony, and I don't mean to misinterpret that, and we will hear from them tomorrow, but a sort of reaction to their testimony was along these lines.

Well, there was this very intractable problem and it was very stubborn and they worked and they worked and they still had a problem, and now recently they have got this good program and we sure hope it works. That is the message that seems to come through.

So then I asked myself, the program looks good but it was a pretty hard problem and how can I be sure that it has really been fixed, except to say well, I will want to see more actual results under the program before I am satisfied that everything is okay.

Why shouldn't I as a Judge just say I am glad

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to hear what you are doing and come back in six months or a year and tell me when you are three-quarters done and we will look at the statistics then and decide whether it is a good enough program.

Now we are here today and your position for the company is that we should approve it, but could you tell me why I don't need that kind of skepticism, if that is your position?

A (Witness Hate) Yes. We have total confidence in our enhanced program. This confidence is built through many multiple checks. For example, David Timberlake's group looks at all the hanger welds prior to even presenting it to QC for inspection.

So now you have got welding supervisors looking at hanger welds prior to even giving it to us for inspection. That is one level of check that we never had before.

We have got Mr. Fuller's engineers out there in the field answering questions and resolving problems as they come up and simplifying the understanding of the craft. It is much simpler for the craft when you have engineers in the field assessing that.

We have formed documentation assessment groups that verify that yes, we have done all the inspections and we have reconciled all the changes and they are all part of the finished product.

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In addition to that, we also do independent QA surveillances. These surveillances, the sample size is based on Mil Standard 105D which gives you a very representative sample of what you have got in the field. Okay?

Q Okay up till there. Could you just repeat the sample and what that is about?

A Yes. The QA surveillances are done to verify the performance of CI and QC inspectors.

Q Are these spot checks, so to speak?

A No, they are more than that. What we do, as we have said, is that for the 19,800 hangers what is the sample size we need to take to have confidence in our program that our inspectors are performing well?

Q Okay, and what is the answer, about big a sample size?

A Based on that, our sample size is going to be approximately 500 hangers, which includes when we go to check those hangers we look at all the welds on the hangers and all the CI attributes. It is not just one weld on a hanger or two welds.

Q Are you saying, and bear with me, I am not an expert on samples and statistics at all, but are you saying that once you have done a checkout on 500; then if you adhere to the sample program, you will get a very high success level on everything else?

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A What I am saying is that these 500 hangers that we will be checking out, so far on our QA surveillances we have looked at approximately 150 hangers.

Q The 500 sample is something that you are working right now?

A Yes. It will continue to go until we finish the installation of the 19,000-whatever hangers there are. You will continue to test them so that ---

Q So you are taking "X" percent? The 500 is "X" percent of 19,000. Was it five percent or something like that?

- A Something like that, yes.
- Q And so far you have done 150 of the 500?
- A Right, but it is based on a recognized statistical sample.

Q Okay. The details on this, I have read your testimony, but is this particular feature all laid out?

A No.

Q Well, then, go ahead. It is of interest.

A Okay. So these QA surveillances give us additional confidence that our inspection programs are working.

Q The QA surveillances, you say you have done about 150 of a projected 500?

A Yes.

Q And what do they show?

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A	Those	results	are	shown	in	our	Answer	35.

Q That is the answer 35 with numbers?

A It is line 22 to 24. It is page 25.

Q Just a minute.

(Pause.)

Yes, beginning with "In addition, the independent check . . ." that is what you are referring to?

A Yes.

Q It came out virtually perfect, 99. something.

A And whatever minor discrepancies we found -- or whatever discrepancies we found were of a very minor nature and had no safety significance and they were evaluated as so.

Q Okay. I think I follow that.

A Now in my oral testimony of yesterday I reported that this is for just a three-month period. I reported for the period of January through October, and the results of are very similar. It is a very high performance rate of our inspectors.

Ω The statistics in the testimony are for a period of February to April. That is just a quarter, correct?

A That is correct.

Q And I am asking you to repeat I guess, but when you spoke yesterday of January to October?

A That is correct.

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Q What is the comparable percentage of acceptance for that?

(Pause.)

- A For QC inspected attributes, which is welding ---
- Q I was thinking about the check, the 500 check, right?
  - A Yes.
  - Q Okay, go ahead.
- A The check of inspector performance for welding for the ten-months is at 98.78 percent.
  - Q Okay.
  - A For CI it is 99.6 percent.
- Q Okay. That is helpful. Thank you. I appreciate you repeating it for me.

and people like that on the television last week and they would have in three percent of the electorate and they would say so and so wins, right, with great confidence, and they turned out to be right, and I suppose most of the time, or they wouldn't say such things.

Are you saying that having done this much of acheck at this stage of the game, then assuming you stick to the present program, which you are committed to, you would come out with a similar result?

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A Yes, sir. But I am also saying that we have many other attributes in our enhanced hanger program that also provide a lot of checks and balances such as David Timberlake's people looking at all the welds which we never did before.

JUDGE KELLEY: Thank you, Mr. Hate. Does anybody else want to comment on that?

WITNESS FULLER: We don't claim to be perfect, and as evidenced by those surveillance numbers not being a hundred percent, we weren't, and we probably never will be.

JUDGE KELLEY: I don't think we can believe a hundred percent.

WITNESS FULLER: We did try.

(Laughter.)

But if there are problems that crop up, we are committed to fix them. If we see areas in our program that need strengthening, that is certainly our intention.

JUDGE KELLEY: Thank you, sir.

Anyone else?

(No response.)

JUDGE KELLEY: That is all I have.

Mr. Eddleman, do you have any further cross based on our questions?

MR. EDDLEMAN: I think I have a few things, Judge.

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JUDGE KELLEY: Go ahead.

FURTHER CROSS-EXAMINATION

BY MR. EDDLEMAN:

As regards this sample size, gentlemen, isn't it true that there have been other sampling program where when a larger sample was taken it was found that there were problems that were getting past the sample?

MR. BAXTER: Objection. Is this a statistical question that in the abstract the mil standard might not be adequate? I don't know what sampling programs Mr. Eddleman is making a reference to. It is too vague.

MR. BARTH: We object, Your Honor, because your questions did not refer to other sampling distributions and only the sample that they had taken here of 150 with an ultimate sample size of 500 of 19,000. You made no reference in you questioning to other samples. It is beyond the purview of the redirect by the Board or cross or however we characterize your questions.

JUDGE KELLEY: Mr. Eddleman?

MR. EDDLEMAN: I can't believe it. I think if you say you have got a sample and you have got high confidence that you are right because of your sampling results, then the very logical question is haven't you before had some samples where things were getting right by you even though the samples looked okay.

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JUDGE KELLEY: The question is haven't they in their work at Shearon Harris?

MR. EDDLEMAN: That is right.

JUDGE KELLEY: All right, I will allow that.

WITNESS HATE: Mil Standard 105 is a very recognized sample program that has worked and is well used across the industry. But what I said to you earlier, Your Honor, is there are many checks and double checks.

The QA surveillances are just one facet of the ---JUDGE KELLEY: I understand, but I think Mr. Eddleman is just after the sample at the moment.

Isn't that right?

MR. EDDLEMAN: That is right.

JUDGE KELLEY: All right.

BY MR. EDDLEMAN:

Well, let me ask you, is Mil Standard 105, was that what was used to inspect the skewed tee fillet shop welds?

(Witness Hate) I don't know.

In what other parts of the auditing or checking on pipe hangers at Shearon Harris is this standard used?

MR. BAXTER: I am sorry. Mr. Chairman, I think the question is confusing. The QC inspections, which are done on every weld on every hanger, with the QA surveillances, which are done following that on a sample basis.

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I think Mr. Eddleman's question is confusing the two.

MR. EDDLEMAN: I think the confusion is Mr. Baxter's.

JUDGE KELLEY: Well, could you restate it and we will see.

### BY MR. EDDLEMAN:

Q For what other checks on inspection of pipe hangers at Shearon Harris is Mil Standard 105 used?

MR. BARTH: Objection, Your Honor, this is way beyond your cross. We are not talking about anything except welds, and not other attributes of these hangers, which would include the material traceability and all kinds of things.

You asked about a sample of 150 out of an ultimate sample of 500 on the attributes and not other matters on these pipe hangers.

MR. EDDLEMAN: Logically if you have to separate out only the welding attributes, then you would have to strike the testimony about the results of the program.

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JUDGE KELLEY: Could you restate the question, please?

BY MR. EDDLEMAN: (Continuing)

Q For what other checks on inspection of pipe hangers at Shearon Harris is Mil Standard 105 used?

A (Witness Hate) Our --

JUDGE KELLEY: Yes, all right.

WITNESS HATE: Our weld inspections, we've always looked at all welds in the field a hundred percent. Okay.

JUDGE KELLEY: Okay.

WITNESS HATE: At receipt inspection in the past
we had used Mil Standard 105 for certain attributes before
we went to looking at hundred percent of the shop welds.
When in '82 we started looking at hundred percent shop welds
so we didn't use Mil Standard 105.

BY MR. EDDLEMAN: (Continuing)

Q Mr. Hate, as regards the questions about attributes, and if any of the other panel members can add to this please do, about how many attributes require inspection on an average Shearon Harris pipe hanger?

A It's over thirty-five attributes.

JUDGE KELLEY: Are you using it now just in the sense of porosity and fusion, or are you using it in the sense of joints?

WITNESS FULLER: The CI checklist has thirty-eight

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attributes on it, although not all attributes on any given hanger may be applicable.

JUDGE KELLEY: I understand. But is an attribute, as you are using it now, like porosity or is it like parts of a hanger?

WITNESS HATE: No. And then on welds we are just using it as a weld joint.

JUDGE KELLEY: All right. That's what I wanted to know. Thank you.

BY MR. EDDLEMAN: (Continuing)

Q Now, let me see if I can be clear on this. Mr. Fuller, among those thirty-eight attributes are all of the joints on the hanger that are welded, are they separate attributes among those thirty-eight?

A (Witness Fuller) I think we are talking about two different things. For CI, there are thirty-eight check points, although some may not be applicable to every hanger.

Q All right.

A From the QC point of view, every welded joint is an attribute. Now, to get a successfully inspected joint, then it should have the correct amount of porosity, undercut, size, the whole weld inspection criteria. Although that goes into one attribute from the QC point of view.

Q Okay. The acceptability of each individual weld joint is one attribute?

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A That's correct.

Q Okay. And about how many weld joints are there on a typical pipe hanger that the QC inspects?

A That question is almost unanswerable. I don't know if there is such a thing as a typical pipe hanger.

Q Okay. Are there typically several? More than one or two?

JUDGE KELLEY: Let me ask you how this relates to the question I asked?

MR. EDDLEMAN: Judge, it doesn't relate to questions you asked; it relates back to the questions that Judge Bright asked about attributes and then the follow-up about how many percent of the attributes pass and so on, not to your question.

JUDGE KELLEY: All right. Go ahead.

WITNESS FULLER: I would guess five, but that could range all the way from one to a hundred.

MR. EDDLEMAN: All right. That's all.

JUDGE KELLEY: Fine. Redirect, Mr. Baxter?

REDIRECT EXAMINATION

BY MR. BAXTER:

Q Mr. Hate, the several times today that Mr. Eddleman has introduced exhibits -- I think 22, 41 and 46 -- which were CP&L reports to the NRC about problems identified as Items 72, 95 and 96, are those three items covered in the

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Reporters, Inc.  discussion of deficiencies in your prefiled written testimony?

A (Witness Hate) Yes, they are.

Q And I think Mr. Fuller probably covered this.

But when subsequent additions of these reports are filed

listing corrective actions, that doesn't imply, does it, the

corrective actions were initiated or undertaken at the time

of the follow-up report?

Mr. Fuller?

A (Witness Fuller) That's correct.

Q Mr. Timberlake, Mr. Eddleman was asking you, I think it was yesterday, about inspecting for porosity and the potential that porosity in a weld could lie beneath the surface.

A (Witness Timberlake) Porcsity in welds, using the process that we use which is primarily a shielded metal

Is that a safety concern? And, if not, why not?

arc process, in layman's terms, a stick welding, normally the only porosity that you get with that process could be when the arc is initiated at the start of the electrode, and that type of porosity is normally very minor and would be

visible on the surface through visual examination.

Q Mr. Fuller, there have been references several times over the course of the two days to problems that the NRC resident inspector found in September 1980. Would you

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clear up the record for us as to exactly what the resident inspector found versus what the Company found on its own?

A (Witness Fuller) All of this is based on the inspection reports that I have read at the time, and the various notes and memos, on that particular subject, since I was not involved in the 1980 reinspection until about midway through it. But based on the inspection reports, what it appears the NRC inspector found was one case where the weld that existed in the field was not the same type as what had been called for on the drawing.

He also found one case that looked like a little sloppy drafting on a drawing where it looked like both a full penetration weld and a fillet weld had been called for, it being on the same joint.

And I believe he also found several instances on two different hangers where there were more sides welded than not. Now, that was not per the drawing, so that's what the concern was.

Now, from this CP&L, within days, undertook a surveillance or a review of hundreds of drawings looking for weld symbols. Oh, incidently the NRC inspector on this particular concern that was raised did not note any weld defects. The weld defects are items that were determined by CP&L when they went out and reinspected the hangers.

So, the NRC pointed out a problem or asked a question,

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æ-Federal Reporters, Inc.  and CP&L took the ball there and began doing the review of the weld symbols on the drawings to determine the extent of the problem, went out in the field and began reinspecting hangers to see if there was a problem that existed there, and ultimately expanded it to include all the hangers that are described in our June 11, 1981 final report.

Q Mr. Timberlake, there was substantial discussion with you about the training of welders, including some of the written materials that you had prepared for classes you presented.

Could you tell us to what extent the outlines that were discussed here and are in the record reflect the extent of the information you communicated to the welders during those classes?

A (Witness Timberlake) Yes. When I prepare an outline, it's primarily for my use and to convey to the training record what the major points of the training class are that are covered. And I usually go into much more depth, because I'm very familiar with what I'm talking about in the training class and will expand upon the outline that you will see -- that we have seen -- typically in these hearings.

Q There was some questioning also of the time that has been spent and the periods covered by the documents that Mr. Eddleman introduced.

Are these classes the initial exposure of these

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welders to the subjects you are addressing in those classes?

A No, they are not.

Q And what kind of training have they had previous to these classes?

A Well, when a welder is hired at the Harris site, they are required to pass a welding test which determines their ability to deposit sound welds. The testing is done in accordance with applicable codes for pipe hanger welders. It would be ASME, Section 9, and if they pass this test they will receive training at that point to indoctrinate them into site procedures.

And once they are welding in the field they will become a part of our ongoing training program.

Q And the training that had been discussed from this documentation introduced by Mr. Eddleman is part of the ongoing training program and not the initial training?

A That's correct.

Q Mr. Hate, there was some discussion about the training given to the QC welding inspectors as well. Could you briefly outline for us the training that those people receive before they are allowed to perform QC welding inspections?

A (Witness Hate) Yes. Training is broken out into two categories. We have classroom training as well as on-the-job training. They have to go to a minimal of nine hours of

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classroom training and a minimum of eighty hours of on-the-job training.

Some of these hours can be reduced based on the inspector -- or the potential inspector having prior work experience that is directly related to this activity.

In addition to that, on an average he goes through one week of reading, and once he goes through this training then he has to pass written test. And that itself takes a considerable amount of time.

Pipe hanger inspectors normally have prior background experience even before coming to the site.

Ω 'And is there ongoing training after they are initially qualified to be welding inspectors?

A Once they are qualified, we continue to perform supervisory checks of their performance. Once an inspector is qualified, we run weekly supervisory checks and as we develop confidence in that inspector we back it off to a monthly check.

In addition to that, they also go through weekly ongoing training.

Q Thank you. Mr. Fuller, can you draw any relation-ship between the fact that at one point NCR, DDR and DR forms were used with the pipe hanger welding and inspection problems discussed in your testimony?

A (Witness Fuller) I know of no connection.

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Q Mr. Hate, I've provided you and the parties and the Board and the Reporter with a copy of a letter from Carolina Power and Light Company, dated June 1, 1982, to Region II of the NRC, signed by Mr. Banks. And attached to the back is a second letter, July 30, 1982.

Are these both responses to NRC I&E reports 82-03 which were previously introduced as Eddleman Exhibit 43?

A (Witness Hate) Yes, they are.

MR. BAXTER: Mr. Chairman, that Eddleman exhibit was admitted with the stipulation that Applicants' response would be also received into evidence.

And I ask that this document be marked for identification as Applicants' Exhibit 25 and received into evidence.

JUDGE KELLEY: The notion is granted.

(The above-referred to document is marked as Applicants' Exhibit 25 for Identification and received into evidence as Applicants' Exhibit Number 25.)

MR. BAXTER: I have no other questions.

JUDGE KELLEY: Okay. Anything else, Mr.

Eddleman?

MR. EDDLEMAN: Just a couple.

JUDGE KELLEY: Okay.

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#### RECROSS EXAMINATION

#### BY MR. EDDLEMAN:

Q Mr. Hate, are all of the requirements for inspector training and checking on the inspectors working the field that you just described for Mr. Baxter, were those always applicable for pipe hanger weld inspectors at Shearon Harris?

A (Witness Hate) I will answer your question in two parts. The first is training. Yes, we've always had a training program, and the requirements have always been there in existence.

As far as supervisory checks of pipe hanger inspectors are concerned, we addressed that in our testimony.

That was part of the corrective action that was initiated
in the middle of '82.

Q Mr. Baxter asked you whether the NRC reports or problems to the NRC in Eddleman Exhibit 2 and some others were discussed in your testimony, and you said yes. Can you tell me where in your testimony that's discussed?

A I would like to take you to Page 17 of my testimony, starting from Question 27 which is the last line on that page.

Q Okay.

A And I would like to take you to the top of Page 20.

I'm sorry, the bottom of Page 20.

Q The end of Answer 30?

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A Yes, that's correct.

Q Mr. Timberlake, in this stick welding as regards porosity, could the angle of the stick or the welding rod or the arc link have any impact on the formation of porosity in welds on these hangers?

A (Witness Timberlake) The angle of the electrode wouldn't normally. Arc link could have some -- it could lead to some porosity, yes.

Q And is spatter sometimes an indication of excessive arc link?

- A Not necessarily, no.
- O Can it be?
- A It can be, yes.

MR. EDDLEMAN: Thank you. No more questions.

JUDGE KELLEY: Okay. Gentlemen, that takes us through the process as far as you are concerned. Mr. Hate is a veteran by now. And we do very much appreciate your coming and your patience and your attention and your answers.

Thank you very much. You are excused.

(The panel of witnesses stood aside.)

There is one thing that we want to note before we break up here, and I think we will in just a minute. We would appreciate it if everyone could just look around to the left and right and front and back, and if there is paper and things just pick them up. We have this very nice room

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here as a matter of grace and not as a matter of right. And we did exasperate some people recently by not picking up paper and soda cans and what not. So, if you would take a look around and cooperate with us in that regard we would appreciate it very much.

Is there anything else we need to raise before quitting for tonight? Mr. Eddleman?

MR. EDDLEMAN: I can't think of anything off, Judge Kelley.

JUDGE KELLEY: Okay. Mr. Barth?

MR. BARTH: Nothing from the Staff, Your Honor.

JUDGE KELLEY: Okay, Mr. Baxter?

MR. BAXTER: I'm sorry, two things.

JUDGE KELLEY: Oh, well, we are not quite through.

Premature. This goes back and forth until it exhausts itself.

MR. BAXTER: Oh, no, no, no. I have no more questions for the witnesses.

JUDGE KELLEY: Oh, that's good.

MR. BAXTER: I just have two closing --

JUDGE KELLEY: You have two closing matters? Okay.

MR. BAXTER: Two closing matters. I would like at this time to ask the Board to reconsider its determination to call as one of the four subpoenaed witnesses Mr. Charles French. It has come out several times today that we have objections to interrogating witnesses on HVAC, cable tray and

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electrical supports as outside the scope of Contention 41 which we view as being limited to pipe hanger welding. Mr. French has had no involvement with pipe hanger welding or inspections. His only background is with other kinds of supports.

And it has been my impression today that our objections were well received, and I would ask that the Board then rule that Mr. French need not come here tomorrow. And if you would like to ask him, he is the same Mr. French who was subpoenaed on concrete. So, he has been previously sworn, and he is here.

But if we can establish that and allow him to go back to work tomorrow that would be helpful.

JUDGE KELLEY: We argued this matter, related matters, way back in the management hearing I think, wasn't it?

MR. BAXTER: Yes.

JUDGE KELLEY: I just don't recall the argument over Mr. French and what we may have said. If you have got a citation maybe you could summarize and the other parties may wish to comment, too.

In being asked to reconsider, I just have trouble remembering what we thought in the first place, so to speak.

And maybe if it's brief, you can refer us to it.

MR. BAXTER: I can hand it to you.

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end #19 Joe flws JUDGE KELLEY: We may have some compelling reason for calling Mr. French or sustaining Mr. Eddleman's desire to call him.

Can we just take a minute here?

(The Board members are conferring.)

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EVENING SESSION

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JUDGE KELLEY: What I am looking at up here for the benefit of Mr. Eddleman and Mr. Barth, Mr. Baxter brought me up a copy of a management transcript where this particular ruling was delivered, and I just glanced down the page. This particular page -- I could take more time and look at it more -- but do you recall, any of you, whether we talked about the particular people in detail.

Whether Mr. French's connection or non-connection with pipe hangers was gotten into?

MR. EDDLEMAN: Judge, I don't believe that we went over each of them in great detail. I have here my areas of inquiry and document list for Mr. French, and I would note that on the document list appear FCR-H-979, FCR-H-979 justification, FCR-H-286, all of which we discussed today, the FCRs and TVs listed on page 6 of the August '84 document list on Contention 41, that is the handwritten version, not the typed version, and Applicants Interrogatory Responses on Contention 41.

The questions have to do with approval of FCRs and PWs primarily, and the analysis that is necessary to do that.

JUDGE KELLEY: Let me just ask. Were you aware whether or not Mr. French was actually involved in pipe hangers?

MR. EDDLEMAN: Well, I got discovery on a lot

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of things about hangers, and some of them were HVAC and other hangers.

I didn't check for sure to make sure that Mr. French was on this one or that one.

JUDGE KELLEY: I gather then we didn't really focus on this back in September, and it is being raised now. Having heard now from Mr. Baxter, and we can ask Mr. French if you wish, do you want determine direct from Mr. French about his involvement or not with pipe hangers, Mr. Eddleman? We could do that.

MR. EDDLEMAN: Well, I think if Applicants wanted to object to this as distinct from it, they would have to show why the documents that I mentioned that were already prefiled as things I wanted to examine him about and the questions are irrelevant to the contention. It is not --

MR. BAXTER: No, that is not it. It is that the documents that you prefiled that have to do with pipe hangers, Mr. French isn't going to know anything about them, and hasn't done anything with them. The documents you prefiled that have to to with HVAC electrical and conduit supports, we do object to asking questions of any witness about.

JUDGE KELLEY: Let me just ask how they got in the picture at all under this particular contention?

MR. BAXTER: At the very beginning, when the

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50.55.E report was written on pipe hangers, the Company decided to from there to look at welding elsewhere on the site, and the same report wrote up some problems found in other areas.

And we simply to avoid the number of discovery disputes we already had from getting larger, gave Mr.

Eddleman some of the documentation behind that as well as on the pipe hangers.

JUDGE KELLEY: Thank you. With that background, though, Mr. Eddleman, let's project ourselves into tomorrow, if Mr. French in fact knows nothing about pipe hangers, and if you are going to get objections on questions that don't relate to pipe hangers, why bring Mr. French?

MR. EDDLEMAN: Well, I think I have questions here that do relate to pipe hangers, and I would rather take the objections when they come up.

MR. BAXTER: I am representing that he has never worked on pipe hangers.

JUDGE KELLEY: That is the point that is being made.

MR. EDDLEMAN: Has he had anything to do with those --

JUDGE KELLEY: Why don't we put him on briefly. He is right here, and let's ask him if he knows anything

about pipe hangers.

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Will you bring Mr. French up?

XXX INDEX

Whereupon,

CHARLES S. FRENCH,

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a witness introduced on behalf of the Applicant, having been previously sworn, testifies as follows:

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JUDGE KELLEY: You fellows can leave, or sit

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in the audience, or whatever you wish.

JUDGE KELLEY: Mr. French, you were on a prior

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panel, right?

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WITNESS FRENCH: Yes, sir.

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JUDGE KELLEY: So you were sworn earlier in the

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case. Let me just ask a couple of preliminary type

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information questions.

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You have heard the discussion general, and you

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know what we are talking about. Where do you now work

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at Shearon Harris?

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WITNESS: I am now working the Electrical

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Construction Engineering Department.

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JUDGE KELLEY: In that connection, do you work on pipe hangers at all?

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WITNESS: No, I do not.

JUDGE KELLEY: Have you ever worked on pipe

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hangers at Shearon Harris?

WITNESS: I never have.

JUDGE KELLEY: Mr. Eddleman, do you want to probe this a bit?

#### CROSS EXAMINATION

#### BY MR. EDDLEMAN:

- Q Mr. French, have you seen the document list that
  I prepared for use in asking you questions on Contention 41?
  - A Yes, I have.
- Ω Did you have anything to do with the preparation or approval of FCR-H-979?
  - A No, I did not.
  - Q How about FCRAS-4294?
- A I do not have that in front of me. I left it back in the back area there.
- Q Do you remember whether you had anything to do with preparing or approving it?
- A Let me take a look at it first before I answer that, please.

JUDGE KELLEY: It seems to me if the witness says he has never worked on pipe hangers.

WITNESS: I don't believe I have. All I have to do is look at the document briefly, and I will be able to tell you for sure.

FCRAS-4294, I did not have anything whatsoever to do with that particular document.

BY MR. EDD'EMAN: (Continuing)



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No, I do not.

All right. Do you have the list of documents on Contention 41, the various PWs and FCRs listed there?

MR. BARTH: Your Honor, there are a 146 documents on this list. He answered your question which you asked him, absolutely and directly, that he never had anything to do with it. For the Staff, that is good enough for us, and I see no reason to bring him.

JUDGE KELLEY: What is the point of pursuing this, Mr. Eddleman. It escapes me.

MR. EDDLEMAN: I want to know --

JUDGE KELLEY: Unless you doubt the man's word that he worked on pipe hangers.

MR. EDDLEMAN: I am not doubting his word. I want to know if he had anything to do with these FCRs and PWs that are on these lists?

MR. BAXTER: But if they don't have anything to do with pipe hangers, then they are irrelevant, too.

MR. EDDLEMAN: Well, we haven't established that.

MR. BARTH: The contention establishes that, Your Honor.

MR. BAXTER: If any of those documents relate to pipe hangers, then by virtue of his previous testimony, he doesn't have any knowledge about them, because he hasn't

worked on pipe hangers.

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JUDGE KELLEY: The paper you got in discovery isn't necessarily admissible in this case.

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MR. EDDLEMAN: I understand that, Judge. Maybe there is a question that I can ask him that will clear this up.

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JUDGE KELLEY: Okay, try it.

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BY MR. EDDLEMAN: (Continuing)

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Did you have anything to do at all, at any time in your work at the Harris Plant, Mr. French, in preparing

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or approving PWs or FCRs that might cover pipe hangers?

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No, I did not.

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MR. EDDLEMAN: That takes care of it. I don't .

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have any objection. You don't have to bring him in.

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JUDGE KELLEY: Fine, thank you. So you are

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excused. Thank you, Mr. French.

us to do that today.

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WITNESS: Thank you, Mr. Chairman.

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WITNESS STANDS ASIDE.

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JUDGE KELLEY: With that, let's resume at --

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MS. FLYNN: Excuse me. Mr. Chairman, one small

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matter. Yesterday, Mr. Runkle distributed a motion to

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reopen the management record on behalf of the Joint

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Intervener, and the Board asked the Staff and Applicants

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to tell the Board how we would like to respond, and asked

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Applicants would like to respond in writing, and request that that be filed ten days after the conclusion of this hearing.

We would also like, however, to make some brief comments in response orally on the record at some time when it is convenient for the Board during the course of this hearing.

JUDGE KELLEY: What about right at the end?
MS. FLYNN: That would be fine.

MR. BARTH: Or, Your Honor, could I suggest we might make it the first point of business tomorrow morning before we start the Staff's panel, or the subpoenaed witnesses.

MS. FLYNN: Whichever the Board prefers.

MR. EDDLEMAN: I don't know if Mr. Runkle is going to be here first thing tomorrow morning. If you adopt that course, I will have to notify him. I will try. I am not sure I can reach him.

JUDGE KELLEY: It would be better to have Runkle here I would think. Do you think you could get in touch with him?

MR. EDDLEMAN: I am not prepared to assign a high probability to it. I will try.

JUDGE KELLEY: Well, that doesn't strike us as terribly important one way or the other when it is done.

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End 20.

Why not at the end, Mr. Barth. Is there some strong reason to not just do it at the end?

MR. BARTH: No real strong reason, Your Honor.

It would seem to me to be the logical place to do it,

and I have no objection when we do it.

JUDGE KELLEY: It is a more definite time, I

grant you that, but it is desirable to have him here. Could

you make some best effort to call him yourself tomorrow

morning and tell him that this may come up, and if you

want to schedule some time, two o'clock tomorrow afternoon,

or whenever he can come, that is all right, too.

MS. FLYNN: I will try that. Thank you.

JUDGE KELLEY: Okay. Get everything picked up, and we will adjourn until tomorrow morning at 9:00.

(Whereupon, at 6:20 p.m., the hearing adjourned, to reconvene at 9:00 a.m., Thursday, November 15, 1984.)

\* \* \* \* \* \* \* \* \* \* \* \*

# CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING: SHEARON HARRIS NUCLEAR POWER PLANT

DOCKET NO .:

50-400-OL & 50-401-OL

PLACE:

RALEIGH, NORTH CAROLINA

DATE:

Wednesday, November 14, 1984

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

MYRTLE H. TRAYLOR Official Reporter

(Sigt) Junel J. Welchh-fr.

(TYPED) GARRETT J. WALSH JR.

Official Reporter

Reporter's Affiliation: ACE

Federal Reporters.

MARY C. SIMONS

Official Reporter