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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of:

CLEVELAND ELECTRIC ILLUMINATING COMPANY

Docket No. 50-440 OL
50-441 OL

(Perry Nuclear Power Plant
Units 1 & 2)

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY & LICENSING BOARD

In the Matter of:	:	
CLEVELAND ELECTRIC ILLUMINATING COMPANY	:	Docket Nos. 50-440 OL 50-441 OL
(Perry Nuclear Power Plant Units 1 & 2)	:	

Lake County Administration Center
105 Main Street
Painesville, Ohio

Tuesday, May 24, 1983

The hearing in the above-entitled matter was reconvened at 9:00 a.m., pursuant to notice,

BEFORE:

PETER BLOCH, Administrative Judge

JERRY KLINE, Administrative Judge

GLENN BRIGHT, Administrative Judge

* * *

FORM OH 325 REPORTERS PAPER & MFG CO 800 626 6313

APPEARANCES:

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C O N T E N T S

WITNESSES:	DIRECT	CROSS	REDIRECT	RECROSS	BOARD
Murray R. Edelman) Gary R. Leidich)	1028	1032			

Exhibits:	Identified	Received:
Board Ex. No. 1 (Resignation letter of Mr. Wilt)	1001-A	1001-A
Staff Exhibit No. 1 (Final Environmental Statement, NUREG-0884)	1224	1225
Staff Exhibit No. 2, (NUREG-0887)Safety Evaluation Report)	1224	1225
Staff Exhibit No. 3 (Supplement 1 to NUREG 0887)	1224	1225
Staff Exhibit No. 4 (Supplement 2 to NUREG 0887)	1224	1225
Staff Exhibit No. 5 (Supplement 3 to NUREG 0887)	1225	1225

Limited Appearance:	Page:
J. Paul Cotton	1134

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PROCEEDINGS

JUDGE BLOCH: Good morning.

Before we proceed this morning, I would ask the counsel and representatives of the parties to identify themselves for the record, starting at my left.

MR. CUTCHIN: My name is James M. Cutchin, IV. I am with the Office of the Executive Legal Director and of the NRC Staff, and I represent the NRC Staff.

MR. SILBERG: Good morning, Mr. Chairman, members of the Board. Welcome to Painesville. I am Jay Silberg from the law firm of Shaw, Pittman, Potts & Trowbridge in Washington, D.C.

With me today here representing the Applicants is Mr. Harry Glasspiegel of the same law firm, and Mr. William Kerner, an attorney with the Cleveland Electric Illuminating Company.

MS. HIATT: I am Susan Hiatt, representing Ohio Citizens for Responsible Energy.

MS. HUBBARD: Amy Hubbard, pro se representative for Sunflower Alliance, Et Al, and with me is Jay Abramson, also pro se representative.

JUDGE BLOCH: Ms. Hubbard, Mr. Abramson, I take it that you are both members of Sunflower Alliance.

MS. HUBBARD: Sunflower Alliance, Et Al is a number of different organizations. We belong to one of the

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organizations on the list, North Shore Alert.

JUDGE BLOCH: The Board learned only yesterday, just prior to the limited appearance statement session last night, that the attorney representing Sunflower Alliance, Et Al, Daniel D. Wilt, has resigned. Attorney Wilt's letter is brief. It says, "I wish to report that, due to irreconcilable differences and professional responsibility, I no longer represent Sunflower Alliance, Inc. I want to thank you and your colleagues for all of the courtesies and kindnesses extended to me during my involvement in this case. Very truly yours, Daniel D. Wilt."

At the conclusion of yesterday's limited appearance statement session, we were approached by Susan Hiatt, Amy Hubbard and Jay Abramson to discuss some of the implications of the resignation of Attorney Wilt. We would have preferred that it was possible for the other parties to be present, but we thought that under the circumstances, it was proper for us to have some discussions about possible implications of the resignation, which we proceeded to do.

We discussed the fact that apparently there are some documents related to Comstock, an electrical contractor for Cleveland Electric Illuminating Company, Et Al. Apparently they have not been gone over by the representatives for Sunflower Alliance, and we discussed the fact that Ms. Hiatt, representing OCRE, does have questions which she would like

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to pursue today.

We left unresolved the issue of how lengthy the review of the Comstock documents might be. We did offer at that time limited assistance to Sunflower under the circumstances, stating that if they identified concerns that they wanted followed up at the hearing, that the Board might be able to be of some assistance to them in following up on those concerns.

This morning, as the result of a request from the Board that Attorney Wilt be here this morning, he called the Chairman at his motel room and we spoke briefly. We had considered, because of the way that Wilk's resignation has left the hearing in some difficulty, the possibility that the Board should take some action with respect to Attorney Wilt.

His conversation with me leaves me with the impression that there are enough questions about the attorney-client relationship that we would not by ourselves undertake any action against Attorney Wilt, although obviously, if a motion were to come from a party, we would have to consider that.

It is our understanding from what Mr. Wilt told us that he had difficulties with his client that have caused him to resign, and we would prefer not to take extensive hearing time with that issue unless forced by a party.

(Letter from Daniel D. Wilt to Administrative Law Judges, dated May 23, 1983, follows:)

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Board #1

DANIEL D. WILT

ATTORNEY AND COUNSELOR AT LAW

May 23, 1983

P.O. BOX 08159
CLEVELAND, OHIO 44108
(216) 249-8777

Judge Peter Bloch, Chairman
Atomic Safety & Licensing Board
Nuclear Regulatory Commission
Washington, D.C. 20555

Judge Jerry R. Kline
Atomic Safety & Licensing Board
Washington, D.C. 20555

Judge Glenn O. Bright
Atomic Safety & licensing Board
Washington, D.C. 20555

Re: Perry Nuclear Power Plant
Docket Nos. 50-440-OL
50-441-OL

Dear Administrative Law Judges:

I wish to report that due to irreconciable differences and professional responsibility I no longer represent Sunflower Alliance Inc.

I want to thank you and your colleagues for all the courtesies and kindnesses extended to me during my involvement in this case.

Very truly yours,

Daniel D. Wilt

CC:
Sunflower Alliance Inc.
Service List

(The document referred to was identified as Board Exhibit No. 1 and received in evidence.)

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First I would like to call on either Amy Hubbard or Jay Abramson or Susan Hiatt to correct anything that I may have misstated about what went on last night. Was my recollection essentially the same as yours?

MS. HUBBARD: It seems accurate to me.

MS. HIATT: I believe your recollection is correct.

JUDGE BLOCH: I asked before we went on the record this morning, I asked Ms. Hubbard and Mr. Abramson if they could estimate the amount of time that it will take them to look at the Comstock documents that they said last night had not been reviewed. I would like them, if they could, to state first the volume of those documents, and second, their estimate of how much time it will take them to review those documents.

MS. HUBBARD: The best I can estimate, Mr. Chairman, not being used to participating in this kind of proceeding, I can only guess. Because we will be in hearings during the day, that leaves us only the evening hours to go over the documents, and what we would like to do is review some of the NRC inspection reports and the audit finding reports and action requests.

We did get a chance late last night in the wee hours of the morning to examine some of them, but in order to present adequate cross-examination, we would like to be able to formulate our arguments better and to be able to organize

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it in an intelligible way.

What we would request would be if Ms. Hiatt could go ahead and present her cross-examination. We feel we would be able to present half-decent cross-examination starting on Thursday, if that is possible.

JUDGE BLOCH: Would the other parties like to comment?

MR. SILBERG: Did you mean to say Thursday? When you approached me before the hearing started, you said tomorrow, which is Wednesday.

MS. HUBBARD: Mr. Silberg, I will take whatever I can get.

JUDGE BLOCH: How many documents are we talking about? First, let me ask what it is you have lost. I understand there was some conflict over whether particular discovery requests concerning Comstock were relevant or needed to be reviewed for hearing. How long would it take you to determine whether those specific discovery requests, which are not the investigation reports, which are probably basic documents, are relevant to the cross-examination?

MS. HUBBARD: It is difficult for me to answer because I am not specifically familiar with the differences. What I did last night was look through a pile of documents I was given.

JUDGE BLOCH: How big a pile? Is that next to you

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there?

MS. HUBBARD: It is a mixture here. Some of this is Pullman Power. This represents the pile (indicating).

JUDGE BLOCH: Would someone like to take a guess at the inches involved? I'm not too good at that.

(Laughter)

MS. HUBBARD: Is that about 10 inches to a foot?

JUDGE BLOCH: Okay. Roughly a foot of documents.

MS. HUBBARD: We already do have some idea about specific areas we would like to address, so it is not as if we are starting out blind. We would like to be able to present a cross-examination that makes some sense and is not just a stab in the dark.

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JUDGE BLOCH: Mr. Cutchin?

MR. CUTCHIN: Well Mr. Chairman, Miss Hubbard spoke to me this morning and my view was then -- I am not sure it has changed now -- was that since Sunflower, Et Al is the lead Intervenor on Issue Number One and OCRE has no quality assurance contention, OCRE's cross examination would ordinarily be limited to non-cumulative, non-repetitive questions following the questioning of the lead Intervenor.

However, since the Applicant appears to be receptive to granting some relief, though as the Board well realizes, one who steps into a case takes it where one finds it. But recognizing that all of this happened at the last moment, the Staff is willing, within reason, to go along with what the other parties think is reasonable.

JUDGE BLOCH: Mr. Silberg?

MR. SILBERG: Mr. Chairman, we would not object to allowing Ms. Hiatt to begin cross-examination initially, notwithstanding the normal rules of lead Intervenor process. I would note my understanding that the process that Sunflower has been using so far to the discovery has been, for some of its members -- including, I believe, Miss Hubbard and I know Mr. McIntyre, who is sitting at Council's table for Intervenors, who I believe is President of Sunflower -- that they have been to the site and have been reviewing documents during the many weekends that we have made our

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files available to them.

Obviously, last minute surprises have a way of interfering with preparation but my understanding is that at least some of the members of the Sunflower Group have been looking at the documents all along. So it is not as if they have not -- it is not as if they have had no prior opportunities to review the discovery material.

JUDGE BLOCH: The Board has been trying to think about what is necessary for a reasoned decision about the facts concerning the supervision of Comstock. It occurs to us that for us to do that properly we will want to see more of a play by play than we will receive from the Applicant and Staff. What I am talking about is more of a month by month statement of what Comstock activities were taking place, what the status of the QA program was in that month, what oversight activities were conducted by the Applicant and/or the Staff during that month, what the Applicant or Staff then knew, what specific follow-up was taken, and what reactions actually occured.

The testimony filed by Applicant and Staff deals with these in what we are sure Applicant and Staff considered to be a wholly satisfactory manner, but the level of generality is greater than we would have liked to have seen. I wonder whether this Board requirement means that -- I wonder whether this Board requirement means that the proceeding could

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proceed more efficaciously if, instead of relying on cross-examination to bring more of this detail out, the Applicant and Staff were able to do that as part of their direct case. And if so, I am interested in knowing whether that can be done right now or whether the Applicant and Staff need a bit of time to respond to this expressed need.

MR. SILBERG: I suspect, without consulting with our witnesses, that a lot of this could be done in response to questions by us or by the Board. I guess I am a little disappointed that we were not given some advance indication of this prior to this instant because we could have prepared specific materials to address that. Obviously, when you walk into a hearing and are told that something other than what is being -- what has been prepared and was filed on all of the parties three weeks ago is needed, it puts off at a bit of a disadvantage.

Even if we were to take a short recess, we would obviously not have the kind of detailed response that we could have had if had had a few days notice.

JUDGE BLOCH: I understand that. I wish I had done otherwise. I would only explain that three weeks ago I was assigned to the Commanche Peak case. I completed my review of the direct testimony last night after the limited appearance statement and I have also had this surprise yesterday about council for the Intervenors resigning.

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Ordinarily, we would prefer to rely on the Intervenors to bring out this information. It is the combination of having completed our own review last night and the resignation of the attorney that prompts me to raise this question now, in the interest of efficiency. I think it would be helpful if we were able to do that now. You are suggesting, I think, Mr. Silberg that we could proceed on the basis of you trying to bring out some of this additional detail I take it.

If there is detail lacking that you think ought to be there, in response to the Board's question, we can make provision for getting into the record later in the week also.

MR. SILBERG: There are many mechanisms by which we can provide additional material to the record, either at a subsequent evidentiary hearing or through other devices.

I guess before we start the process I would at least like to take a few minutes to discuss with our witnesses and see exactly how much of that is readily available, how much is available right now, how much could be prepared on varying degrees of notice, and how much might not be available at all. I think there are some other preliminary matters that we can probably take care of and then I would suggest we take a short recess and we can at least get a feel for whether the information that the Board wishes is available and, if so, on what schedule.

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JUDGE BLOCH: Mr. Silberg, you mentioned preliminary matters. What would you like to dispense with?

MR. SILBERG: There are two preliminary matters. One, I would like to note for the record that I provided the Chairman, last night, with a copy of documents which he had requested during our conference call. This deals with the contractor performance reports. In response to the Board's request we provided him with three months worth of contractor performance reports, plus the sections of all of the contractor performance reports which deal with quality measures.

I would like to note that those reports contain, in addition, information which we think is totally irrelevant to this hearing. Information which the Company considers to be proprietary because it involves financial details of contracts between the Company, the Applicants, and their contractors.

The second preliminary matter has to do with the motion that was filed by Ms. Hiatt, several days ago, seeking to raise new contentions dealing with an application filed by the Applicants under 10 CFR Part 70 for the receipt, on site, of new fuel and certain radioactive sources. Because the motion was filed so late and so close to the hearing, I would like to request that we be given additional time to prepare a response to that motion and I would suggest a period

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of about ten days after the completion of this session of the evidentiary hearings.

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JUDGE BLOCH: Just to clarify, when does the Applicant want to receive the materials on site?

MR. SILBERG: We would not anticipate the need to receive those materials on site until at least early 1984.

JUDGE BLOCH: Are there any objections to the extension of time to ten days after the conclusion of this hearing?

MS. HIATT: OCRE has no objection to Applicant's extension for responding to these contentions.

MS. HUBBARD: Sunflower Alliance has no objection.

MR. CUTCHIN: Staff would second the request, Mr. Chairman.

MR. SILBERG: I neglected to make that request and have it apply to the Staff as well.

JUDGE BLOCH: The request is granted for both parties.

MR. SILBERG: Thank you.

MR. CUTCHIN: I have one preliminary matter.

JUDGE BLOCH: Yes, Mr. Cutchin.

MR. CUTCHIN: Mr. Chairman, I placed at the desk of the Board and made available to the other parties this morning copies of two sets of pages. The first is rather self-explanatory. It is a memorandum for Guy H. Cunningham, Executive Legal Director, from James Keppler, Regional Administrator, Region III. That was accompanied by some

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loose pages of marked-up Staff testimony, being pages number 12, 13, 24 and 25 in a separate package.

The memorandum from Mr. Keppler to Mr. Cunningham --

JUDGE BLOCH: Just a moment. Did you put this before the parties as well?

MR. CUTCHIN: Yes, sir.

The memorandum is in the nature of what I would call a Board notification, although it is not denominated such. I am making available this second package of pages marked up from the testimony for the information of the parties, though the memorandum said those changes would be made to the Staff's prefiled testimony at the time it went into the record.

There are also attached to Mr. Keppler's memorandum some additional marked-up pages that are attachments, and they are explained in the memorandum and I will not go into any detail as to what they are. I will let the memorandum speak for itself.

JUDGE BLOCH: Could you, so we know if we need to read it immediately --

MR. CUTCHIN: You do not. It is in the form of a Board notification, and the Board can read it at its leisure between now and the time testimony is completed on quality assurance and make a decision as to what, if anything, it feels need be done.

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MS. HIATT: Your Honor, I would disagree with Mr. Cutchin's characterization of this memorandum. Having read this just recently, I think it raises some very significant issues about the testimony the NRC Staff has submitted in this proceeding. Apparently there is an electrical inspector with NRC Region III who has some disagreements with the Staff's testimony that has been submitted.

I think Mr. Cutchin should identify this individual if this person is scheduled to testify today. If not, maybe he should be brought in so he can be subject to cross-examination. They are apparently quite a few differences of opinion on the Comstock matter herein.

JUDGE BLOCH: I have not read it, but I would like the Staff's response to the comment.

MR. CUTCHIN: I would be glad to respond, Mr. Chairman. I think I would disagree, naturally, with the characterization of OCRE. I think the memorandum says that here are some additional markups to the testimony that this particular individual would have preferred to see be made. They are indeed differences of opinion as to the tone of the testimony. There appears to be no difference in the views of the panel which the Staff is offering and the individual who has these differing opinions as to the facts; and as the Board well knows, unless there is some reason to believe that this individual has facts not known to the witnesses made

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available by the Staff, it is not likely that that witness should or could be called.

I think the Board should take the time at its leisure to read the memorandum, decide what it believes. As I indicated to the Board on May 9th, some of these things took place after, in response to a question by the Chairman as to whether there were individuals on the Staff who had differing views. This had not cleared up at that time. It has since, and that is why we are making the memorandum available. This individual has not requested the opportunity to come forward as a witness, and of course we are not offering him as a witness at the moment.

JUDGE BLOCH: We will, of course, not rule until after we have read the document.

MR. CUTCHIN: Understandable, sir.

JUDGE BLOCH: Mr. Silberg, have you had a chance to review it enough to make a comment on this debate?

MR. SILBERG: Yes, I have reviewed the document. I don't have anything to add to what Mr. Cutchin stated.

MS. HUBBARD: Mr. Chairman, may I make a statement?

JUDGE BLOCH: Please.

MS. HUBBARD: We would like to second Ms. Hiatt's concern because, having reviewed the document rather briefly, it does mention that this particular inspector believes that some of the problems that the NRC discovered were not problems

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that had been identified by CEI earlier. It is my understanding that -- and I may be wrong in this -- as I said, I am still reviewing the documents -- but it is my understanding that generally it was believed that CEI had already discovered the problems and the Nuclear Regulatory Commission really came in on top of what they had done; and this does make it appear as if there is a possibility it might have occurred that way, at least according to this one person's perspective.

JUDGE BLOCH: Relevant to whether that is actually new views or not, I think, would be that the success that the Applicant would have in responding to the request the Board already made in terms of details of what happened on a month-by-month basis.

MR. CUTCHIN: Mr. Chairman, I would just add that I think a reading of the Staff's testimony would indicate there is no difference in the view of this particular individual as to what the Staff did and did not know at the time it went to its inspection and what the Staff found in addition to what the Applicant had found.

JUDGE BLOCH: It is my understanding that we should now stand in recess.

MR. Silberg, what was the amount of time that you would like to request for this recess?

MR. SILBERG: I think if we could just take a fairly

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short, perhaps ten-minute recess.

JUDGE BLOCH: All right. Ten minutes from now, then.

(Recess)

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JUDGE BLOCH: Back on the record. Before we get into the matter that Applicant has been conferring about, we would like to clarify with the Staff one aspect of the memorandum we received this morning.

Mr. Cutchin, could you tell us the way in which we will receive the facts related to the last sentence of this first paragraph which says, "They were also concerned that the testimony may not adequately convey the Region 3 efforts that were required to secure effective corrective action by the Applicant."

Is that already supposed to have been changed, or is that something additional that will be said to us?

MR. CUTCHIN: Mr. Chairman, the purpose of this memorandum of Mr. Keppler's and the attached pages, it is my understanding, is to provide that which was missing. So there is nothing in addition.

JUDGE BLOCH: Could you show me in the attached pages where we are informed of the efforts that were required to secure effective corrective action?

MR. CUTCHIN: My understanding is that --

JUDGE BLOCH: Which page?

MR. CUTCHIN: Page 20. And on page 17. I think there are some words on 14 as well. But the impression that was wished to be made known by the inspector was the fact that -- or was the view that the Staff had to increase its

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efforts, that it had to do more comprehensive -- that it had to insist on more comprehensive action by the Licensee than this individual thought the testimony that was prefiled had reflected.

As the memorandum from Mr. Keppler says, it was a difference of view as to the tone of the testimony, not as to any facts.

JUDGE BLOCH: My problem is that --

MR. CUTCHIN: This individual, Mr. Chairman, made these changes on these pages, and they -- as I understand -- now reflect his views as to what he would like to see the testimony saying in addition to what it does say.

JUDGE BLOCH: I understand that. My problem is that the testimony is at a fairly high level of generality, and what this last sentence suggests to me is that there may be some details about what staff efforts were that are not in the testimony at this time. Maybe along the line of the kind of play-by-play we were suggesting that we wanted. I don't know.

MR. CUTCHIN: Well, Mr. Chairman, I would take the view, I guess, that that is arguably totally irrelevant.

The real question is whether or not there was a loss of control of this electrical contractor's or any other contractor's activities to the extent that it has resulted in uncorrected or uncorrectable safety problems. And if it took

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additional effort on the part of the staff to get that cured, I guess my reaction would be, so what, so long as it was done.

JUDGE KLINE: Mr. Cutchin, that statement can be read with two slightly different meanings. One is --

MR. CUTCHIN: Which particular statement?

JUDGE KLINE: The statement we've been discussing, the last sentence, first paragraph of Mr. Keppler's letter. The one that starts out, "They were also concerned that the testimony may not adequately convey the Region 3 efforts," et cetera. That could mean that there was simply a large effort needed to do a large job, and it could also mean that Region 3 had to expend effort to essentially overcome what might be thought of as resistance on the part of the Applicant.

Do you have an interpretation of the meaning?

JUDGE BLOCH: To clarify that, I think you may be reading the sentence to say, "convey that the Region 3 efforts were required to secure..." which may be the intended meaning. I'm reading it to say, "the Region 3 efforts that were required," meaning that the efforts have not -- what those efforts were have not been detailed.

MR. CUTCHIN: No. I think it's that the individual did not believe that the testimony and its tone adequately conveyed the amount of effort that was required on the part of Region 3 to get the compliance that it wished to get from the Applicant.

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As I understand it, they had to, in the view of this electrical inspector, lean harder, if you will, expend more effort to get compliance than he thought the testimony conveyed.

MR. SILBERG: Mr. Chairman, I think the important point, as I read this document, is that the changed pages that are attached to it represent the views which this inspector wanted to get before the Board -- views or facts, however one characterizes them, and I think it's matters of interpretation rather than matters of fact.

But regardless of how one characterized them, they are now before the Board in the form of these changed pages. And I think that really is the answer to the question.

I would also note that at the end of the letter, the next to the last paragraph, Mr. Keppler says that if the Board desires amplification of the various views, -- I assume including all the views within the region -- sponsors of the Staff's testimony are fully conversant with the concerns on Inspection Report 81-19, and will be prepared to respond to questions.

It seems to me if there are any questions, the proper way to address them is to the witness panel when the Staff puts the panel members on. If they can answer the questions, fine. If they cannot, then the Board will have to decide what the appropriate course of action is.

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MS. HUBBARD: Mr. Chairman, I think it's wrong to characterize this that the inspector is satisfied with the testimony because if you look at the end of the second paragraph, it states clearly, the inspector, while pleased with the direction of the modifications, still believed that the testimony did not fully convey his views.

MR. SILBERG: But those modifications are not the modifications that are attached here but the additional modifications that were made in the second document.

MS. HUBBARD: Okay, but it's my understanding --

JUDGE BLOCH: Let's clarify. Where is the statement that says he was satisfied after the additional modifications were made?

MR. CUTCHIN: Mr. Chairman, the only reason these pages --

JUDGE BLOCH: No, no,let's just answer the question first.

MR. SILBERG: I'm just reading it as you do on page 2 in the first full paragraph, it says, "I am, therefore, requesting that you make this memorandum and the attached pages of the testimony which represent the additional changes that the electrical inspector and investigator would have made to the testimony available to the Licensing Board and the parties."

JUDGE BLOCH: The memorandum at least says -- it

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says that the additional changes were made.

MS. HUBBARD: My understanding from the letter is that this is the opinion of Mr. Keppler, the Regional Administrator, that the changes reflect diversity of views, and not that it satisfies the electric inspector.

What I am concerned about is on cross examination if we don't have this electrical inspector here, we will not get the full diversity of views that Mr. Keppler seemed concerned about reflecting, and that's why we would like to have him here, so we can at least talk to him.

JUDGE BLOCH: Ms. Hubbard, I think what we'll do is defer ruling on this. In the course of talking to the Staff's panel you should fully explore both the substantive matters mentioned; that is, whatever problems there were in getting Applicants' cooperation, and also, the possibility that views of these individuals go beyond the changes in this document.

At the conclusion of the testimony, we will then decide whether it's necessary to see the individuals.

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MS. HUBBARD: Thank you.

MS. HIATT: Sir, I would like to make this statement. It seems to me appropriate that the person who has the most direct personal knowledge of this investigation on the electrical contractor should be present here to represent the Staff and not to have his views conveyed by other people who apparently do not have that direct personal knowledge.

I recall during the January 5, 1983 telephone conference call concerning scheduling of hearings, one of the reasons this hearing was rescheduled from mid-February to now is that the electrical inspectors who were to have been witnesses were busy testifying at another plant, and now the electrical inspectors are not even here.

It really raises questions in my mind as to whether the witnesses presented by the Staff are those with the most direct personal knowledge and the best qualified to address this matter.

MR. CUTCHIN: Mr. Chairman, I guess I am going to object to these continued mischaracterizations of what is on record in this proceeding. If one would go back and read the papers and one would go back and read the 81-19 report and read the signatures of the individuals who were involved, the two individuals that are on this panel who were most directly involved are Mr. Konklin and Mr. Williams, both of

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whom are members of this panel, and they are the two individuals who were involved in other testimony at the time. I think it would be helpful if we would put accurate facts into the record rather than continued mischaracterizations.

JUDGE BLOCH: Mr. Cutchin, there are two parts to this. I take it these people have certainly not requested to appear; is that correct?

MR. CUTCHIN: That is correct, Mr. Chairman. It is my understanding this individual would rather not appear. He is not satisfied with the way that his views have been conveyed to this Board, and if, and only if this Board believes that there are pertinent facts to its decision at the end of the Staff's and the Applicant's testimony I think can we find out whether the Board wishes him to appear, and we can face that at the appropriate time.

JUDGE BLOCH: I take it also it would be appropriate to show him the testimony so that if he feels personally that the testimony is not fully reflective of his views, he can communicate independently with us.

MR. CUTCHIN: You mean the transcripts after the cross-examination. That would be possible, yes, sir.

JUDGE BLOCH: I would appreciate it if that were done.

Mr. Silberg, can you tell us the results of your deliberations?

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MR. SILBERG: Yes. As I mentioned, if we had had some advance notice, we could have prepared a fairly detailed presentation addressing minute-by-minute, if you wish, the types of actions that you requested. I do not think that that minute-by-minute presentation is either necessary or appropriate to answer this contention.

We would like, however, at least to be given the opportunity until tomorrow morning to try to better collate the information, most of which is readily available, but it is not organized in the format that would address the Board's concern. We have asked some of our people to undertake that, and they are doing that at this minute.

However, we do have testimony which we think addresses the Board's issues, the four issues which it admitted, and we would like cross-examination on that testimony to proceed. I think our witnesses are fully prepared to defend that testimony, to answer many of the questions even encompassed within the Board's formulation, but we would hopefully by tomorrow morning be able to present a more coherent set of responses to the Board's questions.

I would urge that we continue with this proceeding, that we put our witnesses on, we introduce their direct testimony, and that cross-examination of that testimony proceed.

JUDGE BLOCH: Is that method of proceeding

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acceptable to the other parties?

MR. CUTCHIN: It is acceptable to the Staff, Your Honor.

MS. HIATT: OCRE would find it acceptable.

MS. HUBBARD: Sunflower Alliance also.

JUDGE BLOCH: Okay. Have Applicant and Staff decided who would be most appropriate to go first?

MR. SILBERG: The normal course of events is for Applicant's witnesses to go first. We would assume, if that is acceptable to the Staff, that we will continue with that approach.

MR. CUTCHIN: That is the approach the Staff envisioned, Mr. Chairman, and it is acceptable.

JUDGE BLOCH: Mr. Silberg.

MR. SILBERG: Yes. I will ask Mr. Glasspiegel to present our direct case.

JUDGE BLOCH: Please continue.

MR. GLASSPIEGEL: Mr. Chairman, we would call Mr. Murray R. Edelman and Gary R. Leidich to the stand.

JUDGE BLOCH: Off the record.

(Discussion off the record)

JUDGE BLOCH: Back on the record.

While we were off the record, the Board requested that all witnesses in the room stand to be advised of their rights at the same time, advised of their obligations -- excuse

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me. There are now four Staff witnesses standing. I ask them to identify themselves one at a time for the record.

MR. KONKLIN: James Konklin, K-o-n-k-l-i-n, NRC Staff.

MR. GILDNER: Max Gildner, G-i-l-d-n-e-r, NRC Staff.

MR. WILLIAMS: Cordell Williams, C-o-r-d-e-l-l Williams, NRC Staff.

MR. MAXWELL: George Maxwell, NRC Staff.

(Whereupon, Murray R. Edelman, Gary R. Leidich, James Konklin, Max Gildner, Cordell Williams and George Maxwell, having been called as witnesses herein, were duly sworn by the Administrative Law Judge.)

JUDGE BLOCH: I would like to advise the six people standing that this is a proceeding before an agency of the United States Government. It is concerned with matters that may be important to the public health and safety and to the economy of this area of the country. Your obligation in this proceeding is to tell the truth, the whole truth, and nothing but the truth. A failure to fulfill that obligation could result in prosecution for perjury, including imprisonment.

If you understand fully what I have just said, I ask you please to raise your right hand to signify that you understand.

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(A show of hands)

JUDGE BLOCH: Let the record reflect that all six individuals have raised their hands signifying understanding of the warning.

Thank you very much, gentlemen. We may proceed.

Mr. Glasspiegel.

MR. GLASSPIEGEL: Thank you.

Whereupon,

MURRAY R. EDELMAN and GARY R. LEIDICH,

called as witnesses by counsel for Applicant, having been previously sworn by the Administrative Law Judge, were examined and testified as follows:

DIRECT EXAMINATION

BY MR. GLASSPIEGEL:

Q Gentlemen, would you please state your names and spell your names for the record?

A (Witness Edelman) I am Murray Edelman, M-u-r-r-a-y E-d-e-l-m-a-n.

A (Witness Leidich) I am Gary Leidich, L-e-i-d-i-c-h.

Q Would you please state your present --

JUDGE BLOCH: May we close the doors? Off the record.

(Discussion off the record)

JUDGE BLOCH: On the record.

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BY MR. GLASSPIEGEL:

Q Would you please state your present employer and position with the company?

A (Witness Edelman) I am employed by Cleveland Electric Illuminating Company. My present position is Vice President of the Nuclear Group.

A (Witness Leidich) I am employed by the Cleveland Electric Illuminating Company. My present position is Senior Engineer, Nuclear Construction, Engineering Section.

Q Mr. Edelman, will you be the lead witness for Applicant's witness panel?

A (Witness Edelman) Yes, I will.

Q I have just handed you a document dated May 2, 1983, consisting of 34 pages --

JUDGE BLOCH: Off the record.

(Discussion off the record)

JUDGE BLOCH: Back on the record.

BY MR. GLASSPIEGEL:

Q I have just handed you a document consisting of 34 pages and three attachments, dated May 2, 1983, entitled "Applicant's Testimony of Murray R. Edelman and Gary R. Leidich on the Cleveland Elec-ric Illuminating Company's Quality Assurance Program for Control of Safety-related Contractors at Perry Nuclear Power Plant (Issue No. 3)."

Was this document prepared by you or under your

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supervision?

A (Witness Edelman) Yes.

A (Witness Leidich) Yes.

Q Do you have any changes, additions or corrections to make to the document at this time?

A (Witness Edelman) We have one correction we would like to make.

Q Would you please identify the page and line numbers and make all corrections at this time?

A (Witness Leidich) The one correction we would like to make is on page 21, line 20. Change "48" to "36."

Q Do you have any further changes that you wish to make to your testimony?

A (Witness Edelman) No.

A (Witness Leidich) No.

JUDGE BLOCH: May I clarify? You say this document was prepared by you or under your supervision? Do you mean answers to the questions, or the entire document?

WITNESS EDELMAN: The entire document.

JUDGE BLOCH: Including the "Q" portions, the questions?

WITNESS EDELMAN: The questions were posed to us and we responded to the questions.

MR. GLASSPIEGEL: Thank you for that clarification.

BY MR. GLASSPIEGEL:

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Q As corrected, are the answers to the questions in this document accurate and truthful to the best of your knowledge and belief?

A (Witness Edelman) Yes.

A (Witness Leidich) Yes.

Q Do you adopt the answers to the questions in this document as your testimony on Issue No. 3 in this proceeding?

A (Witness Edelman) Yes.

A (Witness Leidich) Yes.

MR. GLASSPIEGEL: Mr. Chairman, if there are no objections, I would move at this time that the previously described testimony be incorporated into the record as if read.

JUDGE BLOCH: Are there any objections?

(No response)

JUDGE BLOCH: Is there any voir dire questioning relating to the qualifications of the witnesses?

(No response)

JUDGE BLOCH: There being no objections and no voir dire, the document shall be admitted into evidence and bound into the record as if read.

(The document referred to, Applicants' Testimony of Murray R. Edelman and Gary R. Leidich, follows:)

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May 2, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, et al.	)	Docket Nos. 50-440 50-441
	)	
(Perry Nuclear Power Plant, Units 1 and 2)	)	

APPLICANTS' TESTIMONY OF MURRAY R. EDELMAN AND GARY R. LEIDICH ON THE CLEVELAND ELECTRIC ILLUMINATING COMPANY'S QUALITY ASSURANCE PROGRAM FOR CONTROL OF SAFETY-RELATED CONTRACTORS AT PERRY NUCLEAR POWER PLANT (ISSUE #3)

Q. 1 Please state your names, current positions, and business addresses.

A. 1 (Mr. Edelman): My name is Murray R. Edelman. My current position is Vice President, Nuclear Group, of The Cleveland Electric Illuminating Company ("CEI"). My business address is 10 Center Road, Perry, Ohio 44081.

(Mr. Leidich): My name is Gary R. Leidich. My current position is Senior Engineer, Nuclear Construction Engineering Section of CEI. My business address is 10 Center Road, Perry, Ohio 44081.

Q. 2 Please summarize your professional qualifications and educational backgrounds.

A. 2 (Mr. Edelman): I joined CEI in 1961. Between 1961 and 1972 I occupied various non-nuclear engineering positions in the CEI Civil and Mechanical Engineering Department, including Engineering Assistant, Engineer and Senior Engineer. During this period I was a Project Engineer on several CEI fossil plant projects.

I began working on the Perry Nuclear Power Plant ("PNPP") in 1972 as the CEI Senior Licensing Engineer responsible for PNPP NRC licensing activities. In 1975 I was promoted to General Supervising Engineer of the Licensing and Administration Section of the Nuclear Engineering Department. I retained my licensing responsibilities and also became responsible for other administrative areas.

In 1977 I was transferred from the Perry Project to the Civil and Mechanical Engineering Department as a General Supervising Engineer.

Between April 1978 and April 1981 I held the position of Manager, CEI Nuclear Quality Assurance ("QA") Department. In that capacity I was responsible for planning and directing the PNPP quality assurance program. I reported directly to CEI's Vice President, System Engineering and Construction Group.

In April 1981 I was appointed Manager, Nuclear Engineering Department, a position I held until April 1982. In that position I was responsible for PNPP engineering, construction,

testing, procedures, records, licensing and cost control and reported to the Vice President, System Engineering and Construction Group.

Between April 1982 and December 1982 I was CEI Division Manager, Nuclear Engineering and Construction Division, responsible for all PNPP nuclear engineering, construction, licensing, fuel management, and cost administration. I continued to report to the Vice President, System Engineering and Construction Group.

Since December 1982 I have held the position of CEI Vice President, Nuclear Group. I have responsibility for all areas of the Perry Project including Construction, Engineering, Plant Operation and Quality Assurance, and report to CEI's Senior Vice President.

I obtained a Bachelor of Science in Mechanical Engineering from Case Institute of Technology in 1961, and Juris Doctor from Cleveland Marshall Law School in 1965.

My professional memberships include the American Society of Mechanical Engineers, Cleveland Engineering Society, and the American Nuclear Society. In addition, I am currently Chairman of the Atomic Industrial Forum's Committee on Reactor Licensing And Regulation.

(Mr. Leidich): I joined CEI in January 1974. In 1974 and 1975 I held various fossil plant electrical engineering positions in the Plant and Substation Engineering Department.

In 1975 I joined the Perry Project. My first position at PNPP was that of Responsible Engineer for procurement of plant electrical equipment. I was also responsible for the electrical system design calculations, voltage and short circuit studies, and transmission system interface criteria for the Perry Project. In 1978 I was promoted to Lead Electrical Engineer with responsibility for CEI's overall field engineering in the electrical area of the Project, including technical overview of all electrical contractor work. I held that position until September 1980.

From September 1980 to October 1982 I held the position of Supervisor, Construction Quality Engineering Unit. My responsibilities included monitoring construction contractors' quality assurance performance. I was one of three unit supervisors reporting to the General Supervisor of the Construction Quality Section. Personnel under my supervision performed procedure reviews, surveillance, inspection and auditing for the 16 safety-related contractors employed at that time on the Perry Project.

Since October 1982 I have been a Senior Engineer in CEI's Nuclear Construction Engineering Section. I supervise 30 engineers who provide construction support for electrical, civil, structural and chemical disciplines. I report to the General Supervising Engineer, Nuclear Construction Engineering Section.

I earned a Bachelor of Science in Electrical Engineering at the University of Toledo in 1972, and Master of Science in Engineering Science at the University of Toledo in 1974. I am a registered Professional Engineer in the State of Ohio. I am a member of the Cleveland Engineering Society, and have served as Chairman of that organization's Public Utilities Division.

In addition to the above, I have been a member of the Institute of Electrical and Electronic Engineers ("IEEE") since 1969. IEEE is an international professional society of electrical engineers and scientists. I am currently serving an appointment as Secretary, and Executive and Administrative Committee Member, of the Nuclear Power Engineering Committee ("NPEC") of the Power Engineering Society of IEEE. The NPEC full committee includes approximately 40 engineers and scientists from industry, university and governmental backgrounds. NPEC is responsible for overseeing those subcommittees and working groups which develop nuclear electrical standards for IEEE.

Q. 3 What is the purpose of your testimony?

A. 3 (Panel): The purpose of our testimony is to address the four issues of material fact under Issue #3, as admitted by the Atomic Safety and Licensing Board in this proceeding. These four issues, which relate to CEI's QA program applicable to safety-related contractor work at PNPP, are as follows:

> The existence, cause, severity, duration and extent of an alleged instance in which applicant's quality assurance program failed by not properly controlling its electrical contractors.
>
> Whether the alleged deficiencies in properly controlling electrical contractors extend to the proper control of other contractors.
>
> Whether deficiencies in the control of contractor activities have resulted in unsafe conditions at Perry.
>
> Whether applicant has an adequate system for periodically reviewing its program for assuring the quality of contractor performance and ascertaining and correcting deficiencies that have arisen, particularly in systems essential to safe plant operation.

See Memorandum and Order (Concerning Summary Disposition: Quality Assurance, Corbicula and Scram Discharge Volume Contentions), December 22, 1982, at 9-10, 16.

In addressing the first two issues of material fact, our testimony discusses CEI's control of electrical contractor work performed at PNPP, including CEI's response to the NRC's 81-19 investigation. The testimony demonstrates that CEI's QA program has properly controlled the work performed to date by the electrical and other PNPP contractors.

With respect to the third issue of material fact, the testimony describes how CEI's QA program assures the proper documentation and correction of all nonconforming contractor construction work.

In addressing the fourth issue of material fact, the testimony explains the QA systems used for periodically

reviewing CEI's program for controlling safety-related contractor work, and shows how deficiencies are identified and corrected under CEI's QA program.

Q. 4 Describe CEI's project management system for the Perry Project.

A. 4 (Mr. Edelman): CEI's management organization for control of PNPP is shown on Attachment 1 hereto. CEI manages the Perry Project through an organization referred to as the Project Organization. The Project Organization consists of all CEI and consultant personnel at the Perry site responsible for the design, procurement, installation, construction, inspection and testing of PNPP. This includes approximately 650 CEI personnel supplemented by approximately 700 consultants. Consultants are used to provide specific expertise or short-term support to CEI, and they are fully integrated into the Project Organization. Contractors are not part of the Project Organization.

As depicted on Attachment 1, overall responsibility for the Perry Project is that of the CEI Vice President, Nuclear Group. I work exclusively on the Perry Project and am the senior Project Organization official. There is a close organizational and day-to-day working relationship between my office and those of other senior CEI executives. The Senior Vice President and I have offices on-site, and at CEI's Cleveland corporate offices adjacent to the offices of the President and Executive Vice President. There are weekly and

often daily communications among these four senior CEI executives concerning Perry Plant issues.

Q. 5 Generally describe the current QA organization and staffing at Perry.

A. 5 (Mr. Edelman): CEI's current Nuclear Quality Assurance Department organization is depicted on Attachment 2. The Department is headed by the CEI QA Department Manager. He reports to me and has organizational status and authority equal to the managers of the Construction, Engineering, and Perry Plant (Operations) Departments.

Under the QA Department Manager are various quality sections headed by CEI General Supervisors responsible for quality assurance activities for the procurement, construction, and operations phases of the Project. Procurement and administration QA is the responsibility of the Procurement and Administration Quality Section. Construction QA is under the Construction Quality Section. Testing and operations QA is under the Operational Quality Section. Separate from these three sections is a Quality Auditing Unit responsible for auditing Project Organization and contractor activities.

The CEI QA organization shown on Attachment 2 is located entirely on the construction site. CEI in 1978 was one of the first nuclear utilities to reorganize its QA organization so as to consolidate all QA activities at the site. Other utilities have since undergone similar reorganizations with the endorsement of the Nuclear Regulatory Commission. CEI has found that

this close proximity increases the ability of the QA Department to monitor other Project Organization departments and effectively to implement the day-to-day QA program.

Since 1978 CEI's QA Department has increased from fewer than 50 to approximately 200 CEI and consultant personnel. It is one of the largest nuclear plant QA departments in the country, according to a June 1982 NRC Staff comparison of QA/QC staffing at 35 nuclear plants under construction. The Staff's compilation also indicated that in June 1982 Perry had the best (lowest) ratio of craft personnel to QA/QC personnel (a 4.6 to 1 ratio) of any plant under construction.

The QA Department includes quality control ("QC") inspectors, quality engineers ("QEs"), supervisors and clerical support. The QC inspectors perform field surveillance and inspection, as an overview to the contractors' "first-line" inspections, to ensure that contractor construction activities are being performed consistent with specified requirements. The quality engineers, who generally have greater technical training and experience than inspectors, are responsible for reviewing, approving, and interpreting QA program requirements.

CEI's professional QA staff has a large number of certified inspectors and auditors For example, there are 24 CEI auditors and 23 CEI lead auditors certified under American National Standards Institute ("ANSI") requirement N45.2.23 "Qualifications for QA Auditing Personnel for Nuclear Power Plants." There are 44 CEI QC inspectors qualified under ANSI

N45.2.6 "Qualifications of Inspection, Examination, and Testing Personnel for the Construction Phase of Nuclear Power Plants." These inspectors also hold 43 certifications in various nondestructive examination techniques such as radiographic testing, ultrasonic testing, magnetic particle testing, penetrant testing, and visual weld inspection. Of special significance, ten of CEI's inspectors have passed the American Welding Society ("AWS") national examination, thereby certifying the inspectors as AWS weld inspectors. Thirteen inspectors have also passed a State of Ohio examination for inspection of pressure piping systems and are certified as Special Inspectors by the State of Ohio.

The turnover of these CEI QA professionals has been extremely low. Since 1978, only six CEI QA employees have left the Project. CEI has been able to retain an experienced and qualified QA staff for a number of reasons. CEI's salary structure for QA personnel is identical to the salary structure used for personnel in engineering and construction, a clear indication from senior management that quality assurance at Perry has co-equal status with construction and engineering functions. CEI's record of training and promoting inspectors has also contributed to CEI's ability to retain these personnel. Another factor has been CEI's ability to attract experienced personnel with local community ties.

CEI's management personnel understand and support the PNPP quality assurance program. As noted earlier in the testimony,

I previously held the position of QA Department Manager. Similarly, the CEI Manager of the Perry Project Services Department, and the CEI General Supervisors of the Nuclear Construction Engineering, Nuclear Project Training, and Administration and Special Projects Sections formerly occupied QA Department management positions. CEI benefits from having management personnel across the Project with strong QA backgrounds.

The primary consultants assisting CEI's QA staff in the overview of contractor QA programs are Gilbert Associates, Inc. ("GAI") and Raymond Kaiser Engineers ("RKE"). GAI's support role is predominately in the quality engineering area. This includes evaluation of construction and equipment specification requirements, review of contract proposals, and review of contractor QA programs. RKE primarily provides inspectors for surveillance of contractor QC activities, and also furnishes clerical support in the records storage area. As with CEI's QA personnel, none of the consultants' QA personnel perform first-line inspection of safety-related construction activities. First-line inspection is the responsibility of each contractor performing safety-related work.

Currently safety-related contractors at Perry have over 300 QA/QC personnel providing first-line inspection and QA audit coverage of all safety-related work being performed at the Project. For each such contractor the QA organization and staffing, as well as the written QA program, are carefully

reviewed by CEI's QA Department prior to implementation. CEI reviews personnel qualifications of every QA/QC auditor and inspector proposed by the contractor to assure that he or she has the required education and experience. CEI follows up its review with a letter to the contractor accepting or rejecting the individual.

Q. 6 Generally describe the scope and content of CEI's quality assurance program requirements for the control of safety-related construction work at Perry.

A. 6 (Panel): CEI's QA program for safety-related work is structured in accordance with the 18 criteria set forth in 10 CFR Part 50, Appendix B, of the Nuclear Regulatory Commission's regulations. The "quality assurance" activities covered by the program, as defined in Appendix B, include "all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service." Quality assurance includes "quality control," defined in Appendix B as "those quality assurance actions related to the physical characteristics of a material, structure, component, or system which provide a means to control the quality of the material structure, component, or system to predetermined requirements." CEI's QA program also follows the QA requirements set forth in various industry codes and standards, such as the American Society of Mechanical Engineers ("ASME") Boiler and Pressure Vessel Code, and ANSI Standards.

CEI's QA program requires, among other things, sufficient QA authority and organizational freedom to identify and respond to quality problems, including the necessary access to management; proper documentation of the QA program in written policies, procedures, or instructions; an adequate inspection program to verify conformance with the documented program requirements; regular management review of the status and adequacy of the QA program; and the necessary training and qualification of all personnel.

CEI retains the ultimate responsibility for the development, approval, application, administration, and control of the total quality assurance program for the Perry Plant. Every safety-related contractor is required by CEI to have a QA program for accomplishing the specific scope of work covered by their contract. CEI's Corporate Nuclear Quality Assurance Program Manual and all implementing procedures and instructions set out the details of the QA program to be implemented by all site personnel. Safety-related construction is only performed at PNPP after CEI carefully reviews and approves the contractor's quality assurance program, and after Project Organization QA and engineering personnel fully review all procedures, instructions, and specifications. During program implementation, CEI reviews and approves all changes to the contractor's program and procedures, and verifies, by checking, auditing, and surveillance, that contractor activities affecting the safety-related functions have been correctly performed.

Later in our testimony we will discuss in greater detail how this overview function is performed at Perry.

CEI's executive commitment to a strong, independent QA program meeting all regulatory and industry requirements is recorded in a written QA policy statement signed by the President of CEI, a copy of which has been included in CEI's Corporate Nuclear Quality Assurance Manual since the Manual's original issuance in 1978. The current policy statement, which differs in only minor respects from the original version, is included as Attachment 3 to this testimony. The policy statement emphasizes the importance of the Perry QA program to the safe design, construction and operation of the Perry Plant. The policy statement recognizes that the QA program requires the support of all Project disciplines and groups. The statement assigns responsibility for ensuring the establishment and implementation of CEI's QA program to the office of the senior Perry Project official, the Vice President, Nuclear Group. The CEI QA Department is given the responsibility and requisite authority, including stop work authority, to identify and resolve all quality problems. Finally, the policy statement makes all employees responsible for informing their superiors of any potential QA program deviations, "including the right of direct appeal to upper management of the Company."

CEI executives repeat this quality message at many management meetings held throughout the year. The importance of every PNPP worker to the quality program, including ready

access to management, is also explained and emphasized in posters on Company bulletin boards and in various printed material distributed by CEI senior management to Project employees.

Q. 7 Please summarize the major QA program changes at Perry since 1978.

A. 7 (Panel): As with any nuclear QA program, Perry's QA program has grown and evolved as activities on the Project have increased in scope and complexity. We have been able to make the QA program increasingly effective over time.

In response to items of concern in a February 8, 1978 immediate action letter issued by NRC Region III, CEI reviewed each letter item and performed a comprehensive management evaluation of all Project QA/QC activities. CEI determined that the underlying causes of the QA deficiencies identified in the immediate action letter included: the lack of a single, all-encompassing QA manual defining corporate QA controls and responsibilities; the limited number of CEI personnel physically located at the Perry site (the majority were based in CEI's Cleveland offices); inadequate definition of surveillance/inspection and audit responsibilities of CEI's QA/QC personnel following the 1977 merger of CEI's QA and QC organizations; and inadequate integration of CEI's and contractors' QA programs.

In response, CEI instituted the QA department consolidation discussed previously in this testimony. This was part of

an overall site consolidation of all CEI QA, engineering and purchasing personnel. In addition, CEI made the following programmatic changes. CEI's QA manual was revised to address all QA-related project activities and procedures; and a series of related administration, procedure and instruction manuals were issued to address overall project QA/QC requirements; programs for quarterly QA management reviews were implemented; a QA advisory committee was established to assist CEI's Vice President, System Engineering and Construction Group (now the Vice President, Nuclear Group) on key QA program issues; CEI's audit program was restructured; and an integrated inspection/ surveillance program of site contractors was established by CEI. In addition, important senior management administrative controls were instituted by CEI, such as formal monthly vice-president meetings and quarterly management meetings with the Chief Executive Officer and President. Finally, CEI instituted a project matrix system under which every safety-related contractor is assigned a construction quality engineer, responsible design engineer, and contract administrator from the Project Organization.

Q. 8 Which elements of CEI's organization are most directly involved in oversight of site contractor activities?

A. 8 (Panel): The primary responsibility for the Project Organization's daily QA oversight of contractors rests with the QA Department's Construction Quality Section ("CQS"), shown on Attachment 2. CQS is divided by discipline into four units.

These include a Civil/Structural Unit, a Mechanical/Piping Unit, an Electrical Unit, and a Program and Records Unit. Each unit is headed by a Unit Supervisor, who reports to the CEI General Supervisor in charge of CQS.

The CQS units include quality engineers and QC inspectors organized by contractor area. The unit supervisor assigns a responsible QE to each contractor. He is supported by a staff of QC inspectors and, in some cases, by other QEs. Each such group is responsible for reviewing the contractor's QA program documentation and monitoring the contractor's implementation of its QA program requirements. The inspectors spend the majority of their time performing field surveillance and inspection of contractor work to verify the contractor's compliance to installation and quality specifications, drawings and technical requirements. The results of these are documented in Surveillance Inspection Reports ("SIRs"). The QEs primarily review and approve QC surveillance and inspection reports, and contractor and Project Organization QA program documentation such as procedures, instructions, specifications, nonconformance reports, and design change documents.

The size of the various CQS units has increased with the increase of construction activity at the site. For example, the CQS Electrical Unit has grown from two individuals in 1977, to six in 1979, to a current level of 12. The Unit has generally had an equal number of QC inspectors and QEs. The other CQS units have undergone similar growth over time. In

addition, CQS was reorganized in August 1981 to consolidate separate QE & QC inspector units. The result was more involvement in field activities by QEs and more involvement in program activities by the QC inspectors. The overall result was a better coordinated overview of contractor activities by CQS.

The responsible QE from CQS is the primary contact between the contractor and the Project Organization with respect to all QA matters relating to that contractor. That same QE is also a member of a Project Organization contract team assigned to the contractor. This contract team, which includes the QE, the contract administrator, and a responsible design engineer from the Nuclear Construction Engineering Section, is the vehicle for implementing the Project matrix system approach which CEI instituted in 1978. Each contract team QE is supported by his CQS staffs as needed. The contract teams meet regularly, often on a daily basis, to discuss the status of the contractor's program. In these meetings the QE brings any contractor QA problems to the immediate attention of his contract team counterparts. Normally the QE emphasizes potential programmatic QA issues that merit action or followup by Construction or Engineering. Any of these QA-related issues that cannot be resolved at the contract team level are brought to the attention of Project management for decision or management action.

The other Project Organization entity with direct responsibility for contractor overview is the Quality Auditing Unit,

shown on Attachment 2. This Unit was created in 1980 to conduct annual independent audits of each safety-related contractor's QA program. Prior to 1980, these audits were performed by the CQS quality engineers along with their other overview responsibilities. The creation of a separate Quality Auditing Unit allowed the quality engineers to increase their involvement in the daily CQS overview activities. In addition, this organizational change created a direct reporting line between the auditors and the QA Department Manager. The number of certified QA auditors in the Project Organization has grown from 30 in 1978 to 90 at present.

CEI management also uses the Quality Auditing Unit to perform periodic internal audits of the Project Organization's implementation of CEI's corporate QA program. The Quality Auditing Unit is also responsible for compiling information used by the QA Department Manager in his quarterly report, "Assessment of Quality Assurance Program Effectiveness." The use of this quarterly report is discussed later in our testimony.

Q. 9 What are the principal QA/QC mechanisms used by the Project Organization in the day-to-day review of safety-related contractors? When and how extensively are these mechanisms utilized to control contractor activities at Perry?

A. 9 (Panel): The process of reviewing and approving the contractor's work procedures and instructions is the first step in CEI's overview of contractor activities. This review is an

ongoing process, since contractors' QA procedures and instructions are continually updated and supplemented as the Project progresses. Implementation of the contractor's approved program is then closely monitored and documented by the Construction Quality Section using a variety of QA program mechanisms.

The most basic and widely used mechanism is the nonconformance report ("NR"). These are used by QC inspectors to document any structural or equipment installation conditions that do not meet specified requirements. NRs are issued by both the Project Organization and the contractor. An NR Coordinator in CEI's QA Department tracks all NRs issued by the Project Organization and contractors using a computerized tracking system. NRs can be dispositioned through repair, rework, or scrap of the nonconforming item, or through a "use-as-is" disposition after engineering review and acceptance. In general, when the nonconforming condition identified by Project Organization personnel involves an area or system which has not yet been turned over by the contractor, CQS personnel will direct the contractor to initiate the NR. After turnover, the NR would be initiated by the Project Organization. To date, over 18,000 NRs have been issued in safety-related construction areas by Project Organization and contractor personnel. Approximately 2000 NRs have been issued in the electrical area.

If Project Organization QA personnel identify contractor programmatic or procedural deficiencies not involving plant

"hardware," these will be documented by CQS personnel as observation or surveillance Action Requests ("ARs"), or by the Quality Auditing Unit as audit ARs. The Quality Auditing Unit is responsible for the tracking and followup of all ARs. A computerized tracking system is used for this purpose. Each unit is responsible for closing out ARs which it generates. If in reviewing an AR the unit that generated it determines that a serious programmatic problem is involved, that unit changes the AR to a Corrective Action Request ("CAR"). The purpose of the CAR is to assure that the problem receives increased management attention until close-out. All open CARs are identified to Project Organization managers and the Vice President, Nuclear Group, on a monthly basis. To date, the Project Organization has issued approximately 140 CARs and 3900 ARs at the site. Seventeen CARs and 267 ARs have been issued in the electrical area.

Stop Work authority may be exercised by CQS to stop work pending correction of an identified condition adverse to quality, where continued work would lead to a serious violation of CEI's QA program. To date CEI has issued 48 Stop Work Notifications ("SWNs") on the Project. CEI has issued 3 SWNs in the electrical area. Though not utilized often, the Stop Work Notification is an essential element in any QA program. The history of CEI's use of SWNs demonstrates our commitment to use whatever steps are necessary to assure effective implementation of our QA program. The use of SWNs reflects a QA program at work, rather than one not working.

Another significant review mechanism is the process audit, which is performed by the CQS quality engineers. Process audits are conducted to provide a limited, detailed review of a defined contractor work activity. They are conducted either in response to previously identified problems, or in areas deemed to be especially complex or critical from a safety standpoint.

With respect to all of the Project Organization in-line QA/QC review mechanisms which we have just described, we would like to emphasize that these are in addition to comprehensive QA/QC inspections and audits of work activities conducted by each contractor. CEI's surveillance and inspection of a contractor involves a number of techniques ranging from reinspection of a contractor's work, to verification of a contractor's QC activities, to performing process audits of field installation activities. The frequency and extent of field surveillance and inspection by the Project Organization in a given area, at a particular time, is based on a number of considerations, such as the safety significance of the area under construction, the level of construction activity involved, previous contractor performance, and the extent to which the activity involves a new type of work or procedure.

Q. 10 Describe CEI's system for periodically reviewing its program for assuring the quality of contractor performance. Discuss in your answer how this system ascertains and corrects deficiencies that have arisen in safety-related areas.

A. 10 (Panel): CEI's system consists of a number of elements. CEI management trends CEI quality engineer findings through the use of monthly Performance Analysis Reports ("PARs") and QA Department quarterly Assessment of Quality Assurance Program Effectiveness reports. In addition, CEI management uses contractor and internal audits performed by CEI's Quality Auditing Unit, as well as periodic reviews by the Quality Assurance Advisory Committee ("QAAC"), to overview the status and adequacy of the PNPP QA program.

PARs, along with any other special statistical trend analyses which are performed by the QE, constitute the first principal component of CEI's contractor trending/overview system. PARs are standard CEI internal reports used throughout the Company to communicate to upper management. CQS PARs discuss the QA performance of each safety-related contractor at Perry. They are based on input from the responsible quality engineer. In preparing this input the QE reviews the results of CQS inspectors' surveillance and inspections, including SIRs, NRs, ARs, CARs and SWNs. In addition to considering this quantitative data, the QE also considers other qualitative information obtained from the inspectors and directly from the contractor's QA organization. Emphasis is given to problem areas receiving special attention from CQS. Significant information in the CQS PARs is included in monthly QA Department PARs; and these are summarized in PARs prepared by the Vice President, Nuclear Group, for executive management.

As we have previously testified, any specific nonconforming conditions or program deficiencies identified in the contractor's area will have been documented in accordance with the formal QA corrective action system.

The next component of CEI's trending/overview program is the QA Department Manager's quarterly report. This report, compiled by the Quality Auditing Unit, includes input from all Project departments and summarizes overall contractor QA performance for the quarter. The report includes a separate section on contractor performance. The quarterly report is reviewed in a quarterly CEI Chief Executive meeting attended by the executive staff and chaired by the President.

In addition to these overview mechanisms, the Vice President, Nuclear Group, receives consultation and advice on significant QA policy issues from the QAAC. The QAAC includes four senior CEI management representatives, the corporate QA managers of GAI and RKE, and an outside QA consultant. The QAAC provides periodic assessments of the effectiveness of the Perry QA program implementation. These assessments are based on reviews of the PARs, QA Department quarterly reports, selected internal QA audits, NRC inspection reports, significant NRs, ARs, CARs, and SWNs, and corrective action taken or planned. The Committee members also observe site activities and interview site personnel involved in quality-related activities to evaluate the effectiveness of QA program implementation.

Lastly, CEI regularly reviews the adequacy of its overview program for monitoring safety-related contractors through contractor and internal audits performed by the QA Department Quality Auditing Unit, as discussed earlier in our testimony.

The objective of all the overview mechanisms which we have described is to provide multiple communication channels to assure that CEI management has the necessary information to evaluate and direct the QA program. These reviews and reports are tools which CEI management uses to stay close to, and involved in, the daily QA activities at the site. They are not used as a substitute for CEI's formal inspection and corrective action program. Any formal corrective action which management believes is required to address QA program deficiencies is achieved through the NR/AR/CAR/SWN mechanisms which we previously described. We would emphasize that periodic QA reports to CEI management are not generally for the purpose of detailing those program areas that are working well. Instead, management expects the reports to highlight problem areas and to set forth the corrective actions underway to resolve those problems.

Q. 11 Briefly describe CEI's initial review and selection of the electrical contractor at Perry.

A. 11 (Panel): In 1977 the Project Organization conducted extensive reviews of proposals submitted for the safety-related electrical work to be performed at PNPP. This included a thorough review of the corporate quality assurance programs

of all the bidders. Included among the bidders was a joint venture proposal submitted by E.C. Ernst & L.K. Comstock. The Ernst-Comstock proposal provided for L.K. Comstock to perform project management, field engineering and quality assurance/ quality control, with E.C. Ernst in a limited role providing field craft supervision. L.K. Comstock had significantly more nuclear plant electrical experience than any other bidder. The results of the proposal evaluations indicated that the Ernst-Comstock joint venture was well qualified to meet the Perry Project quality assurance requirements. Their proposal was also the most responsive to the CEI specified technical requirements. After careful consideration of all proposals, in November 1977 CEI awarded the electrical contract to the Ernst-Comstock joint venture. In mid-1980 the joint venture was dissolved and L.K. Comstock assumed responsibility for the entire electrical construction scope of work.

Q. 12 Please summarize CEI's QA overview of the implementation of L.K. Comstock's program for the period prior to November 1981.

A. 12 (Panel): After the award of the electrical contract and prior to the commencement of safety-related electrical work, L.K. Comstock's QA program and procedures for PNPP were thoroughly reviewed to assure full compliance with CEI's QA program. Electrical work was limited to non-safety related areas until CEI's review was completed. In August 1978 CEI released L.K. Comstock to perform limited safety-related civil excavation work.

Until mid-1980, safety-related work performed in the electrical area was primarily underground civil ductwork, cable tray hanger installation, and field placement of equipment. Very little complex electrical installation was performed during this initial period. For example, less than 5% of the safety-related conduit had been installed. Both L.K. Comstock and CEI QA/QC personnel issued NRs and ARs that were typical in number and severity compared to findings issued against other contractors during comparable initial work activities. These problems were appropriately documented; procedures were revised to provide additional instructions when necessary; and formal training sessions were conducted for L.K. Comstock personnel.

As the more complex electrical installation work began to increase in the last half of 1980, the emphasis of CEI's QA overview was shifted from program and procedure development and review to surveillance of procedure implementation and field installation activities. Review by CEI's QA/QC personnel documented that L.K. Comstock was experiencing conduit installation problems that required closer monitoring. Immediate corrective actions taken to resolve conduit installation problems included increased CEI surveillance of the installation, and increased, better defined in-process inspections by L.K. Comstock. This corrective action had direct results. As L.K. Comstock increased its in-process inspections, the number of L.K. Comstock NRs increased, reflecting a more active contractor QA/QC program. In December 1980, CEI quality

engineers analyzed these NRs and identified a trend of L.K. Comstock craft misinterpretations of drawings and specifications. L.K. Comstock responded by instituting a comprehensive training program for craft in order to correct the problem and prevent its recurrence. As a result, L.K. Comstock NRs were reduced in the first quarter of 1981. Since that time L.K. Comstock has spent significant resources in the development and use of its craft training program. For example, from January 1981 to July 1982 L.K. Comstock spent approximately 15,000 hours training craft and QA/QC personnel.

The QA sequence which we have just described illustrates how CEI's QA program has controlled safety-related contractor work at PNPP. CEI required increased inspection, which led to increased identification of deficiencies, which in turn allowed CEI and the contractor to understand and correct a program problem before that problem led to installation problems. This QA process of identifying and correcting deficiencies during construction is a continual and iterative process that proceeds until plant construction is complete.

In 1980 and 1981, as the more complex electrical construction accelerated, CEI identified the need for increased numbers of L.K. Comstock QC personnel. During this period, the nuclear industry in general was experiencing a shortage of qualified electrical inspectors due to significant nuclear construction activity and a general strengthening of QA/QC requirements in the nuclear electrical discipline. As a result of L.K.

Comstock's difficulty in hiring additional qualified inspection personnel, and with increased attention being given by the contractor to in-process inspection, final inspection backlogs increased. This was a periodic problem during 1980 and 1981. L.K. Comstock did increase its staff throughout 1981; in addition, CEI increased its field surveillance of construction activities in the last half of 1980 and in 1981 in order to assure sufficient overview of installation. Increased contractor QC staffing resulted in a reduction of the final inspection backlog by mid-1981.

During the summer of 1981 safety-related cable pulling activities began to increase. Through October 1981, cable pulling deficiencies were identified and documented by the QA programs of the contractor and CEI. Most of these deficiencies were procedural in nature and were attributable to initial program implementation of this complex safety-related construction activity. However, in November 1981, because the number and types of discrepancies identified by CEI and L.K. Comstock had not decreased, and because of concerns raised during the 81-19 inspections, CEI QA issued a Stop Work Notification for safety-related cable pulling. The SWN required L.K. Comstock to review thoroughly its safety-related cable pulling program, and to make the programmatic changes necessary to reduce implementation deficiencies. L.K. Comstock significantly revised its cable pulling procedure prior to restart of work in January 1982.

Q. 13 Please summarize CEI's QA overview of L.K. Comstock's program since November 1981, including CEI's responses to NRC Region III's investigation of the PNPP electrical area, conducted between October 1981 and March 1982.

A. 13 (Panel): As indicated in Region III's report on the investigation (the "81-19 Report"), allegations were made directly to the NRC in October 1981 concerning the performance of the PNPP electrical contractor. The NRC found no noncompliances with respect to those allegations. In addition to investigating the allegations, the NRC conducted a general inspection of electrical construction activities taking place at that time. As a result of extensive inspections (711 hours of inspection by six NRC representatives), the NRC identified nine items of noncompliance. Deficiencies identified in the noncompliances involved: an inadequate switchgear drawing review; instances of incomplete procedures and procedure implementation difficulties; a failure to return six voided drawings to a central file; control and storage of nuts, bolts and cable mounting bases; three instances of incomplete inspections; two instances of inadequate housekeeping; a missing switchgear hold tag; eight instances of inadequate conduit separation; and a failure to trend eight NRs. The 81-19 Report assigned all of the noncompliances comparatively low (level IV or V) severity levels. The Report identified no significant hardware deficiencies. CEI took prompt corrective action in each of the noncompliance areas.

In February and March of 1982, CEI met with Region III to discuss preliminary findings from the NRC's inspections. In response to those meetings, CEI performed an extensive review and evaluation to re-examine the effectiveness of its QA program for safety-related contractors.

As part of this review, CEI conducted a special safety-related contractor QA evaluation. In the special evaluation, conducted in February and March 1982, CQS quality engineers and QC inspectors separately evaluated each safety-related contractor. Factors considered included: scope of work; outstanding NRs and ARs; QA/QC staffing level; responsiveness to CEI concerns; organizational independence; contractor internal auditing performance; and status and adequacy of documentation. The evaluation teams were directed to focus on contractor weaknesses, to identify deficiencies, and to recommend action items for improvement. Although NRs and ARs were identified and documented during the evaluation, the review was oriented to the management aspects of the QA program and was independent of CEI's formal ongoing QA program. In addition to the special evaluation, interviews were conducted concerning the general use of the PNPP nonconformance system.

The overall conclusion of these evaluations was that there was no indication of a quality assurance breakdown in any area, and that CEI's QA program was adequately controlling safety-related construction. However, a number of areas for improvement were identified, including the need for increased emphasis

on timely resolution of findings, more training in the utilization of NRs, and clearer procedures.

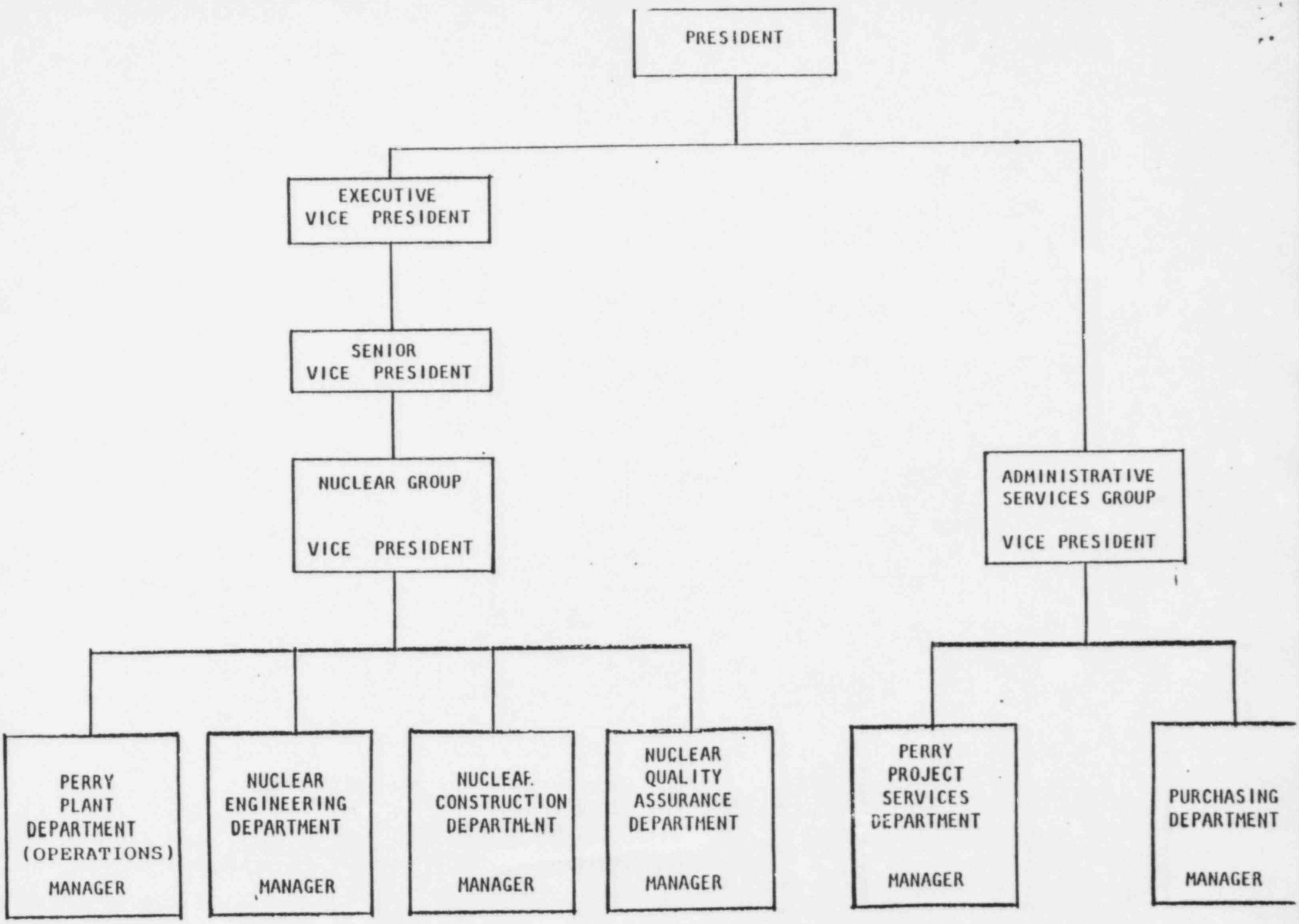
L.K. Comstock's QA program, including the contractor's responses to the various inspections and reviews just described, continues to be under the close scrutiny of CEI CQS personnel. In addition, CEI's Project management has been closely monitoring the status of the electrical QA program. This has included frequent management level discussions and meetings between CEI and L.K. Comstock. L.K. Comstock has concentrated on addressing and closing out the various findings which we have previously discussed. For example, in 1982 alone, the contractor doubled the size of its QA/QC staff and significantly increased the training and qualifications of its QA/QC personnel. In June 1982, L.K. Comstock in conjunction with the National Electrical Contractors Association and the International Brotherhood of Electrical Workers held a special two day training workshop for L.K. Comstock craft personnel working at Perry. The workshop emphasized conduit installation and cable pulling requirements and reviewed applicable QA requirements. Also during 1982, L.K. Comstock hired personnel with experience in program and procedure development, to give special attention to procedure interpretation problems identified in the earlier reviews. Management representatives from L.K. Comstock's corporate offices have spent significant effort, including time on-site, in assuring that the contractor is properly responding to outstanding issues and to all CEI QA program requirements.

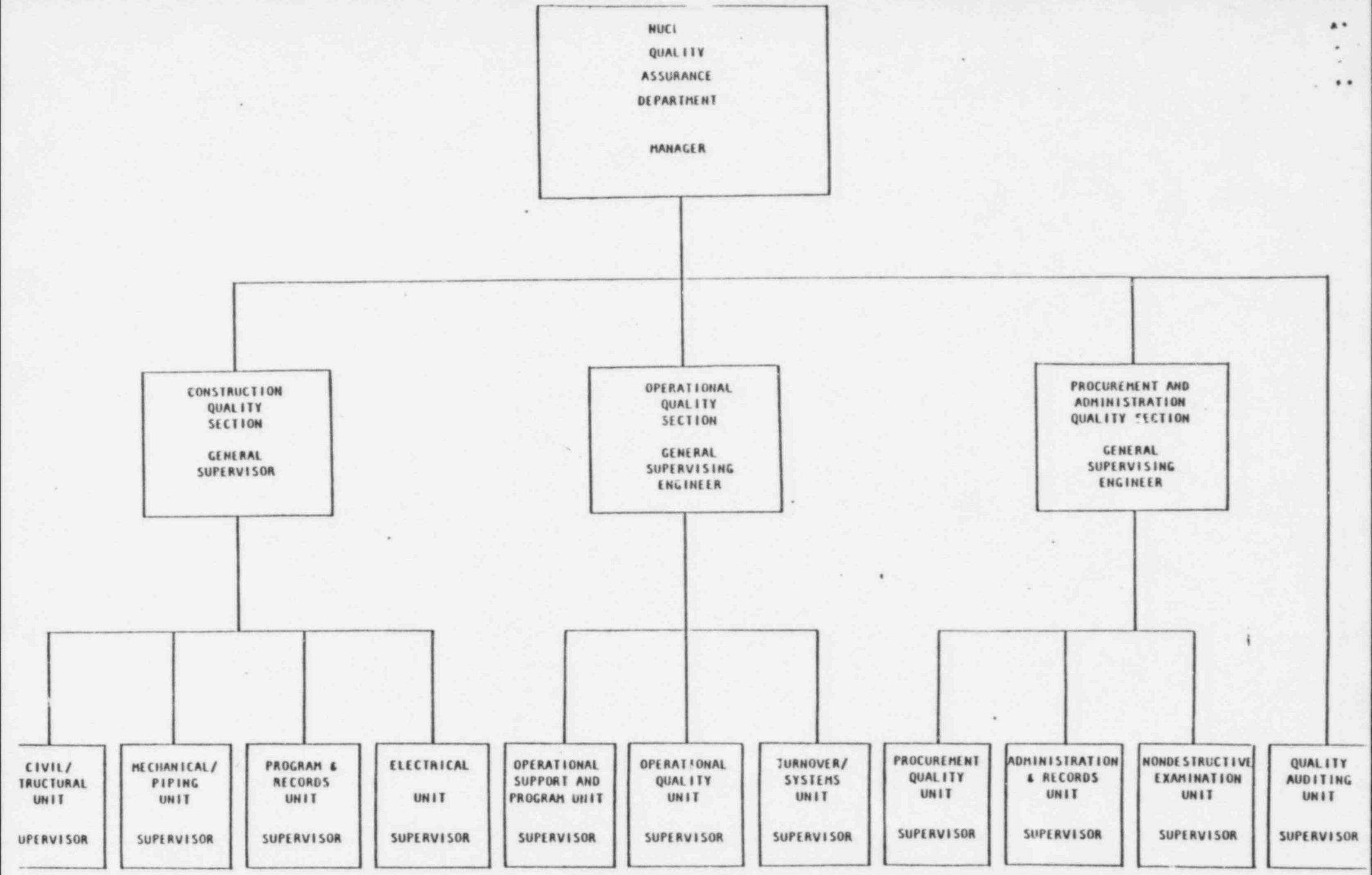
The most significant current QA issue is the number of outstanding final inspections to be completed. Part of the current final inspection backlog is attributable to the QA resources devoted by L.K. Comstock in response to the inspections and reviews which we have described. CEI has required L.K. Comstock to reduce the final inspection backlog in accordance with an agreed schedule. CEI management and CEI's CQS personnel are closely monitoring the backlog to assure that it has no adverse impact on the safety of completed and in-process electrical construction.

Q. 14 What assurance do you have that CEI's QA/QC program has identified and corrected deficiencies in contractor programs at Perry, and that contractor programs have not resulted in unsafe conditions at Perry?

A. 14 (Panel): Our testimony describes in detail how CEI's QA/QC program thoroughly overviews safety-related contractors at Perry. CEI's overview process begins with pre-award QA reviews and continues through program development and implementation. At every stage, Project Organization QA personnel perform sufficient QA reviews, including procedure reviews and field surveillance, to assure CEI that the contractor is meeting CEI QA program requirements. We have demonstrated, using the example of the electrical area program, how CEI's QA program identifies deficiencies in the contractor's program, analyzes the underlying causes of the deficiencies, and corrects the deficiencies and their underlying causes.

In a nuclear project of the size and complexity of PNPP, indeed in any construction project of this scope, the goal is perfect compliance with all project procedures and requirements. However, there will invariably be deviations and noncompliances found by the utility, its contractors and NRC inspectors. The purpose of CEI's QA program is to assure that procedural and substantive problems at PNPP are adequately identified and properly addressed. We are committed to a program that will accomplish this purpose. CEI's senior management is actively involved in seeing that this commitment is met. Our QA program has assured, and will continue to assure, that unsafe conditions in the Perry facility do not exist.


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VICE PRESIDENT
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VICE PRESIDENT
PERRY PLANT DEPARTMENT (OPERATIONS)
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NUCLEAR ENGINEERING DEPARTMENT
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NUCLEAR CONSTRUCTION DEPARTMENT
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NUCLEAR QUALITY ASSURANCE PROGRAM POLICY

The Cleveland Electric Illuminating Company recognizes the need for a formal and comprehensive Nuclear Quality Assurance Program for the Perry Nuclear Power Plant. This program is considered vital to the safety, security and well-being of the public, our customers, employees and shareholders. As agents for the owners, we maintain ultimate responsibility for the development and implementation of a program that contributes to the safe and reliable design, construction and operation of the Perry Nuclear Power Plant.

It is the policy of this Company that such a program fully comply with the regulatory requirements of 10CFR50, Appendix B; ASME Section III, Article NA 4000; ASME Section XI, Article IWA 1000, as applicable, and any additional regulatory guides, codes and standards which address quality assurance requirements that are set forth in the Safety Analysis Reports for the Perry Nuclear Power Plant.

An evaluation of the philosophy, policies and general requirements disclose that the ASME and CEI Quality Assurance Programs are completely compatible in scope, purpose and intent.

The Cleveland Electric Illuminating Company has the responsibility for the accumulation and retention of all required records and documentation. In addition, CEI is committed to ASME Section III, Article NA 3230, and has contracted with Hartford Steam Boiler Inspection and Insurance Company as its authorized inspection agency. The inspection agency is granted access and freedom to the project to perform all required inspections and audits. The Cleveland Electric Illuminating Company agrees to comply with ASME Section III, Article NA 3270 by preparing, certifying and filing the required N-3 Data Report.

Quality assurance is recognized as a most demanding function in terms of the interdisciplinary efforts that are required. Therefore, the program will define specific individual and organizational responsibility and authority. It will also prescribe procedures for compliance with regulatory requirements and establish appropriate guidelines for implementation of these procedures.

All Company and other associated personnel involved in or responsible for the quality of the Perry Nuclear Power Plant shall comply with this program. All Company personnel are responsible for implementation of those portions of the Nuclear Quality Assurance Program pertinent to their respective areas of responsibility.

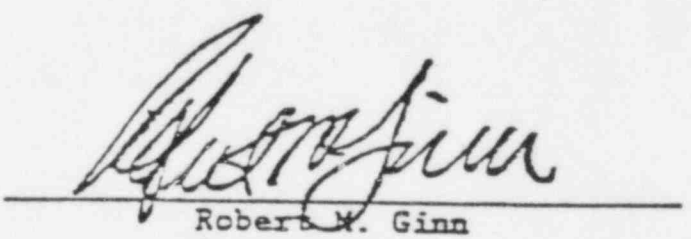
The Vice President, Nuclear Group, is assigned the responsibility for assuring that the Nuclear Quality Assurance Program is established and implemented. He shall periodically review the overall effectiveness of the Nuclear Quality Assurance Program and has authority to administer corrective action to improve its effectiveness or to avoid potential problem areas.

The Nuclear Quality Assurance Department Manager is responsible for assuring the development of the Nuclear Quality Assurance Program. He is responsible for assuring through audit, or other quality assurance techniques, that established systems are implemented, adequate, and are in fact, effective methods which will provide management with confidence that we are proceeding according to plan. He is further responsible for verifying and documenting that we have met all regulations, commitments and other established requirements with respect to safety-related activities, systems and equipment.

The Nuclear Quality Assurance Department has the responsibility to identify quality problems, initiate, recommend or provide solutions and verify implementation of solutions. To accomplish these tasks, the Nuclear Quality Assurance Department is hereby given the authority to stop unsatisfactory work or control further processing, delivery or installation of nonconforming material pending resolution of identified quality-related problems.

Any Company employee who at any time believes that The Cleveland Electric Illuminating Company's Nuclear Quality Assurance Policy or Program is not being fully complied with has the right and indeed the obligation to so inform his or her superiors of any such deviations, including the right of direct appeal to upper management of the Company.

The Corporate Nuclear Quality Assurance Program as described in this manual has my unqualified support. All differences of opinion concerning quality assurance which cannot be resolved by the Vice President, Nuclear Group, and Vice President, Administrative Services Group, will be referred to me for final resolution.



Robert W. Ginn
President

February 25, 1983

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JUDGE BLOCH: Off the record for a moment.

(Discussion off the record)

JUDGE BLOCH: Back on the record.

Mr. Glasspiegel, please continue.

MR. GLASSPIEGEL: Thank you.

Mr. Chairman, the witness panel is now available for cross-examination.

JUDGE BLOCH: Ms. Hiatt.

CROSS EXAMINATION

BY MS. HIATT:

Q Gentlemen, in the attachment number 3 to your testimony, which is a Nuclear Quality Assurance Program Policy, signed by Robert M. Ginn, President of Cleveland Electric Illuminating Company, in the fourth paragraph you refer to the Hartford Steam Boiler Inspection and Insurance Company as the authorized inspection agency.

Would you please go into the exact responsibilities of the Hartford Steam Boiler Company?

JUDGE BLOCH: Ms. Hiatt, I am sorry. Is that the third paragraph? I am looking at that document. It is the one called Attachment 3.

MS. HIATT: Attachment 3 to the testimony. I believe that is the fourth paragraph down in the middle.

JUDGE BLOCH: Fourth paragraph.

MS. HIATT: Yes.

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WITNESS EDELMAN: The Hartford Steam Boiler Company has contracted with us to be our authorized nuclear inspector with respect to ASME Code required work. The rules of the ASME Code require that certain forms and documents be signed by the contractor and submitted to the owners organization, which we must then sign, these various forms for completed piping systems. We are therefore required to hire an outside independent authorized nuclear inspector to review these documents and to sign off on these documents before we can have accepted systems turned over to the plant.

BY MS. HIATT:

Q Does this company review only documents?

A (Witness Edelman) For the Illuminating Company, when they review the document it is turned over to us. The contractors in addition, as required by Code requirement, have authorized nuclear inspectors which review the physical work in the field.

Q Do they review radiographs?

A Authorized nuclear inspectors, as part of the document package, will review the documentation, which would include radiographs.

Q You mentioned --

MR. GLASSPIEGEL: Mr. Chairman, we are having some difficulties.

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JUDGE BLOCH: Off the record.

(Discussion off the record)

END 5

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JUDGE BLOCH: Ms. Hiatt, we're back on the record.

BY MS. HIATT:

Q We were talking about the Hartford Steam Boiler Company and you say they do review radiographs?

A (Witness Edelman) A sample package for review of a radiograph is part of the document.

Q A sample package -- what percent?

A It depends on the level of review of the documents of a given contractor. Their sample may start at a higher level and as they build up a level of confidence they may review less of the sample of the documentation in a given packet.

Q Can you give me a range? 10 percent, 25 percent, 50 percent? Can you give me a number of a range?

A I think it's imprtant when you talik about the authorized nuclear inspector, this is the third level of review or the fourth level of review of this documentation package.

JUDGE BLOCH: For efficiency, I think if questions need -- if answers need amplification and they are related to the whole system, it would be better than it be done on redirect. The question had to do with the sample size.

MR. GLASSPIEGEL: Mr. Chairman, but the question was concerning the range. I believe the witness was

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beginning to put the question of range into context.

JUDGE BLOCH: I would prefer certainly that you answer first. If you must put it into context, do it next, but give the range first. That was the question. The rest is explanation, not placing it in context.

WITNESS EDELMAN: All right. The reviewer of ANI, the fourth level of documentation, the range may start from 100 percent when they start reviewing, giving documentation, and go down to a level of 10 to 20 percent.

BY MS. HIATT:

Q Now, does the Hartford Association deal only with piping?

A (Witness Edelman) Yes.

Q Only with piping and not with any other type of structure such as the containment?

MR. GLASSPIEGEL: Objection, that's repetitive. The question was asked and answered.

WITNESS EDELMAN: They deal with systems under the jurisdiction of the American Society of Mechanical Engineers, which is piping, pressure vessel and containment would fall into that category.

JUDGE BLOCH: Pipe supports?

WITNESS EDELMAN: Pipe supports.

BY MS. HIATT:

Q Are you familiar with the inspection report

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submitted by the Nuclear Regulatory Commission, the date is March 9, 1983, the number is 50-440-8302, 50-441-8302. It's addressed to you.

MR. GLASSPIEGEL: Mr. Chairman, it would be helpful if Ms. Hiatt could show the document to the witnesses before they have to answer the question.

JUDGE BLOCH: If you're going to refer to a document, please show it to the witness.

MR. GLASSPIEGEL: I would also like to have an opportunity to see a copy of the document.

MS. HIATT: I don't have an extra copy of this document. These are NRC inspection reports which should be readily available to Applicants and Staff, and for that reason we didn't bring extra copies of them.

JUDGE BLOCH: Ms. Hiatt, the problem is one of proceeding efficiently. The problem is that they have to be able to examine what the witnesses are being asked about so they can have their rights to make objections if necessary, or to ask for redirect.

It really is not fair, I think, when you pick out an inspection report, to think they can somehow thumb through the thousands of documents and find the one that you're referring to. Is this going to be a general problem for us?

MS.HIATT: I'm afraid it is, since we don't have

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duplicate copies of a great number of these documents. Yes.

MR. SILBERG: I would object to this use of a document. This is not a document that Ms. Hiatt identified as a document she was going to be using for cross examination.

MS. HIATT: I'm not sure what Sunflower Alliance had submitted as documents to be used during cross examination. Perhaps the representatives went over this list and this might be part of it.

MR.SILBERG: Mr. Chairman, the parties were directed to identify the documents that they would use, and Ms. Hiatt submitted that list on May 18th. The document that she's referring to is not on that list. If we're going to abide by the rules, I really think all the parties have to abide by the rules.

JUDGE BLOCH: I asked, I think, for the principal documents the parties are going to rely on, and we can allow occasional deviations but we need most of the documents. Aren't we correct, Mr. Silberg? Did we ask for the principal documents?

MR. SILBERG: No, sir, you asked that the parties identify all documents. You asked that they serve copies of the principal documents.

MS. HUBBARD: Mr. Chairman, this may be a problem for Sunflower,too, since I'm not aware of what list was submitted by Mr. Wilt. I will try to find it. All I know is

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what I have in my pile.

JUDGE BLOCH: Can Applicant provide Sunflower's representative with a list that Mr. Wilt submitted?

MR.SILBERG: I have a copy of it and I don't think it includes the inspection report, either.

JUDGE BLOCH: This is a general problem that they have. They would like to have a copy so that they can know what they have notified the Board about.

We are going to have a problem proceeding with a large number of documents where each time the Applicant has not got them. Would the Applicant like to suggest a method of coping with this problem?

MR. SILBERG: My suggestion would be to use the documents that they identified in response to the Board's order.

JUDGE BLOCH: In other words, you are prepared, even if they do not give you copies,to be able to look at any document that they notified you about?

MR.SILBERG: No, that's not true because Sunflower's list included every piece of paper that we furnished them during the discovery process.

JUDGE BLOCH: You have one problem that you want them to limit themselves to the documents --

MR. SILBERG: We can put our hands, over a period of several minutes, on virtually any piece of paper.

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We cannot do it immediately. But if they want to drag out individual non-conformance reports which this Board said are not at issue, we can do it. It may take 10 or 15 minutes per document. The key documents we have readily available, and our people can address readily.

JUDGE BLOCH: Many of the documents you can get to right away, but some would take a few minutes?

MR. SILBERG: We have several hundred linear feet of files that represent the documents that we made available. Intervenors, Sunflower, in their May 18th filing filed 25 pages, repeating every document that we gave to them; some merely by stating "a bunch of this" and "a bunch of that." We have all of this, and we can put our hands on it. I don't think that those documents are relevant to this hearing, but if we're going to get into them we will get into them, and if we have to bring our file cabinets and put them behind the witnesses, we will do that. I don't think that's a very efficient way to proceed.

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: Back on the record. During the off-the-record discussion, the Staff explained that it has problems additional to those of the Applicant. The problem being that it doesn't have many of the documents that were exchanged between Applicant and the Intervenors. I think what

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we're going to have to do, Ms. Hiatt, is say that you will be limited to the list of documents that was exchanged, except that if you want to use a document that is not on the list you may talk to the Board and show cause why you must be able to use a particular document.

So, you will have to explain why you think the document is significant and why it would be important if you were prohibited from using the document. So let's start with this document on that basis. It was not on the list. Why is it important that you be able to use that document at this time? What does it show to you that's important so that you have to use it?

MS. HIATT: It shows a significant problem with the authorized inspection agency, the Hartford Steam Boiler Company, in that this particular inspection report identifies some welds with possible indications of flaws which were passed by this company back several years ago and are now in question by CEI's Non-Destructive Evaluation Group. And I think this bears on the credibility of this authorized inspection agency to be doing the job the Applicants expect them to do.

JUDGE BLOCH: Now, which of the admitted issues is this relevant to? It does not have to do with Comstock.

MS. HIATT: No, but I think it has to do with the overall issue of controlling contractors, because if Applicants cannot rely on their authorized inspection agencies to provide

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this overview function, as far as checking up on the work of contractors, then it puts the whole system into question.

JUDGE BLOCH: Would Applicant and Staff like to address the showing of cause?

MR. SILBERG: Yes, Mr. Chairman. First, I think we really ought to read into the record what the Board directed all of the parties to do on April 18th in its memorandum and order (Procedural Matters Affecting the Hearing). The Board stated, "The following deadlines are established: (a) direct testimony must be filed on or before May 2nd, 1983; (b) no later than May 18, 1983 parties must serve on one another, but not the Licensing Board, the principal exhibits that they will utilize for cross examination at the hearing and clearly indicate the identity of all exhibits they intend to rely on for cross examination; principal exhibits defined to include all exhibits that may form the basis of more than 10 questions need not be served if they are already in the possession of the other party or are readily accessible to the other party, providing that the identity of these exhibits is fully disclosed."

The Board set up a rule; the parties understood that rule. All of the parties made a filing on May 18th -- I'm sorry, the Staff did not make such a filing, but the two Intervenors, Sunflower and OCRE, made a filing, as did Applicant.

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I believe that the Board has an obligation to abide by its own rules. There has been no showing of good cause why Intervenors could not have identified this exhibit at that time. I think to change the groundrules on the day of the hearing is unfair to the Applicants, is unfair to the other party and is doing a disservice to the Commission's direction that licensing boards abide by their own rules. We do not have a copy of that document here, at least I don't think -- I have not found one. And I think if we're going to run this hearing with fairness to all of the parties that we ought to stick by the rules.

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I don't think Intervenor has made a showing of why she could not have identified that document earlier.

MR. CUTCHIN: Mr. Chairman, I would agree with the Licensee.

JUDGE BLOCH: Mr. Cutchin, before you talk, could you address that specific problem. Why couldn't this document have been identified earlier?

MS. HIATT: Very recently, just a couple of days ago, I did receive some information concerning the significance of the questionable welds in the suppression pool area, that I did not have that information previously.

MR. SILBERG: The question of welds in the suppression pool is a matter that has been around for a long time. It has been in the newspapers. This inspection report, I think the date that OCRE provided was March, there is no indication that they just learned about this problem. It does not relate to Comstock. It is not clear how this relates to the overview system at all. I think the Board has addressed the scope of this hearing on numerous occasions and it has provided procedures to try to keep the scope of this hearing within bounds. I really think we ought to stick by those procedures.

JUDGE BLOCH: Mr. Cutchin?

MR. CUTCHIN: I agree, Mr. Chairman. Especially since the Intervenor is starting with the document and has

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not even attempted to go through the documents that it did identify. I think, until she has attempted to make her case through the documents that she has identified, she should be limited to those and then should have to show, at the end of that examination, how she would be severely prejudices by not being allowed to use these additional documents.

(Board conferring.)

JUDGE BLOCH: The Board is always reluctant to exclude information brought forward by a party, but we have established procedures for pre-notification. If it turns out that there is an important question concerning welds in the suppression pool, on which you got important new information three days ago, the correct way to raise that with us would be by filing a new contention with basis.

The particular issue here, the control of contractors, is not one on which the performance of the Advisory Nuclear -- Advisory -- Authorized Nuclear Inspector is relevant. We are talking about control of the construction contractors, so both on glance of relevance and lack of pre-notification and the availability of another remedy we would like to exclude this particular document.

Please proceed.

BY MS. HIATT:

Q On page nine of your testimony you are talking

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about CEI's QA department. Since 1978 it has increased from fewer than 50 to approximately 200 personnel. I wonder if you might break that down into more of a time period? Why don't we go back to the start of construction? At what time did safety related construction on the site begin?

A (Witness Edelman) We received our first limited work authorization in October of 1974, which did not involve safety related construction. There were a number of limited work authorizations granted between October of '74 and June of 1977, at which time we received a full construction permit to construct the plant. The intervening limited work authorizations involved excavation in the safety related areas, placing of rebar in the foundation areas, and that was essentially all the safety related work that started prior to June 1977.

Q At that time, during this limited amount of work, what was the size of your QA department?

MR. SILBERG: Mr. Chairman, I think we are going beyond the scope of the contention. The Board's order of December 22nd said that there is no genuine issue concerning the safety of work performed up to July 13, 1978. It seems to me that questions involving that pre-1978 period are simply not relevant here.

JUDGE BLOCH: Ms. Hiatt?

MS. HIATT: I would disagree, in that I think what

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we need to establish here is that Applicant's QA program was drastically understaffed from the beginning of this project, until the NRC came in in 1978 with it's immediate action letter. I think this testimony, this examination, is necessary to establish that fact.

(Board conferring.)

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: Back on the record.

MR. SILBERG: I would also call your attention to page eight of that order, in which the Board identifies the period between 1978 and 1982 as the period of concern.

JUDGE BLOCH: Ms. Hiatt, I think the key portion of our summary disposition order, that is controlling on scope, is the statement on page nine and the top of page ten about the four genuine issues of fact that were admitted to trial. Could you tell me how this issue relates to one of those issues?

MS. HIATT: I think it relates to the -- to Issue Number Four, the overview type of system, whether Applicant has an adequate system for periodically reviewing its program. And I think you have to look at this project from its inception. I think you also need to look at Item Three about unsafe conditions. I really think we have to go back to the beginning of this project to look at the kind of

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staffing levels Applicants had in their QA department to determine if their program is really adequate. I think we want to determine why, too, theNuclear Regulatory Commission issued the immediate action letter of February 8th, 1978, and I think this might be relevant to that.

(Board conferring.)

JUDGE BLOCH: Ms. Hiatt, I think the Applicant is correct in pointing out that our review of the previous record indicated that the work prior to 1978 is not in dispute here. The question is control of contractors since that first order was issued. I'm going to limit the scope to the scope of the summary disposition order so you have to establish what has been done, in terms of the control of contractors, since that first order.

MS. HIATT: Okay, then. We will talk about 1978.

BY MS. HIATT:

Q Referring back to page nine of your testimony, you say there were fewer than 50 in 1978. About what time in 1978 are you talking about there?

A (Witness Edelman) March.

Q And exactly how many people did you have?

A I think the number, to the best of my knowledge at that time, was around 47.

Q How many of these people were CEI personnel?

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A About 16.

Q How many of these people were actually inspectors?

A At that time we had no CEI personnel as inspectors.

Q What about the other people? How many of those were inspectors?

A Probably about 15 or 20 were inspectors.

Q And who provided these other people? The difference between the 16 -- the 47. Were those Kaiser personnel or who?

A Yes.

Q All Kaiser personnel?

A No. We had Gilbert also as quality engineers in support of our project.

Q Any other agencies supplementing that number?

A In 1978 we did have some other contract inspection personnel working for us.

Q These are the contractors you had employed to do work on the site? They were people working for you?

A No.

Q Who were these contractors?

A These were specialty small contractors that provided inspection personnel.

JUDGE BLOCH: That was to fill in fields that you could not inspect without them? Was that the general idea?

WITNESS EDELMAN: That was to supplement the second level inspection forces we had. We had some Kaiser people and

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contract people also.

JUDGE BLOCH: So it was not so much a matter of additional fields of expertise, just numbers?

MR. EDELMAN: That's correct.

BY MS. HIATT:

Q How many of these people were serving clerical secretarial type functions?

A (Witness Edelman) I am sure there must have been four or five in that capacity.

Q Why don't we go through this, maybe about a six month period. In the fall of 1978, what was the size of your QA department?

A I don't remember the exact buildup. I can tell you approximations through '78, through '79, and then from '80 and '81. I would have to reference back to our actual manning numbers to give you the actual numbers but by the end of 1978 our organization was slightly up to 100 and then the next year, by the end of '80, probably 100 and a quarter. '81 we were up to 150 --

JUDGE BLOCH: I'm sorry. You said '78 and then '80.

WITNESS EDELMAN: In '78 we started out at 50 and by the end of '78 we were probably up to slightly less than 100. Then in '80 --

JUDGE BLOCH: What about '79?

WITNESS EDELMAN: '79? I think we had the actual

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numbers. I can provide -- you know, this is just guessing, remembering. We build up -- I know what we did was we acquired people who were qualified people over this time period, building up our staff to match the increased construction activities that were going on at the site. We can provide the actual numbers. I don't have them.

MR. SILBERG: Mr. Chairman, we will provide those for the record at a subsequent time.

BY MS. HIATT:

Q I wonder if you might provide these in a rather specific breakdown, as far as time sequence. And also, numbers of inspectors, numbers of auditors, numbers of clerical personnel, and also a breakdown of the organization for whom they were working, whether CEI, Kaiser, Gilbert, etc. Could you do that?

MR. SILBERG: I think we're getting into discovery. The witnesses are being asked for very specific details. We can spend a lot of time generating a lot of numbers. I really think that this is not the right time to go out and create a lot of new documents at this point of the hearing. I really don't know why this kind of information, if the Intervenors wondered, it could not have been requested on discovery. We would be happy to provide general information, but to the extent that this involves a lot of time searching records, I really would object to this kind of additional discovery

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request.

JUDGE BLOCH: Why don't we try to supplement the testimony with just a table, or tables, that are in the form you have already got, on the growth of the inspector force, the growth of the QAQC force?

MR. SILBERG: We will pleased to provide that kind of general information. What I am objecting to is to go back to personnel records and find out who was doing what when. That kind of discovery request really is going to interfere with the course of this hearing and our preparation for it.

JUDGE BLOCH: Having said that, the witnesses should not testify to anything that they cannot recollect. But Ms. Hiatt, you may ask for as good a recollection as they have of these matters so that you can get the picture that you are interested in. At least within the realm of their current recollection. So if we go forward, maybe you could state, to the best of your recollection, how this year to year growth occured, just for the purpose of building the picture that Ms. Hiatt needs to continue her cross-examination.

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WITNESS EDELMAN: I would be very happy to do that.

JUDGE BLOCH: Please.

WITNESS EDELMAN: To put it in perspective, we started out with the numbers, as I described, in 1978 and we added people to our overall organization, showing all of these people were under our CEI Nuclear Quality Assurance Department whether they worked Kaiser, Gilbert or CEI. And we added to this force and built it up to our current level of 200 qualified people, in steps to match the increased construction activity in the various disciplines.

Now, to the best of my knowledge, I wound up skipping a year when I went through it, and in 1978 we started to build up and we were probably under 100. We'll look at the numbers and get the specifics. By the end of the year, during the next year we probably added another 30 or 60 people, to the point that we added up to our staff so that in 1982 we were at a level of about 200 people.

The 200 people breakdown -- I do know I can't break down Kaiser and Gilbert exactly, but 90 of the 200 are CEI people and 110 are consultant people integrated into this Nuclear Quality Assurance Department.

JUDGE BLOCH: Was there a big jump at some point in that? Was it sort of smooth from --

WITNESS EDELMAN: We tried to make the transitions at manageable levels. We built up the force to match the

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construction activity.

BY MS. HIATT:

Q In the last paragraph of page 9 of your testimony, you were talking about certified inspectors and auditors. You say there are 24 CEI auditors and 23 CEI lead auditors certified under the ANSI requirements. What is the total number? Are you talking about 24 people or 47 people there?

A (Witness Edelman) I show in the testimony there is presently 47 people that are certified to one level of the audit program or another. The lead auditor has to have had more experience in terms of the number of audits conducted before he can be qualified under the ANSI program to become a lead auditor.

JUDGE BLOCH: As I understand the answer, there are actually 47 people.

WITNESS EDELMAN: Yes.

JUDGE BLOCH: Let the record show that the witness nodded yes.

WITNESS EDELMAN: Yes.

BY MS. HIATT:

Q At page 11 of your testimony you are discribing how you have previously held different positions in the plant in quality assurance,training, administration, et cetera, and the paragraph concludes that the CEI benefits for having management personnel across the project with strong QA

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backgrounds. Might not a different interpretation of that mean that you're putting people in the Quality Assurance Department who have strong production-oriented backgrounds?

A (Witness Edelman) I absolutely disagree with this. We put people in Quality Assurance Department positions to hold manager positions, to accomplish our overall QA program. I strongly disagree with your statement.

Q To what degree is this type of rotation through departments accomplished?

A The overall corporate philosophy of rotation of assignment is a developmental activity. It starts at the engineer level and moves up through the management level of the company. We have not had significant rotations through the QA Department. For example, I was manager for three years of the Nuclear Quality Assurance Department from 1978 through June of 1981, and we have had a total of three managers in the last six years of the Quality Assurance Department.

I don't consider that a significant rotation of people through the department.

Q I'm referring now to a document which was made available to the Board and the parties by Mr. Cutchin of the Staff. It's a self-initiated evaluation conducted for the Perry Power Plant. Its cover letter is signed by you to Mr. Keppler --

MR. SILBERG: If we could have just a moment to

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get a copy of that to the witness.

(Counsel handing document to witness.)

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: Back on the record.

BY MS. HIATT:

Q Page Roman IV of this report which -- describing some of the weaknesses in your project, Item 3 refers to there needs to be an increased emphasis on training. And item 4 refers to organization changes, additional specific job descriptions, position responsibility guides --

JUDGE BLOCH: I'm not sure, but you may want to ask one thing at a time. Are you going to be able to ask one question?

MS. HIATT: Yes.

BY MS. HIATT:

Q What I'm asking is, does this rotation of persons throughout the departments in any way impact on some of these problems of training, with familiarity with the procedures and responsibilities?

A (Witness Edelman) I don't think that is what the two issues as defined in this evaluation were addressing.

Answering the second question first.

JUDGE BLOCH: It might help us to tell us what you think they do address, and then we get the context better.

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MR. SILBERG: Perhaps just for clarity, we could read into the record the complete text of the two paragraphs so that there is somewhere on the record an understanding of what these two statements are, before they're discussed.

Mr. Edelman, could you briefly read in paragraphs 3 and 4.

WITNESS EDELMAN: Paragraph III -- I'm on Roman IV of the overview section of the INPO evaluation report. "There needs to be increased emphasis on training by supervision to insure that existing procedures are known and followed by all project organization and contractor personnel."

"Item 4 -- In view of recent organization changes, additional specific job descriptions and position responsibility guides need to be developed for project organization to assure individuals have a good understanding of their authorities and responsibilities."

BY MS. HIATT:

Q You believe that the rotation of personnel --

JUDGE BLOCH: We have not had an answer to the question yet.

WITNESS EDELMAN: The question specifically was, do I believe rotation of assignments of personnel affected Item 3, and my answer was no.

JUDGE BLOCH: You began to say, though, that these things addressed another matter.

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WITNESS EDELMAN: Right.

JUDGE BLOCH: Could you explain that to us?

WITNESS EDELMAN: I wanted to get to Item 4 where we said, "In view of recent organization changes." This report was issued at the time that we had just created my position as Vice President of Nuclear Group. At that time, these were the commitments made to the Commission to have a specific nuclear vice president that addresses specifically nuclear issues to the project, which has now -- there are four departments that report directly to me for quality assurance, engineering, construction and operations. And as part of the INPO training and getting ready for operations, one of the recommendations from the INPO review is as you get ready for operations, you must have specific job descriptions and assignments of each one of the staff, including operations, in place for the training of your organization to support the operation of the plant.

I believe that is what this was addressing in Item 4.

BY MS. HIATT:

Q So you do not think that the rotation of personnel in this project has in any way hampered the effectiveness of your quality assurance program?

A (Witness Edelman) No. I think it strengthened the effectiveness in that we have members of the project

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organization who fully understand,comprehend and take full knowledge of what the responsibility of implementing a QA program is. So I think it has helped the project.

JUDGE BLOCH: Is there someplace else in this document that the Board should read carefully with respect to the point you were just trying to make, or have you concluded with that point?

MS. HIATT: I believe I have concluded on that for now. I believe it is addressed further in the document. I, unfortunately, have just read it myself and I have not totally -- I am not totally familiar with where exactly it could be found.

JUDGE BLOCH: Please continue.

BY MS. HIATT:

Q Could you please go into the methods by which contractors on the site are awarded for work performed?

JUDGE BLOCH: Could I hear that repeated? How are the contractors on the site rewarded for the work performed? I think that might be a little vague.

MS.HIATT: Sure. In fact, I am referring to a document here, SECY 82-352, which is an NRC document, dated August 20,1982. I refer to page 2 of Enclosure 1 of that document. I will read this paragraph into the record.

MR. SILBERG: Excuse me while we get a copy of that document to the witnesses, please.

(Pause.)

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JUDGE BLOCH: Do we need the document or can we use the paragraph as something for them to respond to? Is the document itself import[illegible], or is it just that you have a question from the document?

MS. HIATT: I basically have a question from the document. The document itself does address a great deal of generic types of problems with quality assurance programs.

JUDGE BLOCH: Because to the extent you are just using a document to phrase a question, we can avoid using up time on introducing it just by asking the question from the document. If you really need the document to prove something, then we have to go through this process of handing it out and reacting to it.

MS. HIATT: I was basically asking a question from it.

MR. SILBERG: Could we have the page reference again?

MS. HIATT: It's page 2 of enclosure 1.

JUDGE BLOCH: Would you please read the paragraph you are interested in and rephrase the question?

MS. HIATT: Okay.

BY MS. HIATT:

Q The document is talking about balancing cost and schedule considerations with quality, and this is normally balanced to contractual and procedural arrangements. Quoting

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from this document, "For example, if a constructor earns contractual credit strictly with the schedule of physical installation, the message from project management is production. On the other hand, if earned credit is commensurate with the scheduled owner-accepted, adequately documented installation. the message is quality production. The latter case provides the proper incentive for getting work accomplished right the first time."

I would like the witnesses to address which of those two methods is used at the Perry site.

A (Witness Edelman) This is -- the document she is referring to is an NRC policy document.

JUDGE BLOCH: The document itself really is not important. The question is what kind of incentive system or payment system is used and what effects it might have on incentives.

MR. SILBERG: Which, if any, of those two.

JUDGE BLOCH: Which, if any; that is correct.

WITNESS EDELMAN: Our overall payment system for physical work completed is a combination of both, where you pay for physical work as it is being installed but final completion of work is not paid until the final documentation and overall acceptance of the work is turned over to us. So therefore, it is a combination of both, which I think gives production in the right perspective as well as the overall

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effect of the quality of the intended material.

JUDGE BLOCH: You make progress payments, but then at the end you do your full quality check before you make the final payment.

WITNESS EDELMAN: That's correct; not on total but on individual specific pieces of work.

JUDGE BLOCH: Is this general policy or absolutely uniform policy?

MR. SILBERG: When you say general, you mean on this project or within the industry?

JUDGE BLOCH: I mean on this project. Is this with respect to all contractors or is there some variance?

WITNESS EDELMAN: This is our general policy with all contractors.

JUDGE BLOCH: Ms. Hiatt.

MS. HIATT: I think if we might take a short minute here.

(Counsel conferring)

BY MS. HIATT:

Q You say you pay the contractor for completion of specific pieces of work.

A (Witness Edelman) That's correct.

Q What do you define as pieces? Are you talking about systems, components, or whatever?

A For example, when a contract is set up, the

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contractor may be paid a certain percentage for carrying of equipment, a certain percentage for setting of the equipment, a certain percentage for mechanical installation of the equipment. The final payment or portion of it is when the final system is done, the documentation of the system, and then it is turned over to us. It is stepped process.

Q By turned over, do you mean turned over to the nuclear test section?

A (Witness Edelman) Yes.

Q What if the nuclear test section finds some things that require substantial rework, for example?

A (Witness Edelman) The test sections. The system or component is turned back to the contractor. The contractor has to make those modifications.

JUDGE BLOCH: Ms. Hiatt, that last series of questions succeeded in getting the witness to repeat what he already said. We will try to avoid that.

BY MS. HIATT:

Q Page 15 of your testimony, you were talking about in response to items of concern for the February action level.

MR. SILBERG: If you could speak up. Your back toward us is making it hard for us to hear.

JUDGE BLOCH: We are on page 15 of the testimony.

BY MS. HIATT:

Q You determined that the underlying causes of

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quality assurance deficiencies included a single, all-encompassing quality assurance manual. You did not have the quality assurance manual prior to that point?

A (Witness Edelman) There were separate manuals, one for QC inspection, one for engineering, and one for procurement of materials.

Q You now have a single, all-encompassing quality assurance manual.

A The manual, which consists of a number of documents, more than just one volume.

JUDGE BLOCH: Could you explain for us what the problem was that you perceived at the time as arising from a single, all-encompassing QA manual? What was the problem that you list here that you spotted?

WITNESS EDELMAN: Without the overall manual, would give proper direction to the entire project, where we had separate documents giving direction to inspection forces, separate document to the procurement of parts and components, separate documents to the engineering and design aspects of it.

JUDGE BLOCH: But if all of those things were done pursuant to the separate manuals, three separate volumes, you perceive that there was some deficiency. Why would it be done separately to cause the deficiency?

WITNESS EDELMAN: We thought there was no

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integrated overall corporate quality assurance direction from the owner, which in this case is ourselves, and that an overall manual that incorporated all aspects of the quality assurance program was required to give proper direction to the total project of the quality assurance program.

JUDGE BLOCH: Could you get a manual by just taking the three separate things and putting them together between one cover? Would that do it?

WITNESS EDELMAN: We did a combination of almost that because we combined the three manuals into one. We combined the organizational structure and the management structure, which is defined in the manual to direct the work and activities. Essentially it was incorporating the aspects that were decentralized into one overall manual that controlled the work activities.

JUDGE BLOCH: It sounds kind of cosmetic, like you felt better having it in one book cover.

WITNESS EDELMAN: It was not cosmetic because it integrated the organization together with overall direction in the field under one general supervisor under his manual for both the engineering and the inspection side, and one supervisor to handle the procurement and training and the records in another, both reporting to the manager.

JUDGE BLOCH: Those were organizational changes apart from the manual.

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WITNESS EDELMAN: Which were incorporated in the manual by bringing the manual together.

JUDGE BLOCH: When you say bringing them together, you do not mean just physically sticking them in one jacket; you mean making a unified document out of them that supplied cross-references that were not there before and organizational structure that was not there before?

WITNESS EDELMAN: You did a better job on answering than I did.

JUDGE BLOCH: I'm just trying to understand what you were saying.

Ms. Hiatt.

BY MS. HIATT:

Q This manual is in revision quite frequently?

A (Witness Edelman) The QA program is always under constant review.

Q Have there been any significant changes in it since your all-encompassing manual was incorporated?

A I don't think any significant changes. I think the changes we have made have all been to improve and strengthen our procedures and to learn from the areas and activities that we have done over the last five years. I would not define there have been any "significant changes."

Q But there have been changes.

A (Witness Edelman) Yes.

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Q What is the nature of the changes if they are not significant?

A (Witness Edelman) The changes would involve, if we had made further organizational requirements, to keep the manual up-to-date to match the following organization. For example, when we created the Nuclear Group under my direction as the vice president, the manual has to be changed to reflect that so the proper organizational structure is shown there. If we made any organizational improvements in the Quality Assurance Department over the time frame, the manual has to be constantly updated to reflect those changes.

Working through procedures, we have found that they need to be upgraded and revised to make sure that they are workable and more efficient. Then those changes are made to the manual. As we get into new phases of the project -- for example, turnover of systems from the contractor -- those additional procedures are added to the manual to strengthen the overall manual.

There are a number of changes made over the last five years to the overall QA manual.

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Q None in your opinion are major?

A I do not know how you define the wore "major."

JUDGE BLOCH: I think you answered that already. Do you want to modify it in some way,your previous answer?

WITNESS EDELMAN: The first question I was asked was whether there were any significant changes to the manual, and I said no.

JUDGE BLOCH: I would have thought "major" is bigger than "significant."

WITNESS EDELMAN: Either way,the answer is no.

BY MS. HIATT:

Q Also, page 15 of your testimony,you are referring to the February 8,1978 immediate action letter issued by NRC --

JUDGE BLOCH: Ms.Hiatt, we just spent substantial time on the all-encompassing QA Manual. We have gained great respect for your talents and abilities. Do you have a point to make about this?

MS. HIATT: Yes, I do have a point to make about this.

JUDGE BLOCH: Okay.

BY MS. HIATT:

Q I wonder if you might go through a chronology of what led to the issuance of this letter. We understand that this was concerned with a major stop-work on the project.

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Is that correct?

MR. SILBERG: Mr. Chairman, I wonder where we're going at this point and how this relates to what the issues are, which is essentially the post-1978 control of contractors.

JUDGE BLOCH: Ms. Hiatt, does it relate to that?

MS.HIATT: I think it again relates to the overview system and to the degree to which Applicants are identifying these problems or whether the NRC really is.

I want to get into really who stopped worked on the Perry site on February 8, 1978.

MR. SILBERG: I don't think that is relevant. I think you have already ruled on that, Mr. Chairman.

JUDGE BLOCH: We did, Ms. Hiatt. We ruled that you have got to stick to the control problems post-1978. The problem here is that you have put in testimony that she wants to conduct cross on. Do you now think the testimony was irrelevant? Is there a portion of your testimony that should be stricken?

MR.SILBERG: We are talking about the causes of the problems.

JUDGE BLOCH: You are now arguing that the causes of the problems in 1978 are irrelevant?

MR. SILBERG: No,I don't think that's right. I think what we -- what the question was asking for is, tell us everything that led up to -- and why was -- work stopped.

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I don't think that's relevant. I think control of contractors and how that was cured is relevant.

JUDGE BLOCH: In 1978.

MR. SILBERG: In 1978 and after, yes.

JUDGE BLOCH: Ms. Hiatt, if you can assure us that is what you have in mind, you're going after problems of control of contractors in 1978 and after, you may continue without further explaining that to us, but you must be convinced in your own mind that that is what you are doing.

MS. HIATT: I am, and I would further quote from the Licensing Board's December 22nd, 1982 memorandum and order in which the Board stated that they want to learn in detail about September 24th, 1982 notice of violation --

JUDGE BLOCH: Which page, ma'am?

MS. HIATT: The first page.

You also referred to the July 13th, 1978 notice of violation. It's my understanding that that July 13th, 1978 notice of violation, even though it was issued substantially after the stop-work, does relate to that problem. So I do think this is relevant.

JUDGE BLOCH: If it deals with the contractor performance aspects of that.

MR. SILBERG: And the remedies. And I think the language you're referring to in the December 22nd order talks about the steps taken to remedy, not what led up to.

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JUDGE BLOCH: There is a comma there; that is in series. You were talking about the cause of the initial violation with respect to contractor performance. In that way, it is relevant.

MS. HIATT: Right.

BY MS. HIATT:

Q Did Applicants stop work at that time, February 8, 1978?

A (Witness Edelman)A stop-work notification was issued by the Illuminating company.

Q Was this on all contractors at the site?

A It was on all safety-related work at the site at that time.

Q Why did you issue that?

A It was a result of inspections conducted at the end of 1977 by the NRC, and evaluation of the NRC's findings, potential findings at that time. I was not manager of quality assurance at the time that the stop-work notification was issued.

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: Back on the record.

WITNESS EDELMAN: To the best of my knowledge, we were in direct contact with the region. Discussion of the activities,their inspections at the end of 1977, at which

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time we notified the region that we would issue a stop work on all safety-related work as described in that immediate action letter. The Commission then responded to that by issuing the immediate action letter which identified that we had issued the stop-work on the contract.

BY MS. HIATT:

Q Did you have any discussions with the Nuclear Regulatory Commission to -- the nature of which might be that if you had not issued the stop-work notification, they would have?

A (Witness Edelman) I was not manager of quality assurance. The answer, I would guess, would be no, but I was not manager at the time.

JUDGE BLOCH: Are there any company records you have seen on this matter?

WITNESS EDELMAN: All I have seen is that the records indicate there were telephone conversations with the Commission describing the nature of their findings, but not specifically to the question that she raised.

JUDGE BLOCH: So the witness just does not know the answer to that question.

BY MS. HIATT:

Q If the Nuclear Regulatory Commission had not conducted these inspections and made these findings, would there have been any stop-work on the site?

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A (Witness Edelman) I cannot answer that question, I don't know.

Q Is there someone in your organization who could?

MR. SILBERG: Mr. Chairman, I think we're really asking for speculation on what might have happened if, when the if took place five and a half years ago. I really don't think that this is a fruitful line of questioning.

JUDGE BLOCH: I think the testimony clarified that the investigations had taken place prior to the stop-work order, and the results were considered before the stop-work order was issued.

I think where you cannot get further information is whether there was any pressure or indication of an ultimatum or anything of that kind. He just does not know about it.

MS.HIATT: I did ask if it might be useful --

JUDGE BLOCH: For the parties, Ms. Hiatt, I would like to explain that the Board makes comments more frequently than most boards do, and we would appreciate it, if there were objections, that they be stated. We do not get our backs up when our own words are objected to, Ms. Hiatt.

MS. HIATT: Okay.

BY MS. HIATT:

Q I did ask if there were any persons who would be knowledgeable in that area which you claim you have no

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personal knowledge of.

MR. SILBERG: I object to that as calling for speculation, even if there were such persons, and not being terribly relevant to the issue.

JUDGE BLOCH: I think that's more a subject for discovery than that kind of question. You had an opportunity to obtain the names of possible witnesses through discovery. Let's continue with this witness.

BY MS. HIATT:

Q Page 16 of your testimony, you talk about quarterly QA management reviews. Are these related to the quarterly performance reports on quality assurance effectiveness?

A (Witness Edelman) Yes.

Q Are these reports -- is that the extent of the management review?

A Absolutely not.

Q What is the extent of that review?

A If the Board would allow,I'd like to put into perspective the question. It's a general question -- what is the extent of management review.

We have on site since 1978 a manager of qualty assurance, and since last year both the systems engineering vice president and now myself on site at least three days a week. Our review, therefore, starts at that level where we have weekly meetings with each one of the managers;

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specifically, with the Manager of Nuclear Quality Assurance. We have monthly performance analysis reports prepared by each one of the departments to discuss their issues, specifically a monthly performance analysis report prepared by the Manager of Nuclear Quality Assurance to me. In addition, there are monthly meetings with all of the managers, the senior vice president and the executive vice president to review the results of the monthly performance.

Specifically addressed at those meetings are the review of the quality assurance program by the Nuclear Quality Assurance Department Manager.

In addition, after that meeting the vice president and executive vice president have monthly meetings with the president of the company to review the monthly performance of the nuclear group activities. In addition, we now get to the point where we have quarterly reviews, which you started your question with, where we review the entire QA program on a quarterly basis and present that to the president and two executive vice presidents, as well as the vice president of nuclear, which puts in perspective the overall effectiveness of the QA program, as evaluated by the Nuclear Quality Assurance Department on a quarterly basis, which has been in effect now for 17 quarters, since 1978 when we initiated this with the upgrading of the enhancement of our QA program.

JUDGE BLOCH: May I ask, many of these reports for

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management in particular are somewhat conclusory in nature; they state conclusions about the state of the quality of the contractors. I am correct in that statement, aren't I?

WITNESS EDELMAN: Yes, they do.

JUDGE BLOCH: Could you tell me whether there are reports kept somewhere that are the nature more of the inspection reports or the NRC reports which state what was inspected, what the sample was, what the conclusions were from that that somewhat document the activities from which conclusions are arrived at about quality assurance?

WITNESS EDELMAN: Yes. Maybe Mr. Leidich, who was supervisor of the quality engineering section from 1980 to 1982 would elaborate on that point.

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JUDGE BLOCH: Ms. Hiatt, are we interrupting your cross?

MS. HIATT: No.

WITNESS LEIDICH: There is a wide variety of documents us by both Quality Engineers and the Quality Control Inspectors that we refer to in our testimony. The individual documents that describe those areas of concern would be audit reports, they would be CAR and possible stop works that were issued.

JUDGE BLOCH: Could you, for the record, identify what CAR means?

WITNESS LEIDICH: Corrective Action Request, stop work notices, if applicable. In addition, the Quality Control Inspectors utilize Surveillance Inspection Reports, which are the acronym -- the acronym for that is SIRs. SIRs are used to modify the contractors inspection and field performance so we have a wide variety of these types of documents that represent the individual details, which then in turn lead to the conclusions that can be reached in the management assessments that Mr. Edelman indicated.

JUDGE BLOCH: If we see the inspection system as a box, we can see each of these details as an output from the box. If it keeps track of what has gone into the box, how much of the process is being monitored, and what possible gaps there are in monitoring the process?

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WITNESS LEIDICH: The Quality Engineer assigned to that individual contract is responsible for that function. He has, at his disposal, input from the contractors quality organization as well as from his surveillance inspectors in terms of the SIRs and ARs that they may be generating.

JUDGE BLOCH: For example, let's suppose there is a certain stage of work going on and as part of that work there are activities. There might be welding, there might be delivery of new equipment, there might be three or four other things going on. How do you get an overview to know that you sampling the activities in a sufficiently sound way so you are not just missing something, that there is a gap there that you have not even looked at?

WITNESS LEIDICH: The first principle part of that is the Quality Engineer is part of the contract team. We refer to the contract team in our testimony, consisting of the Contract Administrator and a responsible engineer. They have continous day to day discussions and meetings regarding the current status of the installation process. So the Quality Engineer is very much in tune with the overall objectives of both the Contract Administrator and the responsible engineer with respect to the installation progress.

In addition, the Quality Engineer works with, on a day to day basis, the Quality Control Inspector. In fact, they sit side by side in an office together. That individual

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is responsible for the field activities directly, in terms of overview and the contractor's performance in the field.

JUDGE BLOCH: We may not be connecting because my assumption is wrong. Are you saying that whenever there is an activity that takes place, it is monitored 100%? Or is there actually some sampling going on so that you do not monitor -- your QA people do not monitor everything that gets done?

MR. SILBERG: Just for clarity, here I assume we are talking only about CEI's second level surveillance and not the first level function that the contractor's QC personnel are undertaking. Is that correct?

JUDGE BLOCH: I think, in fact, I slipped between levels and you are correct in objecting in that way.

MR. SILBERG: I just wanted to make sure that the answer and the question were connecting and that we are all talking about the same thing. There are two very different systems involved.

JUDGE BLOCH: I am talking primarily about the system of CEI oversight to make sure that the QA activities are being done properly and the work is being done properly. You have some kind of a sampling strategy or an overview strategy there, don't you?

WITNESS LEIDICH: Yes. The sampling and overview strategy is very much a function of the work activity. For

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example, in a concrete placement we provide 100% coverage, on a second line basis, of all of the concrete placements. In the area of cable pulling, for example, we provide a very high percentage of visibility, or oversight, from our standpoint. Other activities get a smaller percentage. It is a function of several variables, including the complexity of the work as well as the individuals contractor's performance in that activity, a snapshot of the quantity of non-performance reports that may be generated during a given time frame, and evaluation of that with respect to what sort of coverage we do need to provide in the field. So, it is a variable kind of a thing.

JUDGE BLOCH: The engineer makes the judgment. In the first instance, is there some supervision of his decisions about the level of oversight.

WITNESS LEIDICH: Yes and that factors into the management system that Mr. Edelman discussed. The overview on that individual decision is by the individual supervisors of the Quality Engineers. They, in turn, report to a general supervisor who, in turn, reports to the Manager of the Nuclear Quality Assurance Department. So, what we are getting there is a reporting system in both directions, from Management to the individuals involved regarding their comments on contractor performance, conversely from the Quality Engineers to Management regarding the contractors

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performance.

JUDGE BLOCH: But we were not asking about reporting to management about performance. It was reporting to management about the level of sampling of performance. Does he do that? I have not seen that in the reports I have looked at.

WITNESS EDELMAN: There is another --

JUDGE BLOCH: Does that happen, or doesn't that happen? Does Management look at the level of oversight, the intensity of 100%, 20%, 50% of different activities?

WITNESS EDELMAN: We look at that because we have another input and that input is the independent audit program of the contractors work which is built in audit of their program as well as their in-process audit of their work in the field. You have an independent Quality Control Quality Engineer looking at the work they are doing. You also have, from a management perspective, the audit of that contractors activities to make sure that the audit is demonstrating and also a feed-back system into that system to make sure they are looking at areas that have been identified and may need further inspections. You have a check and balance type system with the independent audit program also looking at the contractors activities.

JUDGE BLOCH: The audit problem has a similar question, which is the scope of audits. How is that question

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addressed by Management? How do you know how frequently those should be done, what the samples should be? How does Management assess that?

WITNESS LEIDICH: A QA program requires, at a minimum, an annual audit be performed on each of the 18 criteria for each of the safety related installation contractors. So, as a minimum, we are getting an a nnual review of the contractors program and its implementation.

In addition, the supervision within QA makes specific recommendations to the audit group on specific areas thac they would need to explore further.

JUDGE BLOCH: Let me give a more specific example. If the installer of the heating and air conditioning system did nine different things during a period would the audit necessarily sample all of those nine different activities? Would it be possible, for example, that you decided that that month, or that audit, he was not going to look at the welds. Maybe you had done that a year ago and you were satisfied with welds, or you always -- does the auditor always look at everything that the contractor did of significance during that period?

MR. SILBERG: Excuse me, are we talking here just about the auditor or about the whole CEI overview program?

JUDGE BLOCH: Now we're just talking about the auditor. We are focusing on auditors.

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WITNESS ELDEMAN: The auditors would look, in his commitment, the overview program of the contractor. The program may include a number of process activities, for example, he may be doing a number of work activities in various locations. But part of his program may be drawing control, which affects all of the processes so he would look at the areas that would have attributes that affect the entire process as well as based on the Surveillance Inspection Reports from the QC people that have been identified. They would also audit areas that have been identified as concern to our Quality -- to the Quality Inspectors. That would be added, in addition to looking at the overall process of the contractor. You would have -- they would have both inputs in preparing the auditing program to review that contractor.

JUDGE BLOCH: Maybe, Mr. Silberg, you could ask questions. I'm trying to get a picture of how these symbols are drawn by the different parts of the organization, how you decide that you have done a complete analysis of what the work that was going to be done by a contractor during a period, the extent to which to suggest a question of the judgment of either the engineer or the auditor, and the extent to which it is reviewed by the management.

I am not feeling I am getting a complete answer. You could either try to do further redirect now, or you could save it for later.

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MR. SILBERG: One way to do this might be to take a specific example of a specific activity and take it through from start to finish, cable pulling for instance. Take a typical cable pull and tell us how that activity is reviewed, both -- maybe for completeness we can do it, how it is reviewed both by the contractor's QC program, by the project organization's QAQC program, and by the audit program.

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JUDGE BLOCH: Thank you. That is along the lines I was thinking.

WITNESS LEIDICH: A specific example of cable pulling -- the field is responsible for notifying the contractor's QC organization in order to do a pre-pull walkdown. The contractor has the responsibility then to implement their procedures, to perform that walkdown, to insure that the conduit or the cable tray or the duct bank that is involved is acceptable.

It has been signed off from the inspection standpoint, it is free from any obstructions and so forth. That's the first very important point -- the pre-pull walkdown.

At that point, the project organization obviously, with the communications between the quality engineer and the balance of his contract team, is fully aware of cable-pulling activities are going on. We may or may not opt to select a mandatory hold or a witness point. We have done that in several occasions depending on a wide variety of factors such as the complexity of the pull and so forth.

So there may be at that point a CEI hold or a witness point. If there is, the project organization would be formally notified by the contractor. A CEI surveillance inspector would come out and perform and sign off his hold point or witness point. At that point, the cable pulling activity begins.

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Under the contractor's program, he is procedurally obligated and responsible to provide 100 percent QC coverage of the cable-pulling activities, which he does do. The essence of that is that during the entire pull of the cable, be it through conduit, cable tray or duct banks, there is an inspection individual there fulltime.

In addition, there would very likely be -- depending again on the complexity of the pull -- a CEI surveillance inspector performing a 100 percent observation of the pulling activity.

MR. SILBERG: Who makes the determination that the CEI project organization person is there or is not there?

WITNESS LEIDICH: Generally, the quality engineer is responsible for that decision.

MR. SILBERG: Would that decision be reviewed either at that time or sometime later by his supervisor?

WITNESS LEIDICH: Yes, it would be. And if the supervisor determined that we were not providing enough coverage of the cable-pulling activities, then he would direct the quality engineer and surveillance inspector to upgrade their percentage.

MR.SILBERG: And would the Manager of the Nuclear Quality Assurance Department be aware of the level of surveillance which project organization QA is giving to the cable pulling, either that specific cable pull or cable

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pulling in general?

WITNESS LEIDICK: Yes, you would.

MR. SILBERG: How would he be aware of that?

WITNESS LEIDICH: Generally,through the department CARs and individual reports. We refer to that in a broad sense. We would not cite that we are now doing 10 percent or some specific number. We do refer to that in a broad sense with respect to what level of coverage is consumed within the construction quality engineering section.

MR.SILBERG: How often would the manager be in communication with his supervisor as to those types of activities?

WITNESS LEIDICH: It varies, again, depending on the complexity of the activity. If it is a very complex or safety-significant activity, I can cite examples where the manager was specifically involved in assuring that indeed, we were providing adequate coverage of that particular activity.

MR. SILBERG: Please proceed.

WITNESS LEIDICH: At this point, we are now pulling cable and we have 100 percent QC inspection required by the installation contractor, and under his QA program, and we may or may not -- generally do -- provide 100 percent coverage under the project organization program.

Upon conclusion of the cable-pulling activities,

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the project organization prepares a surveillance inspection report documenting their observations. Also, the contractor, his QC, prepares an inspection report documenting their observations. If there were any deficiencies noted during the course of the installation, non-conformance reports would be generated by the contractor.

The completed documentation indicates that the contract organization is reviewed by the quality engineer, so each individual surveillance inspection report then comes back to the office. The quality engineer, as I indicated earlier, has the responsibility for overviewing all of the activities of that contractor. Then, he provides a review and signature of the surveillance inspection reports of that particular activity.

If there are subsequent cables involved, there would be additional surveillance inspection reports.

MR.SILBERG: Who do those reports go to?

WITNESS LEIDICH: As I indicated, they are reviewed by the quality engineer and become a quality record in our storage vault.

MR.SILBERG: How does the information in the surveillance inspection reports get communicated up to the quality engineer supervisor?

WITNESS LEIDICH: The quality engineer is responsible for providing periodic reports, at least on a

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monthly basis, generally, on a weekly basis, of the status of our overview of the contractors, the status of the current installation activities, the status of the performance of the quality control inspectors of the contractor.

MR.SILBERG: Who do those reports go to?

WITNESS LEIDICH: Those reports go to the supervisor of construction quality engineering which in turn go to the supervising engineer, in turn to the department manager of the Nuclear Quality Assurance Department.

MR. SILBERG: Do the monthly reports go higher in the management chain?

MR. LEIDICH: Yes, they do, as referenced in our testimony. Performance analysis reports are then prepared by department managers and vice presidents to eventually be received by the president of the Illuminating company.

MR. SILBERG: Could you address where the auditing function fits into this process?

WITNESS LEIDICH: The auditing function fits in, as I indicated, on a minimum of an annual basis. If the quality engineer feels -- and this has happened in many instances -- that there may be a need to provide an audit perspective of that particular work activity, he would call upon the services of the Construction Quality Auditing Group who has that independent responsibility. They report directly to the Manager of the Nuclear Quality Assurance Department.

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In the course of performing that audit, then, they would perform an overview from sort of a different perspective, and that perspective has a much broader base than with respect to necessarily the individual hardware installation itself, and perhaps the acceptability of that individual cable. They would be looking at the entire installation process. They would be overviewing the documentation prepared by the quality control inspectors. They would be overviewing the documentation prepared by the project organization surveillance inspection personnel to insure that we are following our procedures.

In addition, they would be overviewing the preparation of any non-conformance reports that may result, overviewing the documentation, perhaps looking at the design documents as the design documents are utilized. The cable pull slips which identify the specific routing of the cable may be overviewed by the auditing group, and they may go back to the design agency to insure that all of the design control procedures were properly implemented by the Engineering Department.

So they would provide a much broader overview rather than the individual work activity.

JUDGE BLOCH: You're primarily talking about process audit. Do they also do an end product audit?

WITNESS LEIDICH: I'm not sure what you mean by

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an end product audit.

JUDGE BLOCH: If there are welds finished, one thing you might do is check all of the documents about the welds, but you also might take a sample of the welds.

WITNESS LEIDICH: They have on occasion done that, utilizing the expertise again of qualified welding inspectors within CEI's staff.

JUDGE BLOCH: So the auditors must borrow experts from CEI's staff to do an audit of an end product?

WITNESS LEIDICH: On occasion they do do that, yes.

JUDGE BLOCH: And those are people who were not involved in the work initially?

WITNESS LEIDICH: That is correct. We have a staff of qualified individuals in our NDE group.

JUDGE BLOCH: Do the engineers also sometimes do what I just described as an end product audit? They actually do a sample of a finished product and look at it to see whether it's up to snuff?

WITNESS LEIDICH: Yes, we have had examples of that where the engineers have been involved in the entire audit process.

JUDGE BLOCH: What are some of the reasons that an engineer might call in an audit more frequently than yearly? One obviously is that he is concerned about the contractor, for one reason or another. Are there other reasons?

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WITNESS LEIDICH: As you indicated, that is the most predominant reason that there may be some concern about contractor performance.

In addition, there generally is that level of activity when a new work activity is performed for the first time. In other words, we tend to focus on the beginning of, say, the cable pulling or the conduit installation, or a given welding process to provide improved focus on the beginning of that work activity to insure that all the necessary procedures are implemented.

JUDGE BLOCH: I know of one instance on a different plant, not yours, where a product was delivered, and it involved one aspect that just was never audited or inspected; it just did not get onto the checklist.

Could you give me some insight as to how you would know whether there was an oversight in drawing up the checklist on the acceptance of a system?

MR. SILBERG: Excuse me, are we now talking about the audit or about the first tier inspection or the second tier inspection?

JUDGE BLOCH: Either the engineer or the auditors who are involved would miss it. I'm not talking about the contractor's own work, but the CEI, either the engineer or the auditor or both.

MR. SILBERG: Let me ask a question which clarify.

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Prior to the performing of the audit, is an audit checklist prepared in consultation between the audit group and the construction quality section?

WITNESS LEIDICH: Yes, it is.

MR. SILBERG: What is the purpose of that audit checklist?

WITNESS LEIDICH: The purpose of the audit checklist is to insure that any specific request that may have been made by an individual is being adequately covered in the audit. In addition, it is to insure that all possible insights from both the quality engineer and the auditor, perhaps the design engineer who is occasionally involved in the development of those checklists, are included in the audit itself to insure that everybody that may have a potential concern in that installation process has his concerns adequately addressed.

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JUDGE BLOCH: I understand most of this planning to be in the nature of decentralized employee responsibility, where lower level do the work first and it is checked above. Is this a correct understanding on my part?

WITNESS LEIDICH: That is a fairly accurate representation.

MR. SILBERG: One other thing which I think would help to complete the picture. In the example of cable pulling, could you generally describe the types of post-installation tests and inspections, which also serve to verify the Quality Construction, Quality Assurance and auditing functions?

JUDGE BLOCH: For this purpose, you may have to communicate a little bit of technical information.

WITNESS LEIDICH: I understand.

JUDGE BLOCH: That is, you might start back by explaining the significance of the Quality Assurance criteria for pulls and then, if we're going to have these post-installation checks, you might tell us what they can and cannot detect.

WITNESS LEIDICH: Basically, the cable pulling procedure, which gets a review by the design engineer as well as the quality engineer, defines the attributes of the cable pulling installation process. Included therein would be a checklist utilized by the contractors, first line

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inspection activity. That checklist, which would be required to be filled out --

JUDGE BLOCH: For the record, you are pulling a cable through a duct, right?

WITNESS LEIDICH: Yes.

JUDGE BLOCH: What if the --

WITNESS LEIDICH: I'm not there.

JUDGE BLOCH: You haven't got there yet.

(Laughter.)

MR. SILBERG: That is why these plants take so long to build. It takes a long time before we get to the pulling and the cable.

WITNESS LEIDICH: Ahead of the installation process we have a work procedure which includes all of the installation methods in a fairly substantive detail. It also includes all of the inspection attributes as well as inspection documentation so that the procedure, then, reflects all of the processes of installation, inspection and documentation of the installation. That procedure -- the point that I wanted to make is that that procedure is reviewed by engineering personnel to insure that, prior to the beginning of any cable pulling activity, that all of the necessary technical attributes are included in the work process. It is not a matter of allowing the contractor to proceed with the work activity and watching him in performance of that

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activity. The contractor is requred to follow work procedure and his inspection personnel are required to follow an inspection procedure so that is an up-front process that takes place prior to the beginning of the first safety related cable pull on the job.

At that point then, as I mentioned, we performed our pre-pull walkdown, looking at the important attributes of whether there are any obstructions in the duct or the cable tray or the conduit. That particular point is signed off on an inspection document. The individual inspector is responsible for documenting each of the individual attributes of his inspection, or his procedure.

JUDGE BLOCH: Can he always see through these ducts? If there were a sharp point somewhere in the middle of a curved duct, is that observable?

WITNESS LEIDICH: The individual ducts are a plastic material that is very smooth surfaced inside. Obviously, he cannot see all the way down inside the duct bank. There is a pre-pull device that is pulled through the duct bank prior to the pulling of the cable, though. So, he would be able to readily indicate, from a practical standpoint, whether there are any obstructions or not.

JUDGE BLOCH: This is something that matches the inner diameter of the pipe and goes along the whole thing to verify that it is smooth?

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WITNESS LEIDICH: Yes. So, at that point, we have done our pre-pull walkdown and all of inspection in preparation for the pull. Subsequent to that, then, the cable is pulled through. Depending on the pulling tensions involved it may require some power equipment and it may not. The tensions on the cable pull --

JUDGE BLOCH: Okay. Now you have something that is connected up through the duct and that attaches to the wire at the other end.

WITNESS LEIDICH: That is correct. Generally, what you do is you pull this -- it is called a mandril, through the duct. The cable is connected to the end. You swab through the duct and the cable follows to insure that you do not have any obstructions there.

JUDGE BLOCH: Does the machine itself have a limit on the cable pulling tension?

WITNESS LEIDICH: It depends on the individual tensions involved. You can put tension limiting devices on for 1000 pounds or less on the cables, and we do that so that the device will not be allowed to pull any further than 1000 pounds. For the power pulls, the individual perimeters are monitored by the QC inspection staff. What is used, there is a dynamometer that registers the tension on the cable as you are pulling.

JUDGE BLOCH: Apparently, there is some angle of

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the dynamometer, to get a correct reading. Could you explain that for us?

WITNESS LEIDICH: You have to calculate the effect of angular differences on the tension, not only from the dynamometer with respect to the cable itself, but any modifications inside the duct with respect to its curvature and the effects that those modifications of curvature may have on the tension.

JUDGE BLOCH: This is not a simple reading, like standing on the scale.

WITNESS LEIDICH: Those calculations are done in advance. The values are determined.

JUDGE BLOCH: Are those allowable values? In other words you are going to calculate allowables before you start but then you are going to get a tension on the cable from the dynamometer. Do you need further adjustments to that dynamometer reading, or that just tells you whether you are in excess of requirements or not?

WITNESS LEIDICH: The dynamometer tells you whether you are in excess of requirments or not. The allowables are calculated up front and then we monitor the tensions.

JUDGE BLOCH: There is some problem referred to in one of the inspection reports, maybe it is the CAT report, I'm not remembering clearly, about the possibility the dynamometer could be attached to the cable at the wrong angle

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and have to be reattached. Do you know anything about that? If you don't know it --

WITNESS LEIDICH: I'm not familiar with that particular detail.

JUDGE BLOCH: Can you refresh my memory, Mr. Silberg, about where I was reading last night?

MR. SILBERG: Not off the top of my head, no sir. But I am sure it is in there somewhere.

(Laughter.)

JUDGE BLOCH: As far as you are concerned, the attachment of the dynamometer to the cable is a fairly straightforward procedure and really should be fairly simple for the technician doing it?

WITNESS LEIDICH: Yes.

JUDGE BLOCH: Okay. Please continue.

WITNESS LEIDICH: At that point, we have established the criteria for cable pulling. We have used the inspection checklist and all of the procedural requirements. In addition, we have established a maximum allowable tension on the cable. The cable pull begins.

The Quality Control Inspector monitors the tensions, as well as any other visual inspection attributes, and documents his results. Any deficiencies that are noted obviously would be required to be documented in the non-conformance report. Upon completion of the pull there are

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many details within the procedure that we could walk through individually. I am trying to make this reasonably brief.

JUDGE BLOCH: You can count on us asking if we are very curious about that.

WITNESS LEIDICH: Upon completion of the pull, then, the installation is again visually verified by the inspector and the documentation is signed off that the pull, if there are not any non-conformance reports, has been acceptable because it was within the specified limits.

Beyond that, then, prior to turnover of the cable to the project organization, the contractor performs tests on the cable to verify the integrity of the cable. These are commonly known as measuring tests --

JUDGE BLOCH: Before you get to those tests, you have two types of limits. One is a 100% limit, the other is a 125% limit, if I recall correctly.

WITNESS LEIDICH: That is correct.

JUDGE BLOCH: Can you explain the significance of each of those types of limits? 100% has to do with an optimum tension. Is that correct?

WITNESS LEIDICH: That is correct. The design engineer specifies both of those, both of those tensions.

JUDGE BLOCH: What is the consequence, for the safety of the plant, if any of you exceed 125%. Let's say you have only 126%. What are we worried about?

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WITNESS LEIDICH: From an engineering prospective, it is difficult, if not impossible, to relate the possible overtensioning of the cable to the safety significance or safety function of that individual cable.

JUDGE BLOCH: Does it relate to some kind of a design margin of safety that you go above that amount, your design margin of safety is exceeded?

WITNESS LEIDICH: That is correct. We want to insure that we don't have any possible breakdown of the insulation system by providing excess tension on the cable, particularly if there is a corner in the duct bank, or a corner in the conduit system. We are concerned about what is called sidewall pressure. That is the pressure of that cable coming around that corner within the conduit system, or within the duct. In doing so, it may exert some pressure on the insulation system and tend to cause an out of roundness condition, or a flat spot, on the insulation system.

Generally, the safety significance is none, recognizing that we do provide testing on the cable at a later point. So what we are trying to do is provide for an optimum installation techinque that gives us very conservative assurance that the cable will not be damaged during its installation process.

JUDGE BLOCH: Are we worried about creating weak spots that would degrade faster than the rest of the cable

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so that ten years down the line there is a problem with a weak spot?

WITNESS LEIDICH: It is possible but, again, it is very unlikely and, again, it is impossible to quantify that kind of a scenario.

JUDGE BLOCH: Is there quantification on what the margins of safety are in this area? Are we talking about three times electrical installation properties? What kinds of margins of safety are we talking about in design here?

WITNESS LEIDICH: That is very difficult. I can only give you my professional opinion on that. I would say that those are on the order of ten to twenty times in terms of margins of safety.

JUDGE BLOCH: Is that because it is not specified that way? Because in fact, what you have is you specified the product and we don't know very well what the margins of safety are?

WITNESS LEIDICH: We specify the product and keep in mind that the limits for this sidewall pressure and these tension phenomenon come from the manufacturers themselves. In other words, they tell us the parameters that that cable can withstand with respect to sidewall pressure.

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JUDGE BLOCH: They may know the margins of safety, but you really don't?

WITNESS LEIDICH: That is correct. I'm only giving my opinion on what I think they are from a judgment standpoint.

JUDGE BLOCH: Is there a general guideline in the electrical codes as to what the margins of safety are supposed to be? In steel work it might be three times at a nuclear plant under the ASME code. What would it be, do you have any rough idea, on electrical?

WITNESS LEIDICH: Again, I would feel that the values we are getting from the manufacturers in this area may represent ten to twenty times in terms of margins of safety. You may have manufacturers that have the same cable that give different criteria based on their engineering assessment of the effective sidewall pressure.

JUDGE BLOCH: You said before you did not know what their margins were. What is this feeling based on, that it is ten or twenty times?

WITNESS LEIDICH: Based on questions that we have asked of the manufacturers. Based on my experience with industry groups in this area where we have had discussions on state of the art with respect to sidewall pressure effects on cables and cable pulling technology within the nuclear industry.

JUDGE BLOCH: What does ten times mean? That means if you put three times the tension as was permitted, as 300

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percent as opposed to 125, that you still would not produce a problem?

WITNESS LEIDICH: It is hard to directly equate that, realizing the effect of angles on all of the different calculations and so forth. My judgment with respect to ten to twenty times is that the cable manufacturers have that order of magnitude in their margins with respect to the effect of sidewall pressures on cable pulling operations.

MR. SILBERG: I think we were starting to get into some of the post pulling tests, and you were talking about megarring.

WITNESS LEIDICH: Megarring is a test required to be performed by the contractor, witnessed by his quality control inspection staff, a test that verifies the electrical integrity of the cable, and that is required to be performed prior to turnover of the cables to the project organization.

JUDGE BLOCH: I have never seen a megarring. How is that done?

WITNESS LEIDICH: Basically what you are doing with a megarring test is verifying the installation integrity.

JUDGE BLOCH: Are you passing a current through and seeing how it travels? What are you doing?

WITNESS LEIDICH: You are looking at -- this will get -- I will try to make this as simple as possible -- basically what you are doing is looking at insulation resistance

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between the conductor and the outside of the cable, a very broad, general sense. That is the best way to characterize that test.

JUDGE BLOCH: You are trying to attach some kind of conductor to the outside of the cable and see whether you can pass current through the insulation?

WITNESS LEIDICH: Generally cables have shields around the outside, so we connect to the shield. We connect --

JUDGE BLOCH: Around the shield; right?

WITNESS LEIDICH: Yes. The shield is continuous around the cable.

JUDGE BLOCH: So you are going to put around a circumferential something.

WITNESS LEIDICH: It may be a braided circumference around the cable. It may be a copper tape around the cable. But it is continuous electrically.

JUDGE BLOCH: You attach around that shield and you also attach to the wire itself that is within the cable.

WITNESS LEIDICH: That is correct.

JUDGE BLOCH: And then you transmit current between the two.

WITNESS LEIDICH: That is correct, and you measure the effect of resistance on the insulation system.

JUDGE BLOCH: How do you know you have the spot that

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was hurt by a pull? It seems very unlikely that that kind of a test would detect a particular --

WITNESS LEIDICH: You connect the other end. You are looking at the entire length of the cable. You are going to pick up the lowest path of resistance.

JUDGE BLOCK: In other words, you put a conductor around the entire outside protection of the cable?

MR. SILBERG: I think the shield is the conductor that goes all the way around.

JUDGE BLOCH: You place a shield around the whole --

WITNESS LEIDICH: The shield is a part of the cable. It is an integral portion of the cable already for shielded cable.

JUDGE BLOCH: The shield is the conductor.

WITNESS LEIDICH: Yes.

JUDGE BLOCH: Between the shield and the wire is an insulator.

WITNESS LEIDICH: That is correct.

JUDGE BLOCH: So the result of this by passing current there is that you will find the weakest spot because it will select that spot itself.

WITNESS LEIDICH: The path of least resistance is the path where the test is made.

MR. SILBERG: I think all of our technical education is complete. Have you finished basically describing the post-insulation test procedures?

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WITNESS LEIDICH: No, I haven't. At that point the cable would be turned over to the project organization. An additional level of review would be by the project organization to review all of the documentation associated with the cable installation itself to ensure that any deficiencies were properly identified, corrected and closed out prior to the turnover.

Subsequent to that point, then the Nuclear Test Section within the project organization would have the responsibility to do initial checkout and run-in of the system, and that may again include an additional megarring test to verify that no additional degradation could possibly have occurred during that time frame.

The initial checkout and run-in phase would be followed by pre-operational testing where the cable would become part of an integral operating system to verify its overall performance.

MR. SILBERG: Thank you.

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: We will take a five-minute recess.

(Recess)

JUDGE BLOCH: Back on the record.

JUDGE KLINE: During the cable-pulling operation, if you do overtension the cable or have -- if you do overtension it, does that then require the filing of a nonconformance

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report?

WITNESS LEIDICH: Yes, it does.

JUDGE KLINE: At the time that the cable is overtensioned, I presume that is really all you know about it, that it was overtensioned, and I want to inquire into the procedures, then, that do require the NCR, what additional tests you have to do, then, to close out the NCR.

MR. SILBERG: Our terminology, for the record, is an NR, or nonconformance report.

WITNESS LEIDICH: The nonconformance report would be reviewed by engineering personnel and dispositioned according to our procedures, either use as is or scrap.

JUDGE KLINE: How would you determine that?

WITNESS LEIDICH: The engineer looks at the actual tensions that were involved, may do additional refined calculations in the angles and additional sidewall pressures that were encountered, and may consult the manufacturer with respect to their recommendations on additional testing that may be performed. There have been occasions where, depending on the circumstances, the engineer has decided to use the cable as is with additional testing to be performed, such as additional megarring or perhaps the high potential test, which can also be used to verify insulation resistance integrity.

There have been other instances where the cables have been scrapped.

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JUDGE KLINE: Thank you.

JUDGE BLOCH: Ms. Hiatt.

BY MS. HIATT:

Q When you were describing the cable pulling procedure, you stated that first you pulled a mandril through the duct to make sure there are no sharp edges or obstructions in it.

A (Witness Leidich) Correct.

Q The mandril is also used for pulling the cable.

A (Witness Leidich) No, it isn't. The mandril may be connected to a pull link which is used, so that the mandril would precede the cable through the duct. It may either be done in conjunction with the cable or in a different time, either way.

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Q There is more than one cable in a duct, generally, isn't there?

A That is correct.

Q So you would use the mandril the first time?

A In a duct cable pulling situation in one particular duct. Those cables are pulled simultaneously. It's very difficult to pull additional cables later because of space considerations.

Q They are pulled simultaneously and it's done once?

A It's done in a group. The cables are bundled together, connected with a bundling device and pulled through the duct in a group. There may be some cases, very short duct runs, where it is possible to pull one cable later if space considerations allow that. Generally, the duct runs at the Perry plant are particularly long, and that would be, from a practical standpoint very difficult to accomplish.

Q If I might go back here, we had talked about monthly performance assessment reports, PARs. Are these the same as the contractor performance reports?

A (Witness Edelman) No.

Q What generally is the difference between them?

A A monthly report is from a department to management on the activities with respect to their total department activities. For example, quality assurance. It discusses the construction quality area, discusses the procurement

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quality area, their audit program, re-inspections that have taken place, et cetera, and analysis by the department manager.

A similar type of report is prepared by each one of the engineering and construction departments. The construction progress report you referenced is a construction document used in the Construction Department for analysis of the performance of a given contractor. It is an input to the overall analysis report.

Q I believe you were talking in your example of the cable pull. The contractor notifies you that they are ready to pull cables.

A (Witness Leidich) If the contract organization has established a witness or hold point, then the contractor is obligated to notify us.

Q That's documented in the specific constant procedure?

A Project organization procedure, contractor's procedure, I'm not sure what.

Q In any type of specific constant procedure, it's not the discretion of the contractor.

MR. SILBERG: What is it that you are asking as to its documentation?

JUDGE BLOCH: Let me try. How does the hold point get indicated on the working procedures so that when the contractor comes to it, he stops?

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WITNESS LEIDICH: The contractor is obligated under his QA program to assure that hold points established by the project organization or witness points are honored.

JUDGE BLOCH: But isn't there some kind of a work order for the day, or a listing of things that are going to be done that this hold point gets indicated on? Is that something that's beyond your knowledge?

WITNESS LEIDICH: I'm not aware of any specific documentation in that area. There may be.

MR.SILBERG: Let me try it. How does the contractor know that a hold point exists at a particular point in the cable pull, for instance?

WITNESS LEIDICH: For hold and witness points, the project organization notifies the contractor formally by letter of which holds or witness points are being instituted. They cannot be released until a subsequent letter identifies that.

JUDGE BLOCH: With what frequency does the contractor just overlook a hold point? There seems to be some potential for that.

WITNESS LEIDICH: We've had a very good record of hold points on the project. I can recall only one specific area where we had a finding with respect to one of our contractors for violating that particular condition, and we were looking at something on the order of 25 missed hold

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points in a one-year period in 36,000 cases of calling for hold points. And that was the case that we were very concerned about and put an excessive amount of pressure, frankly, on the contractor to pursue that.

BY MS. HIATT:

Q You stated you put an excessive amount of pressure on the contractor. Are you referring to L.K. Comstock, specifically?

A (Witness Leidich) In this case, the contractor involved was not L.K. Comstock.

Q Would you identify the contractor?

A Pullman Power.

Q You referred to independent audits. Are these audits generally pre-announced, or are they unannounced?

MR. SILBERG: Are you referring to a particular place in the testimony, Ms. Hiatt?

MS. HIATT: I'm just going back over some of the points that were made just recently. I do believe the testimony refers to audits as part of the overview program.

MR. SILBERG: Are we referring to independent audits by project organization or by the contractor?

MS. HIATT: I'm talking about the project organization.

JUDGE BLOCH: Are the project organization audits announced or unannounced?

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WITNESS EDELMAN: They are unannounced audits.

JUDGE BLOCH: Are the quality engineers' visits always announced?

WITNESS EDELMAN: No.

WITNESS LEIDICH: Generally not, I might add.

BY MS. HIATT:

Q Do you think pre-announcing these audits has any effect on the types of findings that you would find that you might not find or find more of if you had not announced the audit?

A (Witness Edelman) I don't think so. I think the audits cover the entire spectrum of their program and their processes. The process is there, it is working, there is no impact. If it is not working, the audit program will identify areas that need strenghthening.

Q During the period when we were at the plant looking at documents, I came across an audit report, number 518, on Pullman Power. The date was April 27th, 1981. Unfortunately, we could not secure a copy of that document. It had to do with weld rod control, and there was a statement in that audit report. An employee, a worker, told the auditor that if you are looking for weld rods you will not find any because we knew you were coming and we cleaned it out.

MR. SILBERG: Mr. Chairman, I think we've been over this groundrule. We're talking about a document that

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was not identified. We are quoting from a document which nobody has, which the Intervenor doesn't have. I really think that that is an unfair question and I would object to it.

I think the Board ruled that the questioning should be limited -- to the extent we're talking about extraneous documents -- to those which the Intervenors identified.

JUDGE BLOCH: We should, but it seems to me there is another direct question which is needed. Would the audit be looking for things like weld rod controls you were talking about?

MS. HIATT: Yes.

JUDGE BLOCH: I don't even understand the question as being found objectionable. But there was a missing weld rod control?

MS. HIATT: This is an area that the auditors had come to check. When they came to the area where the activities were performed to check it, the worker said that you're not going to find a problem because we knew you were coming and corrected it.

JUDGE BLOCH: Well generally, -- I take it since the audits are not a surprise function, I take it you're really not looking for operational evidence of deviations. Is that correct?

WITNESS EDELMAN: The auditors are looking at the

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process and the program that is in place to control weld rod. I have no way of responding to the specific --

JUDGE BLOCH: If there were a problem in the field on the weld rod you would look to the quality engineer to find that.

WITNESS EDELMAN: Or the quality inspector who was out there looking day to day to find it.

JUDGE BLOCH: The quality inspector is their employee, right?

WITNESS EDELMAN: There is a quality inspector, our employee, in the surveillance mode looking, and he would identify that and that would be identified either as a non-conforming condition or the inspector would write up an AR to identify that there was a lack of weld rod control. It doesn't have to part of an audit. He's out there all the time looking at those things.

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JUDGE BLOCH: We would prefer that you not ask questions about unidentified exhibits, or first address us and show cause, as we established ground rules before.

MS. HIATT: Unfortunately, we were not able to secure copies of these documents, even though we looked at them within the time that Applicants had set for us, because we did not finish it. We just did not have enough time to secure copies. It is unfortunate because I think this might have been a rather significant document.

MR. CUTCHIN: I guess we will have no way of ever knowing, Mr. Chairman.

BY MS. HIATT:

Q Page 17 of your testimony refers to this surveillance inspection reports.

A (Witness Edelman) Excuse me. I did not hear the question.

Q I am just making a preface statement here.

JUDGE BLOCH: I want to comment I missed your comment. I had no comment on Ms. Hiatt's. I think it is unfortunate that you always are limited on the total amount of time that you have for discovery,and there always will be a suspicion that if you only had more time, you could find more and discover more documents. I think that there was adequate time for discovery. I don't take lightly your feeling that there might have been more if there had been more time.

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Please continue.

MS. HIATT: All right.

BY MS. HIATT:

Q Page 17 of your testimony. You are talking about surveillance inspection reports. Are these two types of documents surveillance reports and inspection reports? Are they some type of combined function?

A (Witness Leidich) The surveillance inspection report is one document and reflects the activities of the project organization's surveillance inspectors.

Q This is a second line function, I take it?

A (Witness Leidich) Yes, it is.

Q Are these inspectors, do they survey every part of the activity that is going on? Are they always on the site watching the contractor's activities?

A (Witness Leidich) The surveillance inspectors generally spend on he order of 85 to 90 percent of their time in the field observing contractor activities.

Q This is their routine, everyday responsibility and function?

A (Witness Leidich) Yes, it is.

Q And their visits to the areas in question are not announced, preannounced or regularly expected?

A (Witness Leidich) They are generally unannounced.

Q Is the surveillance inspection report ever used to

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document nonconformances?

A (Witness Leidich) If a nonconforming condition were identified, a nonconformance report would be written.

Q By whom?

A In the first instance the surveillance inspector would point out the condition to the contractor and require him to generate a nonconformance report.

Q What if the contractor does not?

A (Witness Leidich) The surveillance inspector would generate the nonconformance report.

JUDGE BLOCH: When does a number first get assigned for a NR? How does that that start?

WITNESS LEIDICH: The number first gets assigned when it is initiated within either the contractor's organization or the project organization.

JUDGE BLOCH: How do you get that number?

WITNESS LEIDICH: It is merely a clerical function. When you have a nonconforming condition, you draft out the top part of the NR which defines that condition. It is then typed and the clerk is responsible, gives the number.

JUDGE BLOCH: From some central clearance point.

WITNESS LEIDICH: Each contractor has his own numbering system for his own individual nonconformance reports from a central point with respect to the project organization nonconformance reports.

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JUDGE BLOCH: I am looking to the accounting system for keeping track of those numbers.

WITNESS EDELMAN: Each contractor has his own system but it is tied into the central system for the project. Once a nonconformance is identified, we can track and do track the total nonconformances on the project no matter whom they are written by, whether they are initiated by the contractor's organizations or our organizations. They are tracked on a central tracking system for the total nonconformances.

JUDGE BLOCH: Once the nonconformance is filed, does a copy automatically go to the engineer who asked that it be filed? How does he know that when he identified it and asked the contractor to file one, that that was done?

WITNESS EDELMAN: A copy comes over to our organization, so that the quality inspector would know that a nonconformance has been written.

WITNESS LEIDICH: In addition, in filling out his surveillance inspection report, he would note that a nonconforming condition was identified and that he requested the contractor to prepare a nonconformance report. That surveillance inspection report, then, would not be signed off and turned into a quality record vault until that activity was performed. There is a closeout mechanism to ensure that the nonconformance report was indeed identified.

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Q How are nonconformance reports generally dispositioned?

MR. SILBERG: Are you talking about the process for dispositioning them?

MS. HIATT: Why don't we address that first, the process.

WITNESS LEIDICH: The process for dispositioning is that the nonconformance report is sent to the engineer who provides the disposition. We reference that process in our testimony, and he has a decision to make with respect use as is or scrap, repair or non-work of that particular item. It is in the design basis document and the design basis of the plant.

BY MS. HIATT:

Q Generally on the project, how, in terms of percentages, how are these nonconformance reports dispositioned? What percent use as-is, what percent rework, et cetera?

A (Witness Edelman) The percentages may depend on the activity involved. You talk about the area of concrete work of spacing of rebar. When we first started the project, there was a lot more tolerance in terms of the engineering tolerance. The rebar may have been off by a half-inch and the concrete in the specification may have been 1800 pounds,

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and our testing was showing that the concrete was coming out close to 5000 pounds strength. The engineer therefore had in his review of this, his design tolerance would allow more use-as-is. As you go into more mechanical-type systems where the tolerances are not as flexible. The use-as-is disposition is not required. It is not the proper disposition for that engineer, and therefore he will ask the particular item to be reworked or scrapped as appropriate depending upon the specific situation.

JUDGE BLOCH: How about electrical?

WITNESS LEIDICH: In the electrical area, it varies depending on the work in the electrical area. Where we have concrete placement, there may be a higher percentage than in an area where, say, we have cable pulling. In a conduit area --

JUDGE BLOCH: Cable pulling. Is that high or low in terms of use-as-is?

WITNESS LEIDICH: I don't really know. I would have to review some statistics to be able better to answer that. In general in the conduit area there may be significant margins with respect to separation criteria, for example, that we can utilize in dispositioning conduit nonconformances. It varies, again depending on the complexity of the work and the safety significance of the work involved.

BY MS. HIATT:

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Q Maybe you could answer the question I asked, which was: what is the general percentage on the project to date, disposition used-as-is?

MR. SILBERG: I object. I think the witness said the percentage varies depending on the complexity of the work.

MS. HIATT: I believe I asked for a number, and I did not get a number in response.

MR. SILBERG: I think the witness said that number is meaningless.

MR. BLOCH: That is the way I understand it. If you want to ask for numbers on particular parts of it, one particular part, the witness says he just does not know. But I am not sure that I would understand the meaning of an overall use-as-is percentage when the work varies so much as to its specifications.

MS. HIATT: Maybe I can expand on that. I do have some project-wide percentages which Applicants have prepared in their quarterly assessment of QA performance reports. The second quarter 1980, it was 64 percent --

MR. SILBERG: Are we getting testimony at this point?

JUDGE BLOCH: Is that a document you have identified?

MS. HIATT: I believe it was among those identified by Sunflower on their list.

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MR. SILBERG: It was not identified by OCRE.

MS. HIATT: Correct. Unfortunately, I have --

JUDGE BLOCH: I do not understand the harm of allowing her to use something that was identified by Sunflower.

MR.SILBERG: I think we have a set of procedures that we developed, and each party was supposed to develop their own cross-examination based on their own set of documents. I think we are just going beyond that.

MR. CUTCHIN: Mr. Chairman, I would have a further objection. As the -- I thought you were finished.

MR. SILBERG: As Mr. Cutchin said before, the Staff has never been given copies of those documents by the Intervenors.

MR. CUTCHIN: I have an additional one to that, Mr. Chairman. If the purpose of the Intervenor OCRE in asking these questions is to seek to introduce those documents into evidence, they are making an affirmative case. As an intervenor who has only cross-examination rights, they would have to rely on Sunflower to make any affirmative showing. She may only cross-examine.

JUDGE BLOCH: I have never ruled that they could not place rebuttal exhibits in evidence if they were not redundant with Sunflower.

MR. CUTCHIN: But I think if the Board will go back

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and read the earlier cases in which the Appeal Board first ruled that Intervenors had cross-examination rights on questions and contentions other than those raised by them, in the Commission's follow-up orders I think it is clear that an intervenor who has not a contention of its own on a subject may not put in an affirmative case. They may only cross-examine.

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JUDGE BLOCH: I am not sure if we have a difference in this case, but we have followed a different procedure in admitting contentions of Intervenors. We admitted contentions to the case.

MR. CUTCHIN: That may have been what the Board believed it was doing, sir. If it did, I believe that it would have erred to that extent in allowing Intervenors who did not raise a contention that could be viewed as covered within the umbrella of the admitted contention. Their rights are only to cross-examine, not to put on an affirmative case as to issues which they did not raise as a party.

Now, clearly, under that same rule an Intervenor, if it shows cost, may seek to amend its petition to adopt or bring in that contention of its own but I believe -- and I can get the Board the citations if need be -- I think to allow an Intervenor to seek to make an affirmative case on a contention which they did not raise is improper.

MR. SILBERG: Northern States Power Company, Prairie Island Nuclear Generating Facility ALAB 244, if my memory is correct.

MR. CUTCHIN: That is my recollection.

JUDGE BLOCH: My recollection is that we issued an order with an explanation that we were following a somewhat different method. My recollection also is that there was no timely motion for reconsideration and we have -- we have

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ruled that motions for reconsideration should be made promptly after we have issued orders, so that we can have settled decisions in this case.

Mr. Silberg, you have a comment on that?

MR. SILBERG: Yes, two things. First of all, the Board's orders did identify various parties as being the Lead Intervenors on the parties. Second of all, the Board's procedures called for direct cases to be filed on May 7th, and for parties to identify exhibits that they were going to use for cross-examination, not for direct case, on May 18th and OCRE has not complied with any of those requirements. They did not file an indication that they had a direct case.

JUDGE BLOCH: Maybe I can clarify this. Are we having an argument that if you are not making a direct case you cannot put exhibits into evidence for rebuttal. Is that what we are arguing about?

MR. CUTCHIN: To the extent that those exhibits tend to prove or disprove the proposition, I would say yes, Mr. Chairman.

MR. SILBERG: We are not talking about a rebuttal exhibit here.

JUDGE BLOCH: You're talking about an exhibit that is intending to prove part of the direct case.

MR. SILBERG: That is what it appears to me to be.

JUDGE BLOCH: I think that may be the situation

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we are in. That is really what you want to do is prove. You want to prove a fact.

MS. HIATT: If this is just part of the cross-examination, we're talking about non-conformance reports in the testimony and trying to follow up here and I have to use this document to do it. Obviously I have to get these numbers from somewhere, I would rather have a document here, prepared by Applicant, that I took them out of than to try to make them up. That would not work, obviously. I am just conducting cross-examination. I am not submitting any kind of direct case here.

JUDGE BLOCH: Do you know if Applicant has used an overall number about the percent of use as is disposition in some of its public reports? Is this a public report, Ms. Hiatt?

MS. HIATT: We obtained it through discovery. I am not sure you would call that a public report.

JUDGE BLOCH: What is the nature of the report there?

MS. HIATT: Assessment of Quality Assurance Program affectiveness for the Perry Nuclear Power Plant. They are identified by quarters. The first one, first quarter 1979, my understanding is it is an internal CEI type of document. It is not something generally made available to the public.

JUDGE BLOCH: There is an acronym for that program, sin't there, that was used?

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MR. SILBERG: No. The only person who uses that acronym is one Staff Inspector and Applicant's Council and they both use them incorrectly. They are referred to as the Quarterly Reports, although I sometimes call them the AROQPEs and one document was filed AROQPE.

JUDGE BLOCH: Do you know if the Applicant uses an overall percentage of use as is?

WITNESS EDELMAN: It's part of the overall program since 1979, as an indice with no basis for it. It looked at the disposition pattern, with respect to NRs. It is a bench-mark with no basis other than just that. We looked at 50% basemark that would require, in the QA program, to look further at the disposition levels to insure that the engineers and the Review Board were, in fact, thoroughly reviewing the NRs to arrive at their disposition of use as is.

JUDGE BLOCH: You do that as a company, but in your opinion, there is no basis for doing that.

WITNESS EDELMAN: We do it as a basis to look at it. There is no technical basis to arrive at a number.

JUDGE BLOCH: I think you have got all you can get. There is an overall number that you have seen. The gentlemen is testifying that it does not mean anything. I really cannot see any basis to think that it does mean anything.

MS. HIATT: I think it must have been identified

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for a reason and now you're saying --

JUDGE BLOCH: He is saying he does not think there was any reason.

MR. SILBERG: He stated what the reason was. It was a reason for people to look further.

JUDGE BLOCH: It was an arbitrary number picked out, that had the consequence that they looked further.

MS. HIATT: I think the 50% target he is referring to is the arbitrary number, but the actual number, the percentage of disposition, is actually listed in here and they varied. The first one I have written in the second quarter of 1980 is 64%. These are project -- it is talking about, during the second quarter, 221 NRs were closed out --

JUDGE BLOCH: Mr. Edelman, have you examined the variation in the use as is dispositions and concluded that the variation might have some meaning even though the level doesn't?

WITNESS EDELMAN: We have examined, in each quarter, the variations. As you said, the level is not an absolute number. We looked at the variation to insure ourselves that our engineers were following the program and their procedures in reviewing the documents. The absolute numbers were just a trigger point for a further investigation at any other audit type activity from the Quality Assurance Department.

JUDGE BLOCH: It would not surprise you if

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generally, these numbers of use as is were over 50%, would it?

WITNESS EDELMAN: No, it wouldn't. As a matter of fact, there were those even though that was an arbitrary number. She quoted one that was above, I think, and all of the rest of them in the last three years have been below that number.

MS. HIATT: That is probably true. Most of them have been. Now, the 50% target, what is the purpose of that? Is it only for an alarm point, so to speak?

MR. SILBERG: I think we have been through this. First of all, it is not a target. Second of all, the answer what it is used for.

MS. HIATT: I quoted from the report. There is a 50% target.

MR. SILBERG: Objection, asked and answered.

JUDGE BLOCH: I think we have the answer to that question. You may have had a follow up one in mind. Let's not wind up. Let's go to the next question, if there was a follow up.

MS. HIATT: The only follow up I was going to say is, is 50% something that you shoot for?

MR. SILBERG: Asked and answered. We already said what the purpose of the 50% number was.

JUDGE BLOCH: We know how they are using it and we know way thinks of the level.

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JUDGE BLOCH: I found a reference to dynamometers. I have one question I would like to ask and then we can break for lunch. It occurs in the Comstock Notice of Violation at page 13. Do you have a copy for the witnesses?

MR. SILBERG: Inspection Report 81-19.

JUDGE BLOCH: The cover letter is September 27, 1982.

MR. SILBERG: Do the witnesses have a copy of Inspection Report 81-19?

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JUDGE BLOCH: Page 13, paragraph 3.3.3.2, yes, we have that. Let's let the witnesses turn to it, please.

(Pause.)

I will read the last sentence that I would like you to comment on. The last sentence of this paragraph says, "Revised dynamometer mounting instructions were given, as well as instructions to scrap the cable if the 125 percent calculated value was exceeded with the dynamometer in the new position."

I asked questions about it before. I inferred there was something inaccurate about the first position, but maybe you can just clarify for me what you think was going on here.

WITNESS LEIDICH: It's hard for me to draw any conclusion or speculate on the events at the time. I would have to review additional documentation to try and determine what actually occurred here.

JUDGE BLOCH: We share the same problem. I hope sometime later we can get clarified what was going on in this instance. Staff witnesses might be the most directly knowledgeable about this. However, it can be clarified. Let's just remember to get back to it.

MR. SILBERG: We will do that. This does refer to Applicant's documentation and I think we should be able to provide some more information to the Board on it.

JUDGE BLOCH: Thank you. We will break for one hour for lunch.

(Whereupon, at 12:46 p.m., the hearing was recessed for lunch, to reconvene at 1:46 p.m. the same day.)

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AFTERNOON SESSION

(1:50 p.m.)

JUDGE BLOCH: Welcome, Mr. Cotton. Please take the seat over there at the witness table. Mr. Cotton has traveled a long distance to be with us for a limited appearance statement and can only talk with us today, so I have agreed that he can address us for five minutes at this time.

LIMITED APPEARANCE STATEMENT OF J. PAUL COTTON

MR. COTTON: J. Paul Cotton of Ashtabula. In most cases, I have included the sources of my information, but to save time I am not giving them. I now feel sorry for our public utilities. The sharply-rising costs of nuclear power plants and the increasing danger of having another Three Mile Island disaster. There is now no nuclear power plant being planned, but our courts have said that the states could prohibit any new plants until the problem of nuclear waste is solved. No locality wants the responsibility of having a huge pile of nuclear waste in its vicinity for thousands of years.

The Zimmer plant near Cincinnati almost complete has been ordered closed by the NRC. There was just too much lack of quality control by inspectors, too many faulty welds. This plant has been under construction 10 years. The estimated cost has doubled three times, and completion has been delayed at least nine years.

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When Davis-Besse was under construction, there were many reports of inspectors being bribed to overlook faulty construction. Last year, they had 79 mishaps, 94 the previous year and 120 the year before that. Davis-Besse was shut down two to four months because of damage in the auxiliary cooling system.

Due to federal regulatory requirements, the projected cost of constructing the Perry Nuclear Power Plant has risen from $4 billion to $5.2 billion. Nearly one-third the X-rays performed on welds of a nuclear reactor containment building at this Perry plant have been rejected by the NRC. Welding defects could result in radiation leaks from the containment vessel.

Dr. Johnsrud explained once the problem has been determined as serious, the utility has 15 minutes to notify the state, and then has 15 minutes to notify the general public. In actuality, the general public is not given adequate notification to evacuate before the radiation damage has occurred. There is no plan for reimbursement to farmers for damage to crops and animals. Ashtabula County will have to provide an estimated $200,000 to maintain a radiation warning network.

As one Commissioner explained, all we can see is a bundle of money has to be spent, and we don't know where it will come from. I praise the CEI for spending $140 million

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to improve three coal-burning plants,to improve air pollution controls and upgrade equipment.

The NRC warned two nuclear plants near New York City that they will be shut down unless they improve plans for evacuation. There were two incidents at the Salem Nuclear Power Plant in New Jersey. Salem Unit 1 failed to scram or shutdown automatically. Fortunately, on both occasions, the reactor was operating at low power. Had the plant been operating at full power, an extremely severe accident, in the words of the NRC, could have taken place.

I thank you.

JUDGE BLOCH: Thank you very much, Mr. Cotton.

MR. COTTON: I want to leave a copy of this.

JUDGE BLOCH: Please. If you would leave a copy with the reporter, it shall be bound into the transcript.

(The Limited Appearance Statement of J. Paul Cotton follows:)

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Log in
#1-19

HEARING AT RAVENSVILLE? May 24, 1983.

In most cases I have included the sources of my information, but to save time, I am not giving them. I now feel sorry for our public utilities- the sharply rising cost of nuclear power plants and the increasing danger of having another Three Mile Inland disaster. There is now no new nuclear power plant being planned, but our courts have said that the states could prohibit any new plants until the problem of nuclear waste is solved. No locality wants the responsibility of having a huge pile of nuclear waste in its vicinity for thousands of years.

The Zimmer plant near Cincinnati almost complete has been ordered closed by the NRC. There was just too much lack of quality control by inspectors, too many faulty welds. This plant has been under construction 10 years. The estimated cost has doubled three times and completion has been delayed at least nine years. (Ashtabula Co. Sunday Paper, Sept.Nov. 14,1982) When Davis-Besse was under construction there were many reports of inspectors being bribed to overlook faulty construction. Last year they had 79 mishaps, 94 the previous year and 120 the year before that. (Plain Dealer, Aug. 19,1982)Davis-Besse was shut down 2 to 4 months because of damage in the auxiliary cooling system. (Plain Dealer, Apr. 23, '82) Due to federal regulatory requirements, the projected cost of constucting the Perry nuclear power plant has risen from $4 billion to $5.2 billion. Nearly one-third of X-Rays perfomed on weldsof a nuclear reactor containment building at the Perry nuclear power plant have been rejected by the NRC. A welding defect could result in radiation leaks from the containment vessel. (Star-Beacon, June 11, '82) Dr. Johnsrud explained once the problem has been determined as serious. the utility has has 15 minutes to notify the state, who then has 15 minutes to notify the general public. "In actuality.the general public is not given adequate notifiaation to evacuate before the radiation damage has occurred." "There is no plan for reimbursement to farmers for damage to crops or

animals." (The Sentinel, June 3, 1981) Ashtabula County will have to provide an estimated $200,000 to maintain a radiation warning network As one commissioner explained "all we can see is a bundle of money has to be spent and wedon't know where it will come from." 'Star-Beacon, May 8, 1981)

I praise the CEI for spending $140 million to improve three coal burning plants to improve air polution controls andupgrade equipment." (Plain Dealer, July, 21, 1982)

The NRC warned 2 nuclear plants near New York City that they will be shut down unless they improve plans for evacuation. (Plain Dealer, May 6, 83)

There were two incidents at the Salem Nuclear Power Plant in New Jersey. Salem Unit 1 failed to scram or shut down automatically. Fortunatelyon both occasions the reactor was operating at low power. Had the plant been operating at full power "an extremely severe accident"- in the words of the NRC- could have taken place. (Union of Concerned Scientists, Spring '83)

May 24, 1983.
992-4825

J Paul Cotton
3600 Lake Ave. #302
Ashtabula, Oh. 44004

JUDGE BLOCH: If the witnesses would retake their positions.

Whereupon,

MURRAY R. EDELMAN and

GARY R. LEIDICH,

the witnesses on the stand at the time of recess, resumed the stand and, having been previously duly sworn, were examined and testified further as follows:

JUDGE BLOCH: Ms. Hiatt?

CROSS EXAMINATION - (Resumed)

BY MS. HIATT:

Q We were talking about non-conformance reports when we adjourned; namely, the disposition of same. Now, I'm afraid I'm going to have to reference a document which was identified by Sunflower Alliance which came to discovery in continuing my cross examination, but this is a non-conformance trend analysis prepared by Applicant, dated March 27, 1978, the subject of which is Non-Conformance Trend Analysis.

MR. SILBERG: Could we have the identification again, Ms. Hiatt?

MS. HIATT: Sure. It is in the form of a memorandum from L.E. Hartline to three people, A. Kaplan, P. Narduche and R. Bowls, dated March 27, 1978; subject of which is Non-Conformance Trend Analysis.

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MR.SILBERG: Is this a document that you identified?

MS. HIATT: It was identified by Sunflower but not by OCRE.

JUDGE BLOCH: Are you going to have to show the witnesses the document?

MS. HIATT: I think I will quote from it here.

MR. SILBERG: Mr. Chairman, I hate to keep repeating this objection but we're going over the same problem that we had before. The one aspect of it that --

JUDGE BLOCH: It's the problem that it's direct and not rebuttal?

MR. SILBERG: No, it's a document that was not identified by OCRE. Until I see the document, then, I --

JUDGE BLOCH: Why don't you look at it?

MR. SILBERG: I don't have it.

MS. HIATT: I will let you look at mine.

MR. CUTCHIN: I will need to see it, too, Mr. Chairman.

(Counsel handing document to other counsel.)

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: On the record. While we were off the record we were trying to ascertain a way out of the mechanical problem that has been created here, apparently because Applicant and Staff have not been aware of all of the

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Sunflower documents which would be used. They have explained off the record that Attorney Wilt had told them that the first page of documents was likely to be used and the subsequent pages were not. One way or another, they are without the entire list.

They have also stated that this particular document that Ms. Hiatt wishes to use has not been found by them to be on the list of the Sunflower documents at all.

Ms. Hiatt, could you tell the Board why we need to use the document rather than framing questions based on it?

MS. HIATT: First, I would like to say that the document is, indeed, on the list. If they look on page 2, item 38, that is the document in question.

MR. SILBERG: No, you gave a date of March 27th. That is the date, March 22nd.

MS. HIATT: The list I have says March 22nd on my list and on the document. They both say March 22nd.

MR.SILBERG: The document you identified was a memo and this says "Trend Analysis Report."

MS. HIATT: It says memo. NCR Trend Analysis. That was my personal documentation. This is a list that I made up for my personal use. When it became apparent that the numbers of these documents were such that it is likely that many of them will be used or will be referenced, and we were not certain at the time at which we had to file the list,

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exactly which ones were to be used, I felt it would be wise to include the whole list as it is possible that any or all of these documents may be used in cross examination or submitted as documentary evidence.

MR. SILBERG: Why were they not included on your list?

MS. HIATT: Because Sunflower Alliance is the lead Intervenor in this case, and I gave this to Mr. Wilt so he could take the lead.

MR. SILBERG: It appears to me that no questions addressed to these documents ought to be asked by OCRE.

JUDGE BLOCH: Mr. Silberg, under the circumstances where the problem has been created by the resignation of a lawyer, should we stick with that formality? What purpose do we accomplish? I take it that what would happen in the ordinary course is that if it is legitimate rebuttal, Sunflower would go first. If Sunflower had problems of fact, they could be handed by OCRE. Isn't that the way we have set it up?

MR. SILBERG: I would disagree. Under the appeal board decision in the consolidated radon case, intervenors are not entitled to rebuttal.

JUDGE BLOCH: I'm sorry. Cross examination. They are not entitled to rebuttal at all.

MR. SILBERG: That's what the appeal board stated.

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JUDGE BLOCH: I'm going to have to review the case in the morning. Can you people get a copy of it to look at?

MR. SILBERG: I don't know if I can, but I'll see if I can get someone back in our office to look for it.

MS. HIATT: Could you give a citation on that case?

MR. SILBERG: When I get it, I will.

JUDGE BLOCH: That was a special judicial proceeding that was quasi-rulemaking, in a sense, too, wasn't it? Was that involved in the principles?

MR. SILBERG: No, it was not a rulemaking proceeding. It was a very complicated proceeding.

JUDGE BLOCH: Generic adjudicatory proceeding.

MR. SILBERG: There were three cases. They were using as the lead case the record in a fourth case. But it was an adjudicatory decision involving operating license applications for Three Mile Island Unit 2, Hope Creek and Peach Bottom Units 2 and 3.

JUDGE BLOCH: That does not stem from the principle that you cannot use documents for cross examination, though, does it?

MR. SILBERG: No, sir.

JUDGE BLOCH: We still have the question of whether after Sunflower's attorney or Sunflower questions on its documents, whether we wouldn't then pass to OCRE, having the

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right to question, also. Isn't the only question the order we're doing things in?

MR. SILBERG: No. I believe the question is whether we're going to abide by the Licensing Board's directives that each party was to identify its own documents.

Furthermore --

JUDGE BLOCH: Providing your notice, I don't understand the harm.

MR. SILBERG: There's also the problem that the parties were obligated to provide copies of the documents that were going to be used to parties that did not have them reasonably available. That obligation was not met, either.

JUDGE BLOCH: That is with respect to Staff, I take it.

MR. SILBERG: That's correct.

MR. CUTCHIN: Mr. Chairman, you need to look a little further. I think it's obvious that there was an intent here to empty the whole bag of discovery documents that had been gleaned on the outside chance that they may decide to ask a question about one of those documents.

I don't think -- at least I hope that is not the intent that the Board had in mind when setting out this rule; otherwise, the rule would have been useless. I think it was the intent of the Board to focus the parties' attention on those things that would, indeed, be used, and Intervenors'

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intent to make their case so they would avoid the element of surprise that has arisen here. And we could do a more efficient and orderly job of moving through this process of trying to create an evidentiary record.

I don't think what we have here is helping that one iota.

JUDGE BLOCH: Ms. Hiatt, could you respond?

MS. HIATT: I think the reason why we submitted all these documents was precisely to avoid the element of surprise so that we would not come up with the argument that we had never submitted these documents before, and we did not meet our obligations. We put them down because we thought it would be necessary to cover all documents that we might possibly use.

We were, at the time of the May 18th filing we were still in the process of evaluating many of these documents and it wasn't possible to determine at the time exactly which ones would or would not be used at the time. So we felt the safest thing to do would be to write all of them down.

I am sorry there was some kind of misunderstanding or that the Staff did not get them. I was personally responsible for those of OCRE, and I made sure that Applicants anyway got copies of these items.

A great portion of the items that I had personally listed had been previously submitted in a brief. Many of them

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were NRC documents and the Staff would have access. I am afraid that there must have been some type of misunderstanding between Sunflower, Applicant and Staff as to how these discovery documents would become distributed to the Staff.

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JUDGE BLOCH: We did intend that the parties would not only have the documents in your possession, but the ones you would have preferred to use. I would have preferred if OCRE had listed the ones they knew it was going to use and then requested an extension to do what the Board was asking. The purpose was to avoid this kind of problem, where they would be fumbling for documents and would not know where you were going next.

The Board suggested a way out of it earlier, but the parties did not seem to want to go along with it and that was the request to Ms. Hiatt to furnish a list of documents for use in a particular session. Would this help us out so that we can at least grab up the documents?

MR. SILBERG: It would certainly make it easier than not having a list.

JUDGE BLOCH: Is the problem that the documents are physically not located in this building at this point?

MR. SILBERG: That is correct.

JUDGE BLOCH: They are in file cabinets that are how extensive?

MR. SILBERG: There are many linear feet of documents and I do not even know if we have -- we are trying to collect all of them. I think we have. I would not want to swear to it but there are literally thousands and thousands of pages of documents. And that is the list that we got from the

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Intervenor, with every document we gave them.

JUDGE BLOCH: We could have been informed of that. We did not even receive those lists. That, obviously, was not the kind of a notice we intended, but it seems the Applicant knew that it was not getting the kind that we intended.

MR. SILBERG: I dealt with it by calling Mr. Wilt. I was told he was not going to use those additional documents. He was only going to use the few documents that were listed on the first page of his attachment.

JUDGE BLOCH: Your interpretation -- he really amended his file by withdrawing the ones that were writing.

MR. SILBERG: I wouldn't want to characterize what he did. He told me that he attached the others because Ms. Hiatt asked him to do it. But he only intended to use the documents on the first page. If the Board wants to go through, we will get every document.

JUDGE BLOCH: How extensive is this problem?

MS. HIATT: I am afraid it is quite extensive because not only the documents that I have, that relate to the trend analysis and overview types of situations, but there are also stacks of documents pertaining to each contractor on the Perry site. It is a very extensive problem. I would note, in the cover letters that I received when I obtained these documents, a copy was sent to Mr. Silberg with the

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attachments, so he must have a rather concise set of these documents, which we did request.

MR. SILBERG: I would hardly say that thousands and thousands of pages are concise. I think we have all of the documents. We have tried to get all of the documents. That is hardly the same as saying we have a concise set of the documents.

MR. CUTCHIN: But we do not have the documents.

MR. SILBERG: Furthermore, if Ms. Hiatt is saying we're going to go through each individual contractor, that certainly is outside the scope of the Board's order.

JUDGE BLOCH: Let's start with how many that are related with Comstock directly. Do we know that?

MS. HIATT: You have a stack of them there, I believe?

JUDGE BLOCH: Do Applicant and Staff have the stack of documents related to Comstock?

MR. SILBERG: I have no idea. We certainly don't have them here.

MR. CUTCHIN: I don't know if I have them at all if they came from discovery of Applicants by Sunflower, because I was never furnished copies of those documents.

JUDGE BLOCH: Does Applicant know if those documents are filed by Comstock, so that they can grab them in one piece?

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MR. SILBERG: We can get them. It may take some time but we can get them.

JUDGE BLOCH: Another set of documents you're going to use are trend analysis reports, right?

MS. HIATT: A number of documents relating to the overview system, trend analysis reports, the quarterly reports, project internal audits, corrective actions requests. Those are the types of things I have been looking at.

As far as getting a list of what might be used in a session, it could be done, but it is obviously going to take some preparation time and I am wondering if maybe a bit of continuance, at this time, would not be appropriate so that these documents can be brought here so that we can go through these and decide exactly what we are going to use and maybe provide copies to the Staff, if they want them or maybe the Staff can use Applicant's copies, when they get here. But it seems to me, there is going to be a continual problem with this that might better be resolved before we continue.

MR. CUTCHIN: Mr. Chairman, I would object to such a continuance of any duration. This was the whole purpose of the many months we have had to get prepared for this proceeding. I think Intervenors were well put on notice of what their duties would be in getting ready to come to this proceeding. I don't think we need to walk through hundreds and literally thousands of documents looking for something that may

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support their case. I think they had an obligation to come and, in an organized fashion, attempt to put evidence before this Board if they had a direct case.

I think there is also a concern that they are circumscribed by the direct testimony as to how far they can go with these additional documents. And I see this getting us into nothing except a big morass. I think the Board has made rulings, the Intervenor has not responded to those rulings. They did not do what they were ordered to do and I think an appropriate ruling is to tell them to move along and each time we come to one of these documents, that they have not supplied, they cannot use it and let's move along and see where we go.

MR. SILBERG: It seems to me there are lots of ways that people can ask questions relating to the direct testimony. It does not always involve having to have the physical document. We went out of our way, opened up virtually all of our Quality Assurance Files, which is something that is at least unusual, if not unprecedented, in NRC cases. We have given the Intervenors virtually free rein through all of our documents. And for them to come back and dump those same documents on the parties and the Board, without attempting to make any sense out of this mass of paper, without attempting to tie it down to the way the Board is forming the issues, I think is doing a disservice to the process. We

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have literally spent one million dollars because of this contention, in terms of time and preparation and effort and I really resent the kind of approach that is being taken.

I don't think it is being fair to the Board and it certainly is not being fair to the Applicant.

JUDGE BLOCH: Ms. Hiatt, I think I have to give you a choice. We can continue on the basis of sticking to our procedural rulings and ruling out the documents that were not on OCRE's list and that were not on the first page of the Sunflower list, which you could also use because that is a live notification. Or if you prefer, we can take that continuance and what you are going to have to do is come up with three or four subjects, argue to the Board what it is you expect to find out from pursuing that subject based on the documents that you have reviewed, have identified the documents that are going to be part of those subjects so that the Applicant and Staff will have them in advance, and then based on those three or four subjects which should be the things you want most to prove which indicate the worst problems.

If you are successful in those three or four subjects, we can continue moving. If the three or four don't show anything, then we will have to consider whether there is any purpose of going beyond that. Now you have a choice, we have a procedural rule, which you have not followed. We can stick to the procedural rule and you have free lee-way within

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that. Or we can deviate it this time, with respect to subjects that you really must pursue. You will explain to the Board what it is you want to show and then, based on that showing, would be able to pursue the matters with the witnesses.

Is there another suggestion you would like? I am trying to think of a way out that is fair to both parties.

MR. SILBERG: Mr. Chairman, I am not sure I understand exactly what that last suggestion is leading to. I think there is a third route, which is the more normal way of proceeding and the one which I would urge the Board to adopt in this case. And that is tht we have direct testimony presentation. The witnesses who prepared that and sponsored it are available for cross-examination on their direct testimony. Intervenors chose not to present a direct case. I understand their reasons why they made that choice. Having made that choice, let them cross examine our witnesses based on their direct testimony. Let them ask any question they want to. We may object if we think it is outside the scope. They don't need documents to ask questions. Let them ask the questions on the subject matters that they think are important. If we cannot do that today, if we have to take a continuance to do that today, we have thrown away years of preparation for this hearing and the numbers of people and the manpower that we have devoted to preparing for this hearing.

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I would be very upset if we walked away from this process by taking a continuance.

JUDGE BLOCH: I was not thinking of more than a couple of hours continuance.

MR. SILBERG: I don't see how that would help. I don't know whether the Intervenors could prepare in a couple of hours. If they give us pieces of papers in a couple of hours and we have to go around and try to locate every document --

JUDGE BLOCH: Let's try a different way. When you come to a document that has not been noticed, if you can think of ways of phrasing the questions without putting the document into evidence, we will be best off. You do not have to put a document in to ask questions based on it. If you cannot think of how to do that, tell the Board what it is what you would like to get at and we will see if we can phrase the questions for you, based on that document. Would you like to do it that way?

MS. HIATT: I think we will try to do it that way. Part of the problem has been the rather extenuating circumstances we have been placed in due to the resignation of Sunflower's council. That was something that happened very recently and it is something we were not prepared for and furthermore I would like to quote the Appeal Board in one of its decisions, I believe ALAB 212, in which it stated that

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due to the disparitive resources between Staff and Applicant on one hand, and Intervenors on the other, it is appropriate to allow Intervenors more time to prepare their cases, especially -- the Appeal Board didn't say this, but I would say especially in the face of these circumstances and we would not be asking for a two week continuance. I would say perhaps recess the hearing at this time and we could come in tomorrow and, I think, be quite well prepared.

JUDGE BLOCH: To do what?

MS. HIATT: To continue cross-examination. Do you have our documents identified in advance, with advance notice to Applicants, perhaps have copies to the Staff, perhaps Applicants could bring these documents in here.

MR. CUTCHIN: That is unacceptable to us, Mr. Chairman, on the grounds that now we will get identification tomorrow morning and are we expected instantaneously to absorb and be prepared to meet these particular documents.

I would think also that much postdating of this ALAB 212 is the Commission's policy statement which says that the Board can give no attention to the difference in resources between parties. Each party is expected to meet its obligations in the hearing, in a timely fashion.

MR. SILBERG: I am awful sensitive to the problems that Sunflower has found itself in. However, we are not talking about cross-examination by Sunflower. Now we are talking

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about cross-examination by OCRE and even as to Sunflower, the review of the documents was not done by Mr. Wilt. The people who visited the Perry Plant to look at the documents were Ms. Hiatt, Ms. Hubbard, and Mr. McIntyre, the people sitting at the table right now. Mr. Wilt never once went to the plant to look at the documents.

MS. HUBBARD: May I make a statement about that?

JUDGE BLOCH: If it is relevant.

MS. HUBBARD: It is very relevant, and I meant to make it earlier. I visited the plant once last November and I believe at that point my job was to write down names of contractors. As far as this case is concerned, I have been involved in the publicity and the fundraising end. I have not been involved in the research. I only went to the plant once. So your characterization is a misrepresentation, Mr. Silberg.

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MR. SILBERG: What about Mr. McIntyre? Did he go to the plant?

MS. HIATT: I would like to address that. As far as people going to the plant, you have made reference to the thousands and thousands of documents there. That is true. We were only giving them a very cursory review and selecting copies which would be gone over in much more detail at a later time when we received the copies. Certainly, not being able to sit in there going through reels and reels of microfilm, stacks of paper, would we be able to put on a case without any further looking at these documents? I think that is really inaccurate to imply that.

JUDGE BLOCH: Let's proceed as Mr. Silberg suggested. To the extent that you believe that our passing a document you would like to put into evidence is harmful to you, put it in a stack, and tomorrow morning you will have a chance to argue to me what matters are important to the safety of the Perry Plant; are not coming into the record because of our evidentiary ruling. We are a little different from other proceedings in that the Board does have responsibility for noting matters important to safety and considering whether to take them up themselves. That is a little different from the normal adversarial process. If you pass a document, put it aside, tomorrow morning you would tell us how your case was harmed, why there is an important safety issue that is

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being passed.

We will proceed on the basis of asking cross-examination questions based on the documents that were not on the first page of the Sunflower list or the OCRE list. Let's just ask cross-examination questions. If you have difficulty, tell us the kinds of questions you are interested in asking, and the Board will try to help you.

MS. HUBBARD: Mr. Chairman,how will that affect Sunflower Alliance? Are we going to be limited to the first page of the list of documents I found, because I had planned to -- I could try to be specific by tomorrow morning about which documents we would like to cross on, but looking at this list, which I have never seen until right now, I know that the documents I am interested in are spread throughout this list.

JUDGE BLOCH: Are they all Comstock documents?

MS. HUBBARD: Comstock. I am also interested in pursuing Pullman Power if the rules are going to allow me to do that.

JUDGE BLOCH: Why don't we have you list the Comstock documents and come in tomorrow morning with that list. I think I would allow some flexibility because of the problems with the attorney on just that list of Comstock documents.

Now, actually you have a pile there. I would

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suggest that, in fairness, that pile be shared with the Applicant as soon as possible. If you are not using it now, I would urge -- do you have someone who can use that stuff now, Mr. Silberg?

MR. SILBERG: Yes, we could certainly go through it and identify the documents.

JUDGE BLOCH: And then you would -- on this small deviation from the proceedings, I would appreciate it if you could accommodate us by giving the Staff a copy.

MR. SILBERG: I am not sure we have the capability of making mass numbers of copies of any of these documents.

JUDGE BLOCH: It looks like we are talking about approximately 350 pages.

MR. SILBERG: I don't think we could do that.

MS. HUBBARD: We could try to get the documents copied. There is a limit as to what we can accomplish within 24 hours, but we certainly can do our best. I am really not expecting that we will need to use the whole stack, but we do need to go through them to figure out which ones are going to be the most important because basically last night about 2 o'clock I spent my time trying to figure out Mr. Wilt's cross-examination questions, and I did not get a chance to get to this.

JUDGE BLOCH: In the morning, then, we will have copies of the documents you are going to use plus a list?

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MS. HUBBARD: I hope to have copies. I cannot promise you. I have a source where I might be able to get them, but I don't know. It depends on how early we get out of here.

JUDGE BLOCH: We will try to get out by 4:00 today. Does that mean that you can have copies?

MS. HUBBARD: If the machine is working.

JUDGE BLOCH: I think we have to have copies. I take it there must be commercial places in this area. One way or the other, the Staff has to have copies of the documents. Let's do just the Comstock tomorrow morning, though, and we will defer ruling on the Pullman. I have no idea how many documents are involved or why we should be getting into that. Why don't we argue that later before we do that?

All right, Ms. Hiatt, please proceed.

BY MS. HIATT:

Q We were on nonconformance reports.

JUDGE BLOCH: You were going to ask a question about the trend analysis document. There may be some way to ask that. Just think through what it is you had in mind to learn and see if you can figure out how to put it into questions.

MS. HIATT: I think I will defer on that one at this time and go into another area.

JUDGE BLOCH: To be clear about the stack that we

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are going to create, if you don't give us a chance to help you on it -- I am not thinking that we have ruled it out -- it will not be eligible for the stacking concept. You have to figure out what it is you want to learn so we can try to help you.

MS. HIATT: Well, I really don't see how I can phrase a question without presenting this document, the statement that is made herein.

JUDGE BLOCH: Let's try quickly. What does the document show that you would like to obtain from these witnesses? What is the problem?

MS. HIATT: It refers to the use-as-is disposition on nonconformance reports and why the disposition is used so frequently.

JUDGE BLOCH: What does it say is the reason it is used so frequently?

MS. HIATT: This refers to a stage of the work. Civil, structural, and other types of dispositions are considered to be difficult and undesirable by the contractor inside organization, and use-as-is proposals are therefore anticipated by QA, and both Engineering and QA approve them. That is a statement.

JUDGE BLOCH: Let's take a crack at a question. During the civil engineering phase of this project, were you aware of any reluctance to assign dispositions other than use-as-is, an improper disposition to do that?

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WITNESS EDELMAN: To my knowledge there was no question of proper or improper dispositions of NRs at any stage of construction. As I answered in an earlier question this morning, the disposition pattern depends on the type of work involved. The civil structure area, you would write a nonconformance if the rebar placement is off by an inch, or even less than that if it is not exactly to the tolerance of the drum and therefore has to be dispositioned by an engineer, can the rebar be in that place --

JUDGE BLOCH: In fact, you testified more about that this morning. I remember your answer. So that has already been gone into.

BY MS. HIATT:

Q You talked about rebar. What about other types of things, say, voids, wall being out of plumb, off location, other such items such as that.

A (Witness Edelman) Disposition of potential void or out of plumb would be disposition by engineering if it meets design intent. If you had a void, I am sure if the nonconformance disposition identified it, the disposition is repair.

JUDGE BLOCH: What you are saying is in the civil engineering area, you had rather rigid criteria for the craft to meet, but if they did not meet it, what it did was to trigger an engineering reanalysis, which might or might not show that the condition needed correction.

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WITNESS EDELMAN: That is correct. The trigger was the issuance of a nonconformance report by the first-line QC inspector.

JUDGE BLOCH: You wanted to use those liberally so that all of the situations that might be a potential safety problem would be reanalyzed.

WITNESS EDELMAN: Correct.

MR. SILBERG: When you say use those liberally, you are referring to the NRs?

JUDGE BLOCH: They would be used liberally, the NRs. The criteria was liberal so that all possible problems would be reanalyzed.

WITNESS EDELMAN: That is correct.

JUDGE BLOCH: It would seem I have led the witness, but I don't think I have. I think all I did was to summarize what he said earlier today.

MR.SILBERG: On cross-examination, Mr. Chairman, you are allowed to lead the witness.

(Laughter)

JUDGE BLOCH: The Board does not like to cross-examine; but let's go on to something else.

BY MS. HIATT:

Q Is there a certain time period within which a nonconformance report must be closed out?

A (Witness Edelman) The time period for closing out

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nonconformance, by the rules and regulations as I understand them, is before the plant can go into operation; however, it is not good practice on a project to leave nonconformances open for any extended period of time. It has been our practice to try and make sure that we get responsive closeouts of nonconformance conditions.

This does not say that we don't have nonconformances that are not open for extended periods of time, because that part of the construction activity is not in process now, or that it requires disposition from a vendor or engineered piece of hardware, which may take a year or even two years or longer to keep a nonconforming condition open. The important thing is, from the programatic aspect, is that we track and identify every nonconformance and that we note the status in the existence of all nonconformances, of where they are, whether they have been reviewed by engineering, disposition by the review board, have the repair made by the contractor if applicable and then reverify it. We have a system that tracks and identifies all of the open nonconformance conditions.

Q You referred to rules and regulations requiring the disposition before a plant opening. Whose rules and regulations are they, and could you quote one specifically?

A (Witness Edelman) I cannot quote a specific rule, but we have been told verbally by the NRC inspectors that

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before this plant opens, they will not tolerate open nonconforming conditions to exist in the plant. I cannot quote you a specific regulation.

JUDGE BLOCH: It would seem inherent in the definition of a nonconforming condition.

WITNESS EDELMAN: I believe so.

BY MS. HIATT:

Q Do you have a policy or procedure on the site for a time within which a nonconformance report should be closed out?

A (Witness Edelman) We try on the site in our procedures to have the disposition of nonconformances obtained within 30 days. Our procedure is that goal, and we track on-site nonconformance conditions that are open longer than 30 days. We try to see the status of these and where they are in the review cycle or the repair cycle or the evaluation cycle. We have the goal. We are trying to keep these nonconformance conditions open no longer than 30 days.

In addition, it depends on the type and the phase of the area of construction you are in. For example, when you are in concrete and you are pouring concrete and you have a nonconforming condition with respect to the rebar, you cannot pour the concrete work until that nonconforming condition has been cleared. Then the concrete work can be performed.

If you have a nonconforming condition with respect

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to an engineered piece of equipment, the nonconformance can be closed prior to the time of turnover of the equipment, which may be an extended period of time. But the significance of it from a quality assurance point of view, you want to have a manageable system that you are tracking. You know the status and where you are with your nonconformance control system.

Q How long have some of the nonconformance reports been open?

A (Witness Edelman) We have a status. As a matter of fact, I looked not too long ago. There are 12 nonconformances open almost four years on the project. We have it broken down, so I know the number. I cannot tell you exactly what they are, but our goal is to close all of these nonconformances out in a timely fashion as we can. We have right now about 1800 nonconforming conditions that are still open in our tracking system.

Q Is that the largest number there has ever been?

A (Witness Edelman) No. As a matter of fact, at the end of last year, just prior to the system turning over, we had about 2300 nonconforming conditions open longer than 30 days.

Q Do you feel that there has been a problem on your project with the control of nonconformances and their closeout?

A (Witness Edelman) No.

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Q The INPO's health evaluation, which I will find somehwere here, which OCRE identified as a document that it would use, I believe did make a suggestion that that is a weakness in the program -- your control of non-conformances. And I'll find it in a minute.

MR.SILBERG: Is that a question?

MS. HIATT: There will be a question phrased from that.

MR. SILBERG: Do you have a particular page you are referring to, Ms. Hiatt?

MS. HIATT: Not at the moment. There will be. Page 68, the finding therein states that, "Procedures which have been in place for identifying, tracking and resolving non-conformances had not always been effective in achieving timely close-outs of the non-conformances identified."

BY MS. HIATT:

Q This evaluation identified that as a weakness in your program, did it not?

A (Witness Edelman) The INPO report you are referring to, the finding said that our procedure was in place for tracking them. We were not getting timely close-out. This was the time that our NRs had pieces -- I have just referenced about 2300, and they said in the INPO evaluation it was looking at the overall project and where we were going.

The indications were as you're going through your

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testing phase you are not going to get turnover from the contractors or be able to accept turnover of systems if you have large non-conformances open in those systems. And, therefore, they recommended that your system tracks them and you identify them and you ought to pursue the activities from a management perspective to get prompt close-out of the non-conformances.

JUDGE BLOCH: Was the INPO report directed solely at safety type inspections, or did it have other purposes for the plant?

WITNESS EDELMAN: It had overall management of the plant, including budget, schedule, total plant organization, staffing, et cetera.

JUDGE BLOCH: It was to broadly be useful to management; not just for identifying safety problems?

WITNESS EDELMAN: That is correct.

JUDGE BLOCH: In your opinion, this particular finding is more of a management finding concerning the schedule of the work than it is a safety finding?

WITNESS EDELMAN: Yes, because they identified that our procedures were in place and we were adequately tracking and identifying the non-conformances, but from the management perspective if you want to get into the turnover phase of your project, it would be more expeditious from a management point of closing out the non-conformances to get

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the turnovers accomplished.

JUDGE BLOCH: As time passed, would that place increased pressure on the organization to close them out, use as is?

WITNESS EDELMAN: No. They have already been dispositioned in the tracking system. The time lag is the implementation of the contractor to make the corrective actions.

JUDGE BLOCH: In other words, the corrective action is already indicated.

WITNESS EDELMAN: On the non-conformance. It has already been reviewed by the engineer and dispositioned by the review board. It is in the implementation stage of the correction.

JUDGE BLOCH: How long of a lag is there, not until the disposition of the NR but the -- until the corrective action is indicated? What is the length of time that is acceptance in that area?

WITNESS EDELMAN: We try and get the work done in as expeditious a manner as we can. We try to make sure that our procedures allow them to get through the engineering disposition and the review board within 30 days, and then have the contractor make any modifications needed and then re-inspection.

The point that this was addressing, you have them

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through the review board, engineering and now they are sitting there and have not been implemented by the contractor, so that you can then verify that the close-out activity has taken place.

JUDGE BLOCH: Have there been lengthy delays before the dispositioning?

WITNESS EDELMAN: There may be specific examples. In general, that has not been a problem in terms of disposition of the non-conformance report.

JUDGE BLOCH: Do you track that separately with whether the disposition has been made?

WITNESS EDELMAN: We track where the non-conformance is in the process. In terms of once it has been identified, has the engineer issued his disposition, has the review board reviewed the disposition of the engineer and is it now back to the implementation phase.

JUDGE BLOCH: Have you done a special audit of tardy dispositions to make sure that those were being handled properly and were not subject to pressures to disposition as "use as is"?

WITNESS EDELMAN: Our review of the NR process and scheduling has never indicated any tardiness in the resolution of the non-conforming conditions.

JUDGE BLOCH: The slower ones. You indicated there was a distribution of some that were faster, and some that were slower.

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WITNESS EDELMAN: On our audit of the overall non-conforming system process, we have never identified any specific problem in the engineering and review board disposition of the non-conformances.

JUDGE BLOCH: In terms of the time lag or in terms of the substantive dispositions?

WITNESS EDELMAN: When we look at the process that was addressed in the issue of time lag.

JUDGE BLOCH: The results of that study were that time for disposition never was a problem?

WITNESS EDELMAN: That is correct.

JUDGE BLOCH: If you have further questions,Ms. Hiatt, pursue it yourself.

BY MS. HIATT:

Q Okay. Has there at any time been any inclination to try to reduce the numbers of non-conformances which are written?

A (Witness Edelman) No. Our program has always been to reduce the number of outstanding non-conformances that have been dispositioned. Our program, total site, both contractors, is to identify issues that need non-conformance reporting.

Q How about voiding? Has there been any inclination to void NRs?

A In earlier provisions there was an allowance for

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the voiding of an NR based on an engineering disposition that the condition did not exist. As part of our ongoing review of our program, that part of our program of voiding NRs has been addressed and eliminated.

JUDGE BLOCH: How is it dispositioned now if the condition didn't exist?

WITNESS EDELMAN: If it's a non-conforming condition, it is used "as is", and the non-conformance addresses it.

JUDGE BLOCH: Suppose you find that the report was wrong, it just did not exist that way. There was a mistake made in filling out the report.

WITNESS EDELMAN: You still have to disposition by the engineer to review that there was no problem for which you needed a disposition. We do not lose track of that non-conformance report once it is written.

JUDGE BLOCH: It stays in the system?

WITNESS EDELMAN: That's correct.

JUDGE BLOCH: Disposition is used as is?

WITNESS EDELMAN: Correct.

BY MS. HIATT:

Q What are seismic occurrence violations?

A (Witness Leidich) Seismic occurrence violations are the results of an inspection activity that has been going on at the plant for approximately three years. What we have is conditions [illegible] plant where because of the

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accumulation of tolerances perhaps between a cable tray support and, say, a lighting fixture in the electrical area. Because of the accumulation of tolerances there we need to be concerned about any possible effects that the seismic event may cause, from a lighting fixture swinging during a seismic event and perhaps interfering with the operation of the cable tray support or the cable tray itself. That generally is done on projects very late in the game, and typically, inspection crews are called out at system turnover, or just prior to plant operation to walk down the plant and do a complete 100 percent inspection of all of the seismic occurrence attributes or possible conditions where a seismic event could be a problem.

At the Perry Project we decided to do that very early on, and as I indicated,two or three years ago instituted an inspection staff whose full-time function was to perform that walkdown on an ongoing basis. So they have been doing it for a couple of years, identifying those conditions that could possibly represent that seismic occurrence problem because of those accumulations of tolerances, document those in documents called seismic occurrence violation reports.

Q Were these instituted in any way to relieve some of the pressure on the non-conformance system?

A No, these are not identification strictly of non-conforming conditions with respect to each of the

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contractors. They more represent a walk-through at the end and a physical overview by the inspection staff based on criteria applied from our engineering group to have an additional level of assurance that we don't have any possible conditions resulting from a seismic event which may somehow be perceived to have an influence on safety.

Q How are these dispositioned?

A Again, they take on the same form as the non-conformance report. They would either require rework, repair or use "as is" conditions.

Q About how many of these items are open at the time, right now?

A I don't know offhand. I would expect a couple of hundred, as a ballpark figure.

Q I think it becomes necessary at this point to use a document which was identified on Sunflower's list. I guess maybe we would refer to it as rebuttal, but I think there are some discrepancies between some of the information that these witnesses have given us and some of the information in this document.

JUDGE BLOCH: Tell me about what the discrepancies are.

MS. HIATT: The number of the seismic occurrence violations that are open, and the purpose of initiating that system.

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JUDGE BLOCH: How many do you think -- first of all, that was a different time period, wasn't it?

MR. SILBERG: The witness said that was his ballpark number.

JUDGE BLOCH: How many were open at the time of that document?

MS. HIATT: The latest one I have is the last quarter of 1982, and I will go through it here. If I go through my notes I might find it a little more rapidly.

MR. SILBERG: Before we go too much further down the path, I'm wondering what this has to do with quality assurance at all.

JUDGE BLOCH: Ms. Hiatt, we have a relevance objection.

MS. HIATT: Well, I think that the seismic occurrence violation program may be something Applicants are using to try to bypass the non-conformance system to relieve the tremendous backlog which they are experiencing.

MR.SILBERG: The testimony was directed to the contrary.

MS. HIATT: This document says something different.

JUDGE BLOCH: What does it say?

MS. HIATT: If I find the exact point in it, I believe it says the seismic occurrence violations were instituted to relieve some of the pressure on the non-conformance

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system to avoid NRs. First quarter of 1981.

JUDGE BLOCH: The testimony is when there is a seismic occurrence problem, you fill out an NR. Is that correct?

WITNESS EDELMAN: No.

WITNESS LEIDICH: Seismic occurrence violation form is filled out.

JUDGE KLINE: Is there any less paperwork with the seismic occurrence violation than an NR?

WITNESS LEIDICH: No. It goes through the same engineering review.

JUDGE KLINE: Is there any potential for one to relieve the pressure on the other?

WITNESS EDELMAN: Absolutely not.

JUDGE KLINE: In terms of labor or any engineering attention?

WITNESS LEIDICH: No.

JUDGE BLOCH: Do you have the same attention requirements on the records?

WITNESS EDELMAN: Yes.

MS. HIATT: If I could read this statement here in the document, I think it will speak for itself.

JUDGE BLOCH: You're addressing it to me so I can decide whether we have to keep asking questions on it?

MR. SILBERG: Can you tell me what you are reading from?

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MS. HIATT: A quarterly assessment report for the first quarter of 1981, page 8, the last paragraph. The heading it is under is "Non-Conformance Control." The last paragraph states, "Engineering and quality assurance has developed a method to document seismic occurrence violation criteria in a form to better suit the needs of everybody involved and eliminate the use of non-conformance reports."

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JUDGE BLOCH: It does not say anything about relieving the stresses on the nonconforming report system. What is the evil you see here? Just explain to me what the evil is.

MS. HIATT: If you look at the whole area here of nonconformance control, this paragraph starts out: "Control of open nonconformance reports should greatly increase activity during the first quarter of 1981."

There is continual concern expressed in these documents about the backlog of nonconformance reports open for over 30 days. This number has grown from about 400-some in the first reports to up to 2300 in the last report.

JUDGE BLOCH: What does this concern? The Applicant's witness stated that he felt the concern was managerial; that is, that the backlog could slow down the worker later on. Is it a safety concern? What is the nature of the safety concern here?

MS. HIATT: I don't know if it is a specific safety concern. It is a potential safety concern in that Applicant might in some way be trying to bypass the formal documentation procedures for documenting possible safety violations on nonconformance reports by using a different form for different types of violations.

JUDGE BLOCH: Providing they are maintained and listed as formal records of the Applicant. They can be

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reviewed. Why is that a safety problem?

MS. HIATT: What I am trying to get at is the more general picture of Applicant's control of this probject, of their control of the documentation, of the records, the paperwork, which I think does relate to the control of contractors, because quality assurance essentially functions on accurate records and paperwork.

JUDGE BLOCH: Let me ask the witnesses:

On your reports to the management system, when you are reporting on the volume of NRs, do you also mention the seismic reports in the same document?

WITNESS EDELMAN: I am not sure in the same paragraph.

JUDGE BLOCH: Not the same paragraph; the same document. Are they discussed in the same management reporting system?

WITNESS EDELMAN: Yes. We know the status. We know where they are, and their engineering disposition.

JUDGE BLOCH: I understand why you became concerned, Ms. Hiatt, and why you want to think more about it. I just do not understand that it comes to anything, at this point. You have not been able to explain to me any malady that comes out of this different form of record.

MS. HIATT: The reason I brought it up on cross-examination is to try to see if there is some type of problem.

JUDGE BLOCH: I think, unless you can think of

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some other problem, we ought to go on to something else. You have not even got a theory here on why it is a safety problem.

MS. HIATT: I would like to ask one more thing:

BY MS. HIATT:

Q Are these for safety-related systems, or nonsafety-related systems, or both?

JUDGE BLOCH: What are "these?"

MS. HIATT: The seismic occurrence violation; are they used for safety or nonsafety-related systems, or both?

WITNESS LEIDICH: Both.

BY MS. HIATT:

Q Thank you.

Would you explain what the master deficiency list is?

A (Witness Leidich) The master deficiency list is a tracking system that is utilized by our startup organization,the nuclear test section to track all open items with respect to a system. They developed this list prior to system turnover, utilize it at the time of turnover to gain a complete status tracking picture of all open items with respect to that system.

Subsequently, it is used beyond the turnover point throughout the preoperational test program. The master deficiency list includes on it with respect to status tracking, individual nonconformance reports that would then be sorted

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by that system. It also includes areas of incomplete construction so that a startup organization can better track those areas for completion to support the turnover schedule.

It also includes non-safety related efficiency reports. It is basically a formal punchlist, as it were, to support system turnovers.

Q You mentioned the incomplete construction. I thought construction had to be complete before you turned the system over, before the contractor turned it over.

A As I stated, this list was started before the turnover process, sothat the individual responsible test engineer can get a handle on what it is he has to complete to support that turnover process.

JUDGE BLOCH: These are special items he zeroes in on. It is not his whole list, is it? He has additional lists but he does whether or not there is an NCR, doesn't he?

WITNESS LEIDICH: Yes. It includes the non-conformance reports, and a wide variety of other additional work that is required to support the system turnover.

BY MS. HIATT:

Q When a non-conformance report is documented or somehow added to this master deficiency list, is the non-conformance report closed out?

A (Witness Leidich) No. The non-conformance is a stand-alone, separate document.

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Q Again, I saw some documents here that tended to refute that.

JUDGE BLOCH: Tell us about your concern.

MS. HIATT: Yes, okay. First I have to find it in this list. Some of these documents contained a concern as to the adequacy of the master deficiency list, and further, some of them stated that when a non-conformance report is documented on the master deficiency list, the non-conformance report is closed out. And if the master deficiency last, upon which it seems to be depending, is not something dependable, I'm concerned whether there is really a loss of control and tracking of the deficiencies.

Now, if you will give me a moment I will try to collected these documents.

JUDGE BLOCH: Perhaps you could just ask the witnesses that question.

MR. SILBERG: Or put a "Isn't it true that..." in front of that question and we can move on.

MS. HIATT: It seems a little more useful when I can have the documents in front of me stating something to the contrary.

JUDGE BLOCH: Is it documents that were noticed or not noticed? Are they part of the list that is fair game?

(Laughter.)

MS. HIATT: I'm afraid they might be part of the

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list that is not fair game, unfortunately.

JUDGE BLOCH: Do you gentlemen remember anytime in the history of the plant when there was a problem because an erroneous procedure rose up and NRs were closed when they were added to master deficiency lists?

WITNESS EDELMAN: The concept of the master deficiency list starts with the non-safety systems, which are the first systems that are done at the plant. We're just at that stage where we're turning over the major -- or starting to turn over the major safety systems.

JUDGE BLOCH: When you say safety systems, are you using it in the NRC sense of systems related to safety systems, important to safety? How do you use "safety systems"?

WITNESS EDLEMAN: Systems required for the safe shutdown of the plant, consistent with the NRC definition.

JUDGE BLOCH: So some of these others are important to safety but they are not necessary to the safe shutdown of the plant?

WITNESS EDELMAN: That is correct. But tape one that is clearly a non-safety system, for example, in the water treatment facility, which are not -- they are non-safety documents in incomplete construction. We have gone over and are starting to go into the major what I call safety systems, systems important to shutdown safety. I know we are tracking the NRs. Whether they change status or they go

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on the list, we don't close them out. But I have to get into the details of the procedure to make sure that it is adequately numbered and tracked. We don't lose the NR, is what we're trying to say.

JUDGE KLINE: Do the NRs transfer from one list to another, or when they go on a master list do they remain on the original file?

WITNESS EDELMAN: They remain in the original file. The number remains the same. They are transferred to the list.

JUDGE KLINE: They would appear in two different places? They are not physically lifted from one list and place on another?

WITNESS EDELMAN: No.

JUDGE BLOCH: Does that mean a shift in the responsibility to disposition the NRs?

WITNESS EDELMAN: They are always dispositioned by the engineer and the engineering review board.

JUDGE BLOCH: Is it shifting responsibility for determining that they have been fulfilled? When it moves to the master deficiency list is there no group of people responsible for seeing that the disposition has been complied with?

WITNESS EDELMAN: If the work is contracted work, the original contract organization still has to do the original work from which it was identified under the

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non-conforming condition. The final inspection may be by another inspection verification group, but the work would have to be done by the contractor to which the non-conforming condition was originally generated.

JUDGE BLOCH: Your final inspection will determine whether the work has been done properly?

WITNESS EDELMAN: Correct.

JUDGE BLOCH: At that point, in order to close out the open item, I take it that person must somehow go back to the NR file.

WITNESS EDELMAN: They are on a computerized file.

JUDGE BLOCH: How does he actually close out the NR and indicate it is finished?

WITNESS EDELMAN: It has to be signed off and verified by the quality control people. Once that is signed off, it is signed off, verified, the NR goes into the system and gets closed out.

JUDGE BLOCH: The people who are doing the startup check? The QA people?

WITNESS EDELMAN: No. The people doing the startup tests are the test engineers. It's the QA organization that would verify the close-out of the non-conforming condition.

JUDGE BLOCH: So that the person doing the startup has the master deficiency list.

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WITNESS EDELMAN: Right.

JUDGE BLOCH: He can check off whether or not it has been -- the item has been taken care of and accepted, but until QA goes back and sees it again, it is still on the list.

WITNESS EDELMAN: Correct.

WITNESS LEIDICH: Correct.

JUDGE BLOCH: Has it happened that an item has been accepted by startup and then found not to be acceptable by the QA people?

WITNESS EDELMAN: Not to my knowledge.

JUDGE BLOCH: It could be because it's still open?

WITNESS EDELMAN: It would still be an open item.

JUDGE BLOCH: It might under that procedure theoretically accept an item that is still open because it has not been closed out in the approved way by a QA person.

WITNESS EDELMAN: I'm getting tangled up in the example. The bottom line is that to close out the non-conforming condition it must be verified by a quality control person that the actual work has been done.

WITNESS LEIDICH: That's independent of its relationship to the master deficiency list, I think is the point that we want to make.

JUDGE KLINE: The close-out procedure is the same as if it had never gone on the master deficiency list.

WITNESS EDELMAN: That's correct.

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WITNESS LEIDICH: Yes.

JUDGE BLOCH: My problem is it is the same, but now you have to -- the QA person or QC person would have to say that it has not been properly closed, even though we have accepted it as a company.

WITNESS EDELMAN: We do not accept it until it is closed. We do not accept that the non-conforming condition is completed.

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MR. SILBERG: We are getting confused with the word accepting. As I understood what the witness was saying, there is one acceptance process to get an item off the master deficiency list and that acceptance takes place by the start-up crew. That is not acceptance by the company, in the larger term, because that final acceptance, if you wish, requires QA sign-off and that cannot happen until the NDR is closed out and there is a separate tracking system to make sure that occurs.

JUDGE BLOCH: May I ask the witness, is that true? You need both the QA sign-off and the start-up sign-off before you accept the system?

WITNESS EDELMAN: Correct.

JUDGE BLOCH: Ms. Hiatt.

BY MS. HIATT:

Q Have you found any problems with the master deficiency list or deficiency tracking system as far as keeping control of various items?

MR. SILBERG: Can we have more clarification? That seems an awfully broad question. What kind of items are you talking about?

JUDGE BLOCH: Let's start back a little further.

MS. HIATT: The best way for me to address that is the document.

JUDGE BLOCH: The NRs are kept in a computer, okay?

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WITNESS EDELMAN: It is computerized, yes.

JUDGE BLOCH: Is the preparation of the master deficiency list also computerized?

WITNESS EDELMAN: It was originally manual, I think now we have computers.

JUDGE BLOCH: As of when did it become computerized?

WITNESS EDELMAN: The last six to eight months.

JUDGE BLOCH: At this time, the list ought to clearly reflect all open NRs when you prepare a master deficiency list.

WITNESS EDELMAN: Correct.

JUDGE BLOCH: Prior to that time, I suppose one possible source of error would be -- what possible sources of error would there have been, prior to that time?

(Laughter.)

WITNESS EDELMAN: I don't know of any. In terms that we still follow our non-conformance condition close-out process.

JUDGE KLINE: How did the two lists get cross-referenced? If something happened to an NR on one list, how did the other list come to know of it?

WITNESS EDELMAN: They are referenced, the NRs are referenced by systems that are cross-checked with a computer program by system.

JUDGE BLOCH: Could there have been a lag between

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the time that the master list was prepared and the time that some additional NRs might find their way into the file that the master list was prepared from?

MR. SILBERG: You are assuming there might have been some NRs that fell through the cracks, that did not get on to the master deficiency list?

JUDGE BLOCH: I'm asking if that is possible because Ms. Hiatt seems to be concerned that that happened.

WITNESS EDELMAN: I guess it is possible. I don't know the answer.

JUDGE BLOCH: You never heard of it happening, though, did you?

WITNESS EDELMAN: We had problems in establishing the master deficiency list, to make sure it was accurate and capturing these things. That is why it took us time to get it computerized. That is why we started on the non-safety systems first.

JUDGE BLOCH: Non-safety systems could be important to safety.

WITNESS EDELMAN: Yes.

JUDGE BLOCH: What were the problems before you went on the computer? What were the problems that caused you to go on to the computer system?

WITNESS EDELMAN: We were going into the stage of turnover that we have a multitude of documents, from various

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contracts, that all feed into one system, and therefore keep an accurate record of what we are doing, in order to make sure that we are on top of all of the contractors. You are now at the point where you're no longer dealing with x or y contractor. This system may involve, now, the funneling of the documents for four or five contractors into the close-out of a system.

JUDGE BLOCH: So the problem of getting the data from all of the NRs, of all of the contractors, together for the master deficiency list.

WITNESS EDELMAN: I'm not saying it was an answer, but you are postulating a problem.

JUDGE BLOCH: I want to know if it was a problem, or if it wasn't a problem. I want you to testify, were there any problems related to the compilation of the master deficiency list?

WITNESS EDELMAN: Part of our program for turnover, we went through extensive review of all of the procedures that affected turnover. The master deficiency list was one of the areas that we investigated to make sure that we had our first safety system turnover, as we defined it, that all of these procedures improved and many aspects were addressed.

JUDGE BLOCH: So, as far as you are concerned, these problems were pre-application problems. You were trouble-shooting before it was used?

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WITNESS EDELMAN: Correct.

JUDGE BLOCH: As far as you know, the problems never occured in the compilation of an actual list?

WITNESS EDELMAN: As far as I know.

JUDGE BLOCH: Is there a document that makes you want to pursue that further, Ms. Hiatt?

MS. HIATT: Yes. I'm afraid this is from the --

JUDGE BLOCH: What is the document? What is the section that concerns you?

MS. HIATT: This document concerns Project Internal Audit, 83-06. It is on a memorandum dated March 16, 1983. It states "numerous problems were found in a deficient tracking system which limited its effectiveness."

JUDGE BLOCH: Let's read some of them.

MR. SILBERG: Before we go further, the deficiency tracking system, I'm not sure, is what we are talking about here. I think it could be a problem.

JUDGE BLOCH: Can the witnesses explain what a deficiency tracking system is?

WITNESS EDELMAN: I'm not sure what she's talking about. I have to see the document to see what she's talking about.

MS. HIATT: Would you like to look at it?

JUDGE BLOCH: What is the heading of the document?

MS. HIATT: It starts off, it is the Cleveland

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Electric Illuminating Company memorandum from J.R. Hayes to a group of four -- test program administration audit report and if you look into the body a little bit it says here is the audit report for Project Internal Audit 83-06, test program administration. It does, indeed, talk about the master deficiency list, about non-conformance report transfers, seismic occurance violations, and all these things. It says that the tracking system has problems, numerous problems, which need correcting.

JUDGE BLOCH: The date?

MS. HIATT: March 16, 1983.

JUDGE BLOCH: Let's put that into the list of potentially important documents, the pile that you're going to keep separately. Does the Applicant have the identification of the project?

MR. SILBERG: 83-06. I have to ask if that is an adequate identification. Is it?

WITNESS EDELMAN: Yes, the Internal Audit Program.

MS. HIATT: To clarify, we're going to address this matter tomorrow, is that it?

JUDGE BLOCH: Tomorrow morning, you're going to address them together and try to give the Staff a chance to know what the documents are.

MS. HIATT: At that point, you will want reasons why this a significant safety related problem?

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JUDGE BLOCH: That's right.

MS. HIATT: In that case, we have to come back to the master deficiency list at that time.

JUDGE BLOCH: Are there other questions that you can pursue with allowable documents?

MS. HIATT: Yes.

JUDGE BLOCH: Let's do that.

MS. HIATT: I will.

BY MS. HIATT:

Q Why don't we look at the investigation tht the Nuclear Regulatory Commission conducted concerning the Comstock case which, as I understand, culminated in the report 81-19. This investigation was prompted by allegations from employees of the contractors on your site, was it not?

A (Witness Edelman) We have no way to know who prompted the allegation.

Q Someone did make allegations, is that correct?

JUDGE BLOCH: Ms. Hiatt, if it appears in the document and that is an NRC report, I believe we can take notice of that. Am I right Mr. Silberg, we do not have to have cross-examination to establish what is in the document?

MR. SILBERG: I have no objection.

JUDGE BLOCH: We could take notice of it. We know that document quite thoroughly, so if you want to base questions on it, you may do that.

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MR. SILBERG: Did the witnesses have a copy of 8-19?

WITNESS EDELMAN: We do.

(Pause.)

BY MS. HIATT:

Q At what point did you become aware that the Nuclear Regulatory Commission was conducting an investigation into the activities of your electrical contractor?

JUDGE BLOCH: Are we talking about the investigation which lead to 81-19?

MS. HIATT: Yes.

WITNESS EDELMAN: When the NRC comes on site, they have an interest meeting with the management, tell us at that point in time, they are there to investigate allegations made relative to work activities and that's all we are told. They come in to start their investigation of tht activity.

BY MS. HIATT:

Q You did not know where this investigation was directed, at which contractor?

A (Witness Edelman) They told us it was in the electrical area.

Q What time? What was the first time when this occured? What was the date?

A End of October, 1981.

WITNESS LEIDICH: October 27.

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Q Were these unannounced or announced inspections that they made?

A (Witness Edelman) This was an investigation and it was unannounced.

Q Until they came to the site, when they announced it to you?

A I don't understand your question.

JUDGE BLOCH: I think we already had testimony, what they said when they came to the site. What is the question about that. You can argue things in your findings without repeating it again in a different form.

MS. HIATT: Basically, what I was getting at is the NRC said this was an unannounced investigation.

JUDGE BLOCH: You clarified what happened. They did not know about it when they got there. When they got there they were told certain things. Those are the facts you have gotten from the witnesses. You do not have to repeat it in other language.

MS. HIATT: All right.

BY MS. HIATT:

Q So you were aware, in October of '81, that the NRC was conducting investigations. Were you aware of the source of the allegations.

A (Witness Leidich.) No, we were not.

Q Did you take any steps to find out who had made

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the allegations?

A No, we did not.

WITNESS EDELMAN: We did not.

Q Not at any time?

MR. CUTCHIN: Was that a question, Mr. Chairman?

JUDGE BLOCH: It was redundant. There was no answer.

MS. HIATT: I have a document here, which I referenced in my list. I will show it to you. It is a newspaper article concerning an inspector in the electrical area that was fired for falsified credentials. I will show it to you if you have not seen it.

(Handing document to witness.)

(Pause.)

MR. SILBERG: Do you have a copy of the newspaper article?

WITNESS LEIDICH: Yes.

MS. HIATT: I just gave them a copy.

BY MS. HIATT:

Q Have you seen this before?

A (Witness Edelman.) This article?

Q Yes.

A Yes.

Q It basically states that a person was fired who had made allegations to the Nuclear Regulatory Commission

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concerning the electrical contractor.

A I disagree with that. It does not state that he was fired for making allegations.

Q I did not say for that. I said who made allegations.

A The article does not say that. It says, a gentleman was released because he had false credentials on his employment application at the plant.

Q The article also states that the former inspector had made allegations concerning work by Comstock to the NRC from late summer '81 to January and might have made charges to a Cleveland newspaper.

MR. SILBERG: Is that a question?

MS. HIATT: It is a statement.

MR. SILBERG: I object to statements by the cross-examiners.

JUDGE BLOCH: That is a question. First, is that your interpretation of the article?

WITNESS EDELMAN: The middle of the article, they quote the NRC indicating that this former inspector had made allegations.

JUDGE BLOCH: Do you have any knowledge of whether that is true or false?

WITNESS EDELMAN: We do not have, by the rules, any documentation that any individual made, or did not make allegations. We have no records to show, in any way, whether an individual made, or did not make, an allegation.

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JUDGE BLOCH: You changed my question a little bit. Do you have any knowledge as -- you said no records. Do you have any knowledge as to whether he did or did not make any allegations?

WITNESS EDELMAN: As this investigation proceeded, we had belief that this probably was the individual making allegations.

JUDGE BLOCH: Did that belief develop before the individual was discharged, or after?

WITNESS EDELMAN: That belief probably developed before the individual was discharged.

BY MS. HIATT:

Q Why was the person discharged from the plant?

A (Witness Edelman) Part of our review process of our contractor's people, of their background in terms of their academic and previous work experience. The verification program was ongoing, and this was one man of a number of people whose background was checked whose documentation was not clear. This gentleman was called in by his employer, who requested that they have the opportunity to go back and verify some of this prior work experience, as well as his educational background.

He gave them permission to do that. Upon inspection of this background data, it was found that he had falsified his credentials. This individual was confronted

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with that information, did not dispute it and was released.

JUDGE BLOCH: You just said this was part of the general examination of the records, personnel records for that type of employee.

WITNESS EDELMAN: That is correct.

JUDGE BLOCH: Do you know on what date the investigation of those records began?

WITNESS EDELMAN: I think it began early 1980. It was part of the normal procedure. Their annual review of the records would have been early 1982.

JUDGE BLOCH: Just to clarify, you said normal annual, and you said 1982. That means that there had been prior such records.

WITNESS EDELMAN: He started to work sometime in 1981, I believe.

JUDGE BLOCH: This was annual to his employment date.

WITNESS EDELMAN: To that contractor's review of their people in their personnel qualification file.

JUDGE BLOCH: Did that review begin before you began to suspect that this individual had made a complaint or after you began to suspect that the individual made a complaint?

WITNESS EDELMAN: The review process begins that part of the year, January. I don't know if we suspected

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before or after that review process had started.

JUDGE BLOCH: Would that have reviewed for every process annually?

WITNESS EDELMAN: For this particular contract. This is what his program had called for.

JUDGE BLOCH: Did they check all of their employees?

WITNESS EDELMAN: They went through the files and questioned ten or twelve people whose background checks did not have documented evidence. He was one of the 10 or 12 people that was checked.

JUDGE KLINE: Is this something they had flagged earlier for subsequent resolution; say, when the person was hired, it was something unresolved, and then later followed up on? Why was --

WITNESS LEIDICH: It is an annual occurrence for that particular contractor to ensure that -- it is sort of an audit, not in the quality assurance sense but an audit of their own files to assure that they have complete background information on all of the individuals.

JUDGE KLINE: Were the 10 or 12 picked at random, or is there some reason for saying that there may have been a flag on their file or something?

WITNESS LEIDICH: My recollection is there were 10 or 12 individuals they were continuing to pursue to get

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background information on.

JUDGE KLINE: The investigation began -- it did not begin as a new investigation, then, in that January investigation.

WITNESS EDELMAN: It was part of the ongoing process.

JUDGE KLINE: There had been some prior identification that needed resolution; is that right?

MR. SILBERG: I think we are getting confused between what happened with this particular investigation and prior investigations, if I can.

JUDGE BLOCH: Yes.

MR. SILBERG: Is it true that this contractor's program called for an annual review of all of the employee qualifications?

WITNESS EDELMAN: Yes.

MR. SILBERG: And had that review taken place in prior years?

WITNESS EDELMAN: Yes.

MR. SILBERG: So that the review that led to the questioning of this particular individual's qualifications was not the first company-wide review of employee qualifications?

WITNESS EDELMAN: No.

MR. SILBERG: I think you said there were 10 or 12

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people that were -- whose qualifications were questioned in the 1982 review; is that right?

WITNESS EDELMAN: That is correct.

MR. SILBERG: Were those the only people whose records were reviewed, or those were the ones whose records showed an outstanding issue that was looked at further?

WITNESS EDELMAN: Those are the ones that showed the outstanding issue.

MR. SILBERG: Does that clarify?

JUDGE BLOCH: Could you explain how it happens that these 10 to 12 people were hired at all before the checks were completed?

WITNESS EDELMAN: First of all, these people are second level inspection; they are not first level inspection people. They are part of our QC people. In addition --

JUDGE BLOCH: Were they certified to a certain level of quality assurance inspector?

WITNESS EDELMAN: They came in and were certified to certain levels based on their past experience.

JUDGE BLOCH: Different levels based on background checks?

WITNESS EDELMAN: In experience, yes.

JUDGE BLOCH: Which had not been completed, the checks had not been completed.

WITNESS EDELMAN: That's right.

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JUDGE BLOCH: How come that is not a continuing effort rather than an annual one? In other words, you have hired someone and certify them to a certain level without completing the background check. You put that aside and come back to it next year.

WITNESS LEIDICH: Generally what happens is when an individual is hired, his certifications are reviewed, and generally contact is made with the previous employer. The background checks that we are discussing here are complete background checks thatgo back to perhaps as far as high school education with respect to a total documented background check, sending letters to colleges or high schools or former employers and getting documented verification of that individual's employ at that particular job site or his graduation from high school, whatever.

JUDGE BLOCH: So you send off letters right away, or do you wait?

WITNESS LEIDICH: I'm not sure when the letters are sent.

JUDGE BLOCH: I don't understand why you would wait until an annual review to continue following up.

WITNESS EDELMAN: We send the letters off right away. The responses are not all that quick, and on an annual basis, we go back to audit the files to see what is still outstanding, what is still open that has not been responded

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to, a college or one employer before the one before that that was contacted from his last employment.

JUDGE BLOCH: This one person was discharged. What was the disposition on the other 9211?

WITNESS EDELMAN: The other 9211, all of the background checks, the records were received and verified for the previous employment or their educational background or whatever was missing in the file, went back and verified it.

JUDGE BLOCH: The problem on this employee in particular, what was it specifically? What had been classified?

WITNESS EDELMAN: Past employment experience that he purported to have on a given job. He said that he worked for X Contractor. In fact, he was not an inspector, he just worked for the contractor. He had educational requirements from high school or college which, when we went back, they said they never heard of the person, he had never gotten a degree.

JUDGE BLOCH: I thought that the job check was done immediately and it was certifications from particular institutions that you deferred; is that not true?

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WITNESS EDELMAN: When you called the previous employer, did Joe work at this plant site, the answer is from most employers, yes, X worked here from such-and-such to such-and-such.

JUDGE BLOCH: They will not tell you over the phone what level of work he did?

WITNESS EDELMAN: No.

JUDGE BLOCH: You tried but they just won't cooperate?

WITNESS EDELMAN: You get what you can but most places they'll just tell you that certain experts worked for this company from X time to time Y.

JUDGE BLOCH: This is the result of lawyers making companies worried about giving information out because of liability.

(Laughter.)

You don't know that.

WITNESS EDELMAN: I won't answer that question.

(Laughter.)

MR. SILBERG: You're asking my witness for a legal opinion, which he is qualified to give but not in this context.

JUDGE BLOCH: Ms. Hiatt, you may want to take that further.

BY MS.HIATT:

Q The other 9:00 to 11:00 people, did you have any

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belief that they may have made any allegations to the Nuclear Regulatory Commission?

A (Witness Edelman) I don't know.

Q What prompted you to suspect that this person is making allegations to the NRC?

A Based on what I was told and his work habits and work attitudes demonstrated to his supervisor in terms of the assignment he had been given,just did not seem to be performing in a normal fashion compared to other inspectors. This was document in his personnel file in terms of his performance as an inspector.

JUDGE BLOCH: Can you give us some more of an idea of what those deficiencies were?

WITNESS EDELMAN: We assigned a gentleman to work in certain areas. We went up to see if he was working there. He was not there, he would wander off and do different things, whatever he wanted to do. It was not substantiated by me, but it was in the file that this individual had approached contractors on site for a job while he was in our employe. He had not completed his work in a timely fashion and demonstrated other things that he was not performing to the standard that we expected of someone who supposedly had the background qualifications.

JUDGE BLOCH: Would you necessarily check the background of someone who was not doing the job? Isn't that

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enough reason to get rid of someone?

WITNESS EDELMAN: At the time that this work was done, we knew now that this investigation was going on. We knew now --

JUDGE BLOCH: Which investigation?

WITNESS EDELMAN: The one that had started in October that certain allegations were made on site. We were aware that in the industry you just don't surreptitiously fire people without making sure that there is good cause and reason for firing someone.

So, therefore, as part of this background check we gave the actual cause without any question that the individual was not qualified to perform the work. He was released.

JUDGE BLOCH: But if he had not been part of the investigation -- ?

WITNESS EDELMAN: He still would have been released.

JUDGE BLOCH: But you would have released him quicker.

WITNESS EDELMAN: To say we might have been more cautious in this case, probably so.

JUDGE BLOCH: Have there been other situations where QA/QC people have been fired for not performing their jobs diligently?

WITNESS EDELMAN: I would say in most cases where this has happened, people have resigned rather than being fired.

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JUDGE BLOCH: To your knowledge, have people resigned under pressure because the company was dissatisfied with their diligence in QA/QC work?

WITNESS EDELMAN: They were not fired under pressure in terms of --

JUDGE BLOCH: Did they leave after they knew that there was dissatisfaction with their diligence in QA/QC work?

WITNESS EDELMAN: There are several ways of recognizing whether a person is not performing his job, and that is in the annual salary, the performance appraisal treatment of the individual, wherein he reviews his yearly apparaisal performance with his supervisor as to what his goals and expectations are for future advancement in the company.

If it says that his performance has been to date that he has done his job to the minimum standards, his chance for further advancement from this job are not going to be that great. That individual must weigh that recommendation that he is receiving and that evaluation of his performance by his supervisor, as well as his merit increase that he would receive on a yearly basis. Those factors would prompt people to say, I am not going to get anywhere on this job; therefore, I will resign.

If we found someone who was not doing his job, we would fire him at that point in time.

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JUDGE BLOCH: I would hope that most people are treated that way. I'm not sure I'm comfortable with QA/QC people on a nuclear plant being treated that way. You're saying even with a deficient -- with a noted deficiency in performance, you would wait until the annual review?

WITNESS LEIDICH: No. In this particular case --

JUDGE BLOCH: We're not talking about him anymore; we're talking more generally. Personnel policy.

WITNESS LEIDICH: Reassignments are very typical in terms of reassigning individuals to perhaps less, more complex areas. I did want to indicate that that is one of the steps we took with this individual.

MR. SILBERG: Did you say less more complex?

(Laughter.)

WITNESS LEIDICH: I probably did, yes.

JUDGE BLOCH: You meant less complex. So job actions are taken but you don't know of any situation where it was necessary to fire someone outright from QA/QC for non-performance?

WITNESS EDELMAN: No.

WITNESS LEIDICH: That is correct.

BY MS. HIATT:

Q I'm not sure you really answered my question which was, what prompted you to believe this individual was making allegations to the Nuclear Regulatory Commission?

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A (Witness Edelman) Based on that we had indications without names or anything told to us by the Commission that there were allegations being made on site, and that the actions and activities of this individual had demonstrated -- prompted us to believe he was potentially the individual involved.

Q Did you actively seek out the identities of these people?

A No.

A (Witness Leidich) No.

Q I'd like to call your attention to a document which was referenced in OCRE's list. It is Item 30 on the list of material I obtained from the Freedom of Information Act.

JUDGE BLOCH: Ms. Hiatt, before you continue, Mr. Cutchin, was this matter inquired into at all by Staff? The possible relationship between a discharge and an investigation?

MR. CUTCHIN: I have no idea personally, Mr. Chairman. I could find out if the Board thinks that is real important.

JUDGE BLOCH: It's something that the Staff ought to consider. I'm not convinced from the record at this point that it is important, but Staff has better investigative resources than we have at a public hearing.

MR. CUTCHIN: I'm sure, sir, if there was any of

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these assertions that they were made known to the Staff. I just feel confident they were. I can check with the Staff members. You know, each time that there is some assertion -- I'm not sure that this is not something that the Labor Department would worry about more than the Nuclear Regulatory Commission.

JUDGE BLOCH: They would also have to worry about it. I'm not sure that there are no implications for the licensing process.

MR. CUTCHIN: I'm not sure there are none, but I think with the facts that have been elicited here, that there were valid grounds for firing this individual. I would hope that a company would not be put in a position so that it would retain people whom they thought ought to be fired for other grounds just because they made assertions as to QA. I think it's very easy to come up with a theory that if one is suspect and feels he is vulnerable, he will quickly place himself in that posture.

JUDGE BLOCH: We don't know all the facts unless they're investigated. I admit that is a characterization of what we've just heard. An investigation would make me feel more comfortable.

MR. CUTCHIN: If that will make you feel more comfortable, Mr. Chairman, I will ask the witnesses to come up with an answer to your question. I do get a little

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concernedthat maybe the Board wants to exercise supervision over the whole of the QA process on this plant, rather than just look at the specific matters that are put forward as safety problems. But I will make an effor_ to get you an answer to that question.

JUDGE BLOCH: Ms. Hiatt?

WITNESS EDELMAN: May I volunteer another piece of information on this?

JUDGE BLOCH: If it's relevant information.

WITNESS EDELMAN: Before this gentleman was fired, our project manager did inform the NRC that we were going to release this gentleman for cause. We never confirmed or denied that this individual, to us,was the one who had made allegations, but we did inform NRC management prior to taking the action.

JUDGE BLOCH: I want to make clear, I would like to know whether or not an investigation was done. I am not impuning your reputation or anyone else's. It just seems to me that when there is a newspaper article of this sort and there is this kind of coincidence, that the Staff ought to be interested in what happens to its witnesses.

I just would like to know whether they actually do look into that.

BY MS. HIATT:

Q This document, which I would like to investigate

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now is a memorandum for NRC's Region 3 files from Charles Wilde, Investigator, concerning the Perry Nuclear Power Plant former quality control inspector in possession of false AWS certificate. The date on this is March 13, 1982.

A person was found at the Washington Public Power Supply Site who had a falsified American Welding Society certificate.

JUDGE BLOCH: Let's ask if they have any knowledge of that.

WITNESS EDELMAN: This is an internal NRC document which we have seen with the names blanked out.

JUDGE BLOCH: Do you have any knowledge of a person having been found with a false AWS certificate? What item was it, Ms. Hiatt?

MS. HIATT: Item 30 on the list.

WITNESS EDELMAN: The answer to your question is no.

BY MS. HIATT:

Q This person was employed by National Inspection and Consultants at the Perry center --

MR. SILBERG: I would object to any further questions. The witnesses have just said they have no knowledge of this matter. Therefore, further questioning can serve no useful purpose.

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JUDGE BLOCH: I do not see how questioning about this could help if they do not know anything about it.

MS. HIATT: I think it is something important that relates to the types of background checks that are performed on quality control personnel at the Perry site, about the frequency of these checks. I think it would be useful to go into that area, maybe not talking about this person particularly but looking at the more general aspects of this, about how frequently are persons' backgrounds, credentials checked.

MR. SILBERG: The document itself indicates that it is just not relevant here. The last sentence on the bottom of the first page -- and I have never seen this document other than the fact that Ms. Hiatt supplied it to us -- says that the individual whose name is whited out did not perform any inspections at Perry requiring an AWS certificate; so that the fact that on another job there may have been an allegation that this individual had a false AWS certificate has no possible relevance here.

MS. HIATT: I think the point I am trying to make, and I will put it rather bluntly, the individual made allegations to the NRC, was found and fired, and here is a person who worked on the site with a falsified welding certificate that was not found.

JUDGE BLOCH: He also was not certified. He was

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not doing anything to do with certification, is what Mr. Silberg -- there was no problem for the Perry Plant because it may have been falsified but not with respect to this work. It does sound irrelevant to me. If he was doing welding certifications at Perry and he did not have welding qualifications, we would be interested in that, but not that.

In addition, we seem to be going a little bit far afield from the concern with the control of the QA/QC process by management. We are now getting into the details of personnel screening.

MS. HIATT: I think this is relevant to the Comstock problem. The whole Comstock investigation was prompted by allegations from workers at the Perry Plant.

JUDGE BLOCH: We will let you go into that with respect to the individual who you said was discharged who had made the complaint. I don't think it has to do with this other person who was not even doing what he was not certified to do.

Let's go on to something else.

MS. HIATT: All right.

MR. CUTCHIN: Mr. Chairman, would this be an appropriate point to allay the Board's concerns regarding the firing of the other individual? I am told by an individual here who had first-hand knowledge that the Staff was consulted by the Applicants in connection with the firing

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of this individual and that the deputy director of the region, after having been given all of the facts, indicated that the Applicant had very valid grounds for discharging him and had no problems with it.

JUDGE BLOCH: Thank you. No further investigation is necessary.

MR. CUTCHIN: Thank you.

JUDGE BLOCH: Ms. Hiatt.

MS. HIATT: I think I do not have further questions of Applicant witnesses at this time. I may later.

WITNESS EDELMAN: Mr. Chairman, I went back and I looked up some of the numbers that I had to recall this morning.

JUDGE BLOCH: Would you read those, please?

MR. SILBERG: Before we proceed, if we could take just a two-minute recess to make sure we have all of the correct numbers.

JUDGE BLOCH: Let's take a five-minute recess. I have found there is no such thing as a two-minute recess.

(Laughter)

(Recess)

JUDGE BLOCH: Back on the record.

Please state the numbers.

WITNESS EDELMAN: The question that was asked this morning was the total Nuclear Quality Assurance Department

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staffing through the various years, including in the staffing numbers how many of those people were CEI employees versus how many of those were consultant employees. I have gone back, and starting with April of 1978 when I took over as manager of the Nuclear Quality Assurance, I have the following dates: April of '78, and then I go 12/78, 12/79, 12/80, 12/81, 12/92, through April of '83.

JUDGE BLOCH: You skipped 12/81.

WITNESS EDELMAN: This morning I skipped '80. I have every year. In April of 1978, there were a total of 46 people, of which 20 were CEI employees. By December of 1978, we built up a department of 85 people, of which 32 were CEI employees. By December of '79 we had 119 people, of which 46 were CEI employees. By December of '80, we had 130 people, of which 51 were CEI employees. By December of '81, we had 169 people, of which 65 were CEI employees. By December of '82, we had 204 people, of which 81 were CEI employees. As of the end of April, there were 208 people in the Nuclear Quality Assurance Department, with CEI employees numbering 87.

It is important to note that this represents the second level of surveillance people on site. In addition to this, there are over 300 QA/QC people involved from the contractors themselves on top of our own organization. I think these numbers were referenced in our testimony with

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respect to overall planning and our own manning.

Thank you.

JUDGE BLOCH: Ms. Hiatt, do you need to follow up on those numbers?

MS. HIATT: Yes. I think we also asked for a breakdown as far as inspectors, auditors, clerical-type people.

BY MS. HIATT:

Q Is that information available?

A (Witness Edelman) It was not available between 12 and 1. We will certainly develop that list and attach it.

JUDGE BLOCH: Ms. Hiatt, could you tell me why it is going to measure?

MS. HIATT: Well, I think you have to look at the whole quality assurance program, the degree to which it is staffed, the number of inspectors versus clerical personnel. Most of these people are clerks, records-type clerks. It raises a question --

JUDGE BLOCH: We have nothing in the record that shows that. We have a statement that says there were four clerical people out of the first 85.

MS. HIATT: That is right. We are going further throughout the life of the project, and I think it might be useful to have that breakdown.

JUDGE BLOCH: You have not asked them to break it

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down by how many were clericals. Is that the only thing you are really interested in, how many were clerical?

MS. HIATT: I asked how many were inspectors, how many were auditors in that area.

JUDGE BLOCH: Do you have any reason to suspect from the discovery you have done that that is a problem?

MS. HIATT: I don't have any reason to suspect from the discovery, but that is why we are here doing cross-examination.

MR. SILBERG: I would suggest that is not the purpose of cross-examination, Mr. Chairman.

JUDGE BLOCH: Do you have any reason to suspect that the number of clerical workers is too high?

MS. HIATT: No, sir; I don't have any reason to suspect because we are requesting information at this time. We will not know until we see it.

MR. SILBERG: Mr. Chairman, that is discovery, and we are beyond that stage.

JUDGE BLOCH: We also have a further problem, which is that we have no way of knowing what the workload is to know that the number of people is too high or too low even after we get the numbers. I don't know really know how we can ever draw any inferences about the number of people being too low since we also do not have any workload information. I think I have to disallow this realm of inquiry because there has

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been no connection and the discovery process failed to uncover a problem.

MS. HIATT: I have identified another area where I would like to conduct some cross-examination.

BY MS. HIATT:

Q This refers to the documents known as the quarterly reports. I would just like to confirm that Applicants did make these statements concerning the level of activity of the Nuclear Regulatory Commission, primarily in 1981. This again is --

JUDGE BLOCH: Assume that you get everything out of the questions that you would like to. What is it that concerns you? What is the worry?

MS. HIATT: I think, looking at the Nuclear Regulatory Commission, at their degree of oversight in identifying this problem with Comstock -- my basic concern is does the NRC have enough manpower to identify all of the problems that are made available? The reason why we are in this hearing, why this Board did not grant in its entirety the Staff's motion for summary disposition is that the NRC performed a rather extensive investigation into allegations as to performance of CEI's electrical contractor. This investigation was based on worker allegations, and perhaps if these individuals had not come forth with allegations, this problem would never have been suspected whatsoever. So I

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think we need to look at the level of NRC coverage to determine if perhaps these similar problems do extend to other contractors on the Perry site.

JUDGE BLOCH: This was a report that followed up a complaint. You have the report, so you can test with the witnesses from the Staff itself whether the report is adequate. You are also going to be able to question them as to how many people were involved or how much work was involved. Why were you going to talk to the Applicants about this?

MS. HIATT: They have made a statement in the quarterly performance report as to the level of coverage by the NRC in 1981. I think it is important to verify these statements here.

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MR. SILBERG: I think you correctly noted that if OCRE wants to find out the level of NRC coverage, they have got the people here to ask and those people are going to be on the witness stand.

The second point is, the issue is not the NRC's inspection of the electrical contractor area. The issue is Applicant's overview program of its contractors and, specifically its electrical contractor. I think there are two grounds why this line of questioning just is not relevant to what we are doing here today.

MS. HIATT: There appears to be some discrepancy between the NRC Staff's testimony and the statements made herein that I think maybe --

JUDGE BLOCH: What is the nature of the discrepancy and why does it upset you?

MS. HIATT: Applicant's are saying that NRC coverage was reduced drastically during 1981 and the reasons they give here are resulting from both reorganization of the NRC to meet needs identified during studies of the TMI 2 accident, and the policies of the new Administration. I think that needs to be verified if Applicant's did believe that NRC coverage dropped drastica ly during 1981.

JUDGE BLOCH: Why is that relevant to whether or not the Applicant controls the contractors properly?

MS. HIATT: It is relevant to the whole reason why

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we are here. We would not be here, in this hearing, had the Nuclear Regulatory Commission not found this problem with Comstock, which they would not normally find had not persons come forth with allegations. I agree, this is something to cross-examine the Staff witnesses on. I just want to get the witnesses of Applicants to verify the statement that they made in this document.

JUDGE BLOCH: Why we are here, why the Staff did that study, is not the issue here. The issue is whether the Applicant supervised their contractors and, therefore, I must rule that this area of inquiry is irrelevant.

Have you finished with this panel now?

MS. HIATT: Yes.

JUDGE BLOCH: I have no questions on this entire report, which I assure you is very unusual.

MR. SILBERG: My impression was that you had already asked a lot of questions.

(Laughter.)

JUDGE BLOCH: Not on the document.

MR. SILBERG: I see.

JUDGE BLOCH: Do you have questions?

MR. CUTCHIN: I have no questions to ask of this witness -- the witnesses, but if the Board was looking for a way to fill the next few minutes, until four, I was going to offer a suggestion and that be that the Staff, in

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accordance with 2.743 of the regulations, offer the documents that it plans to move into evidence. They being the final environmental statement, the safety evaluation and its supplements.

JUDGE BLOCH: Sounds good, providing Mr. Silberg has no redirect.

MR. SILBERG: I do not believe we have finished cross-examination. I'm not sure the appropriate time is now for redirect.

MR. CUTCHIN: That is my view, as well, since there is a possibility of more tomorrow.

MR. SILBERG: I would like to dismiss this panel and let them get about building and inspecting the plant but I was not sure we were at that stage yet.

JUDGE BLOCH: Sunflower will have an opportunity, in the morning, to tell us what they are planning to do. Let us excuse the panel for the time being.

Thank you very much, gentlemen.

(Panel temporarily excused.)

JUDGE BLOCH: Mr. Cutchin.

MR. CUTCHIN: Mr. Chairman, I would, at this time, like to mark as Staff Exhibits, the following documents: as Staff Exhibit Number 1, NUREG-0884 which is the final environmental statement related to the operation of Perry Nuclear Power Plant, Units 1 and 2.

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(The document referred to was marked for identification as Staff Exhibit No. 1.

As NRC Staff Exhibit Number 2, I would like to have this marked as NUREG-0887, which is the safety evaluation report related to the operation of Perry Nuclear Power Plant, Units 1 and 2.

(The document referred to was marked for identification as Staff Exhibit No. 2.

As NRC Staff Exhibit Number 3, Supplement No. 1 to NUREG-0887, which is the Supplement No. 1 to the safety evaluation report.

(The document referred to was marked for identification as Staff Exhibit No. 3.

As NRC Staff Exhibit Number 4, this is Supplement No. 2 to NUREG-0887, which is Supplement No. 2 to the safety evaluation report.

(The document referred to was marked for identification as Staff Exhibit No. 4.

And finally, as NRC Staff Exhibit Number 5, Supplement No. 3 to NUREG-0887, Supplement No. 3 to the safety evaluation.

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(The document referred to was marked for identification as Staff Exhibit No. 5)

JUDGE BLOCH: Because they are bulky and prepublished, they will not be inserted into the transcript.

MR. CUTCHIN: I have prepared, and have available for the reporter, three copies and in accordance with the rule, I would now like to offer them into evidence and have them so received.

MR. SILBERG: No objection.

JUDGE BLOCH: There being no objections, they are received into evidence.

(The exhibits previously marked as Staff Exhibits 1 through 5 were received into evidence.)

MR. CUTCHIN: Any appropriate portions of the documents related to the individual contentions may be cross-examined on at the appropriate time.

JUDGE BLOCH: Off the record.

(Discussion off the record.)

JUDGE BLOCH: Back on the record. I would like to thank the parties and witnesses for their cooperation.

The hearing is adjourned until 9:00 a.m. in the morning.

(Whereupon, at 3:50 p.m., the hearing was adjourned, to reconvene at 9:00 a.m. on May 25, 1983.)

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CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings before the NRC COMMISSION

In the matter of: Perry Nuclear Power Plant

Date of Proceeding: Tuesday, May 24, 1983

Place of Proceeding: Washington, D.C.
Painesville, Ohio

were held as herein appears, and that this is the original transcript for the file of the Commission.

Barbara Whitlock
Official Reporter - Typed

Barbara Whitlock
Official Reporter - Signature