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UNITED STATES
NUCLEAR REGULATORY COMMISSION

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MEETING OF NRC STAFF
WITH CASE

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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

MEETING OF NRC STAFF WITH CASE

Nuclear Regulatory Commission
7920 Norfolk Avenue
Room P-118
Bethesda, Maryland

Tuesday, November 19, 1985

The meeting convened at 9:02 a.m., Clarence Chandler, Office of the Executive Legal Director, presiding.

ATTENDEES:

ANNETTE VIETTI-COOK, NRR/DL/CPP
T. A. IPPOLITO, AEOD
H. H. LIVERMORE, NRC - Reg. II
C. J. HALE, NRC - Reg. IV
H. S. PHILLIPS, NRC - Reg. IV
C. E. McCRACKEN, NRC/NRR
CHET POSLUSNY, NRC/NRR/DL/CPP
ANTHONY Z. ROISMAN, CASE/Trial Lawyers for Public Justice
BILLIE GARDE, CASE/Trial Lawyers for Public Justice
LAWRENCE J. CHANDLER, NRC/OELD
LARRY SHAO, NRC
JOSE A. CALVO, NRC
VINCENT S. NOONAN, NRC
GEARY S. MIZUNO, NRC-ELD
CHARLES M. TRAMMELL, NRC
RICHARD H. WESSMAN, NRC
SHOU-NIEN HOU, NRC
R. W. HUBBARD, NRC
V. P. FERRARINI, TRT
R. MASTERSON, TRT
W. P. CHEN, TRT
SPOTTSWOOD B. BURWELL, NRC/NRR/CPP
C. D. RICHARDS, TRT
J. H. MALONSON, TRT
M. W. ELI, TRT
R. W. BONNENBERG, TRT
V. W. WATSON, TRT
VICTOR L. WENCZEL, TRT
T. E. CURRY, TRT
WILLIAM C. WELLS, TRT
DAVID L. MEYER, NRC/ADM/DRR/FOIA
JOE CAWLEY, NRC/ADM/DRR/FOIA
AL SERKIZ, NRC/NRR/DST
PAUL KESHISHIAN, TRT-Consultant

-- continued --

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ATTENDEES (Continued):

ROGER ROHRBACHER, NRC/IE
IAN BARNES, NRC - Reg. IV
TONY BUHL, SRT/TUGCO/IT Corp.
R. A. WOOLDRIDGE, Worsham, Forsythe, Sampels & Wooldridge, for TUGCO
WILLIAM S. EGGELING, Ropes & Gray
ROY P. LESSY, JR., Morgan, Lewis & Bockius
JOHN H. BUCK
R. K. GAD, III, Ropes & Gray
WARREN E. NYER, TUGCO/NYER, Inc.
JACK D. REDDING, TUGCO
M. SIVA KUMAR, Gibbs & Hill
DAVID C. GARLINGTON, Southern Engineering
HOWARD A. LEVIN, CPRT
BEN FINKELSTEIN, Spiegel & McDiarmid (Brozas G&T)
JOHN GUIBERT, CPRT/SRT
JOHN KNOX, NRC/NRR
DONALD F. LANDERS, Teledyne Engineering Service

PROCEEDINGS

MR. CHANDLER: Good morning, I'm Clarence Chandler with the Office of Executive Legal Director. This morning there will be a public meeting which has been agreed to between the Staff of the Nuclear Regulatory Commission and Intervenor, Citizens Association for Sound Energy.

Citizens Association for Sound Energy this morning is represented by Anthony Roisman and Ms. Billie Garde. I will turn it over to Mr. Roisman in a moment for any opening comments or thoughts he may have.

Notice of this meeting was provided -- and in addition I see representatives of the Applicant in the rear of the room. Mr. Noonan, in a moment, will make some opening comments, and further discuss the conduct of this meeting.

Essentially, this meeting is being conducted as outlined very generally in the joint stipulation of Staff and Citizens Association for Sound Energy Request for Subpoenas, a document dated October 23, 1985, filed with the Atomic Safety and Licensing Board in this proceeding on that date.

The general subject of this meeting will be a discussion and questioning by Citizens Association for Sound Energy on the matters discussed in the Staff's

supplemental safety evaluation reports 7 through 11, which reflect the reviews and evaluations performed by the Staff's technical review team, or TRT. This meeting is a joint Docket 1 and Docket 2 meeting, and as agreed, CASE's Washington representatives will be asking questions in both dockets.

With that, I will turn it over to Mr. Noonan for any preliminary comments that he may wish to make at this time and for introduction of the other Staff individuals.

MR. NOONAN: Good morning, I'm Vince Noonen. I'm the director of the Comanche Peak project for the Nuclear Regulatory Commission Staff. Just a couple of things I would address to Mr. Roisman and Ms. Garde.

The subject of intimidation and harassment, I know that's part of this case. This particular group of people were not involved in that directly other than they looked at allegations. As you know there was a special report put out by my panel, and they addressed the subject of intimidation and harassment. I have asked the Staff not to use names of allegers even though they may have been made public, since this is a public meeting I asked them not to use names. If that's no problem I would like to proceed that way.

At the end of this session today and also tomorrow, I would ask the Applicant if they wish to make a

comment for the record. One last item of business, I would like to provide some frequent breaks to the reporter so we could stop for a short period of time to allow her to take a quick break.

Other than that, Mr. Roisman, I don't have any other opening remarks. Go ahead and proceed with your questions.

MR. ROISMAN: Okay, Mr. Noonan. Ms. Ellis asked us to have included in the record a one-page statement which attaches the stipulation and simply explains her understanding of the agreement. I've given the reporter three copies, and I will give Mr. Chandler one and Mr. Noonan one, and one for the Applicant's lawyer.

Let me start at the outset by saying what we will do in the next two days is not cross-examination. When we do cross-examination, it will take place in front of the hearing board. Our purpose is a very benign purpose. We simply want to find out in each of the areas that we are interested in what was meant by statements that appear to us to be ambiguous, or it is not clear; and where the statement is clear, and it is not clear why the statement was made, to understand the basis.

Our purpose is not to argue with you or to attempt to pin you to the wall, so to speak. There is a time for that; this is not it. It is not our purpose here.

This is in the nature of what lawyers talk about. This is in the nature of a discovery deposition. I just want to find out what you know, and in the words of Watergate, when did you know it, and that is our only goal.

I realize there's a certain amount of tension that precedes this meeting, and that's probably inevitable on both sides, but I want you to know that at least Billie and I have no particular axe to grind. We come with no predisposition that any statements you made are clearly wrong or, unfortunately, that they are clearly right. What we come for is information.

A lot of the information that underlies the work that you have done has only very recently been made available to us and even larger pieces have not been made available at all. That's not the fault of any of you who we'll be talking to, but there will be times when you will think, why are they asking that, I had a 16-page memorandum that explained it all. Just tell us that, that it is laid out in something.

We have this FOIA request which is being responded to at a pace which is glacial, to say the least. Eventually, all the information will be there, and we will try to not ask you questions that we should know the answer to because we have the material in our hands.

The outline of how we intend to proceed is, to

start with, Mr. Ippolito, who is sort of the grandfather of this project, let him explain to us how it got started, what it is about. We will ask Mr. Ippolito to discuss in some detail the July 13, 1984 report, which was, for lack of a better term, a mini TRT report. And we'll ask Mr. Noonan very briefly to simply indicate to what extent the system that Mr. Ippolito put into place was changed, altered, relied upon or in any other way used for the remainder of what ultimately became the TRT's letters and then after that the SSERs.

We'll then take the SSERs, essentially in chronological order except the one that deals with miscellaneous -- we'll probably do that just before we do QA/QC, so we'll start with number 7, then do number 9, 10, 8 and 11, in that order.

Now, if we are talking about matters that are in one of your areas of expertise to someone who really is not as expert and you want to speak up, it is okay with me. I don't know what Mr. Chandler or Mr. Noonan may have told you but it is quite all right with me if someone says, that's not exactly it, or wait, let me explain, because I was there. That's fine. I'm just trying to get information, and I'll direct my attention to whoever Mr. Chandler and Mr. Noonan say I ought to start talking to, but if somebody else wants to speak up from the Staff,

that's all right with us.

Do you have any questions?

MR. CHANDLER: Let me make one comment. That is in fact the way the Staff intends to respond. To the extent -- and as you can see, there are quite a number of individuals here, you will be hearing from -- likely, from more than simply the individuals at the table, to the extent another individual may have information pertinent to your question.

You alluded in your opening comment to the fact that this is in the nature of a discovery deposition. Just again so the record is clear, this is in the nature of informal discovery. These individuals, unlike a deposition, will not be placed under oath, and let's proceed on that basis.

MR. NOONAN: One clarification, the Staff has been instructed to speak up if somebody in this room has information that's available, they will speak up and tell you that. If something is said wrong, we'll correct it right at the time that we know about it. I want to ask one question: In reading the transcripts next week when we go through them, if I find some errors, I will give them to Mr. Chandler and he can communicate to you what those errors are.

MR. ROISMAN: We hoped you would do that. We

appreciate it.

MR. CHANDLER: Will this document provided by Ms. Ellis be filed in the proceeding or is it simply your intention to have it attached?

MR. ROISMAN: Our intent was to have it bound in with the transcript.

MR. CHANDLER: I have no problem with that.

MR. ROISMAN: Mr. Ippolito, I would like to start with you. Do you have a copy of the June 11, 1984 letter that you sent to the hearing board? Well, I'll go through it slowly enough so we'll be able to talk about the same thing.

In that letter, you state on page 2 of the attachment -- and the letter that I'm referring to until I tell you different is the June 11, 1984 letter to the hearing board that you signed, in which you transmitted to them a copy of the Comanche Peak plan for the completion of outstanding regulatory actions dated May of '84. On page 2 of the plan you indicate "this plan proposes the formulation of a TRT to evaluate and resolve a number of technical issues, including allegations presently identified."

Can you expand a little bit on the scope of what you understood was your mission, and in particular, distinguishing between issues that you were going to look at that came to the Staff as a direct result of an

allegation, and other matters that you were going to look at that didn't have their origin in an allegation.

MR. IPPOLITO: Yes. I think that AEOD stated it on March 12, established responsibility for managing all licensing actions to NRR. This included those actions necessary that are normally performed by the office of investigation, INE: the region, the hearing issues, as well as the licensing issues, and whatever allegations we were aware of. It was principally these four areas that I was responsible to coordinate, and resolve. The plan that you have before you provides -- it includes what a typical plan does include, schedules, manpower estimates, it also includes an estimate of the amount of work that has to be done at the time that plan was written.

MR. ROISMAN: So that your perception at that time of what the TRT's output would be would be --

MR. IPPOLITO: I'm sorry, continue.

MR. ROISMAN: Your perception as of June 11 of 1984 of what the output would be was that it would in effect be the total technical report on the plant?

MR. IPPOLITO: What I described is my responsibilities. As part of that, I established a TRT. That is clearly stated in the plan. The TRT was to investigate the known and existing allegations that were known at the time, and I think that within that, you'll see

the distribution.

My recollection is there's something like 300 or so allegations that were being looked at, then there was something like about another hundred that were being distributed to OI, that remained in the region, and I forget whatever is in there but the parceling of the responsibilities are stated there. As part of the enclosures there are the charts, schedules, with the people responsible for them.

MR. ROISMAN: The part that puzzled me -- and let me read the phrase again -- was, "this plan proposes the formation of a TRT to evaluate and resolve a number of technical issues, including allegations presently identified." Were there some technical issues that TRT was going to look at that went beyond the scope of the allegations?

MR. IPPOLITO: If you looked at the record here, there are areas that are confusing as to what are allegations and what are technical issues. By that I mean if one looks at what has been happening at the hearings, when you speak -- like, in particular I'm thinking about the Welch Doyle issues. These were treated as issues to be resolved.

I had to assemble the people to resolve those issues, but when you looked at the allegations, what you

found is a total overlap. So I wasn't going to have people, two groups of people reviewing pipe hanger design or cable tray hanger design, and it is within that context -- there was an issue ongoing at the hearing that needed resolution. To the extent that the TRT had overlapped in that area, then we would cover it.

MR. ROISMAN: Were there any issues that related to technical problems that the Staff was aware of at the plant other than ones that would go to OI that the TRT was not going to look at?

MR. IPPOLITO: Yes.

MR. ROISMAN: You don't have to list them. Can you categorize them?

MR. IPPOLITO: I would say the licensing issues. For instance, I'll name two that come to mind immediately. One is the TDI, the diesel generators. There's a big problem, there was a generic problem with TDIs. Then we had a request by the licensee on the paint to declare the paint non-Q. It was -- that review was not done by the TRT.

MR. ROISMAN: When you say licensing issues, that's different than hearing issues?

MR. IPPOLITO: Correct.

MR. ROISMAN: Were there any issues -- was the Staff trying to at least encompass all the technical hearing issues within the scope of what the TRT would look

like?

MR. IPPOLITO: I just don't recall. There's a nice chart in that plan that lists responsibilities, and I think that we could save a lot of time if you just refer to that. That's what I attempted to do.

MR. ROISMAN: I'm not good on charts and I can't use the term "nice" for any of them. Why don't you tell me which one you particularly liked?

MR. IPPOLITO: Look at figures 2 and 3 of the plan.

MR. CHANDLER: So the record is clear, that was figures 2 and 3 attached to the letter dated June --

MR. ROISMAN: Attached to the May '84 plan attached to the letter of June 11, 1984.

Did you participate in the decision on how to divide the responsibilities between what the TRT would take, what would be done outside the TRT and by other components of the Staff and what would be done by consultants?

MR. IPPOLITO: Yes, I did, but clearly, a part of my responsibilities -- when I was appointed project director, I was told to attempt to use the line organization to the maximum extent that I could. In other words, those issues that are normally handled by a particular office, to the extent that I could, with resources available and time, what have you, I should try

to coordinate their efforts.

MR. ROISMAN: And in the preparation of this division of labor, what, as you understood it then, what was the operating criteria for whether a technical issue was looked at by the TRT rather than by somebody else?

MR. IPPOLITO: Say that again.

MR. ROISMAN: I'm trying to understand what was the operating criteria by which you decided whether it was to be looked at by the TRT or some other component.

MR. IPPOLITO: Other than those obvious things, I think I looked to see whether the line organization had sufficient expertise, knowledge available within time constraints to work on the job. If not, then I would attempt to supplement the TRT with the right consultant to endeavor to meet those criteria.

MR. ROISMAN: Your answer makes me think I haven't made my question clear. Some issues were to be resolved by the technical review team, whether by technical review team members who were Staff people on assignment or whether they were done by technical review team consultants. Some issues the technical review team was not supposed to look at, someone else was supposed to. One class of those issues was, for instance, all the issues that went to OI. Was there some set of operating criteria that you knew of or planned to develop that decided whether the issue was to

be looked at by the technical review team or by some other component of the Staff?

MR. IPPOLITO: There were no criteria. I decided -- excuse me.

MR. ROISMAN: If someone else has the answer, it may be more efficient to say.

MR. NOONAN: Staff can speak up if they want to.

MR. CALVO: My perception was that we looked at all the issues available at the time, so whether they were going to OI or other people, the technical merits, as far as it relates to the merits, that was given to the technical team.

MR. IPPOLITO: He's asking whether there existed a set of criteria by which a decision was made as to who would work on an item. My response is, like I say in the report here, I decided after examining the item to be looked at where it should be looked at.

MR. ROISMAN: Let's talk for a minute about the decision to give to OI the responsibility for locking at harassment and intimidation. Can you explain to me what it was that you understood was the way that responsibility was to be divided? What was it that OI was going to look at as opposed to what the TRT would look at?

MR. IPPOLITO: OI is responsible for looking at wrongdoing. They and only they are responsible for doing

that. If there were elements of wrongdoing, they would look at that portion of it. We would cooperate -- in their review of investigating wrongdoing there were possible technical issues involved, then we would cooperate with each other. We would extract from that portion of the issue, the technical issues. I would then transform them into "allegations," and insert them into the technical review team review process. But the technical review team, or NRR, as far as I know, looks at wrongdoing, and as I understand it, intimidation and harassment is included as a responsibility of OI. I stand to be corrected but that was my understanding at the time.

MR. ROISMAN: Is it -- I'm troubled by the term "wrongdoing." If a QC inspector -- if you learn that a QC inspector approved something that shouldn't have been approved -- you're doing a review, you find something, you check back and see that he signed off on something as satisfactory and it wasn't satisfactory, and it was a mistake. Is that wrongdoing by the QC inspector, without getting to the question of why he did it?

MR. IPPOLITO: I think it is a judgment call on the part of whoever uncovers this. If it looks like a typical human error, that's one thing. If it was determined to be premeditated or whatever have you, purposefully done, that's another matter. And if we

suspect that it is the latter, then we ask OI to look into it.

MR. ROISMAN: I want to be clear that I understand your understanding of this. The scope of what you understand OI would look at is if somebody appeared to do something wrong on purpose or as a result of somebody else improperly forcing them to do it against their will, that would be an OI concern, although you would still want to have the technical review team look at the underlying technical problem?

MR. IPPOLITO: That's correct.

MR. ROISMAN: Then you and OI would work together to the extent that they needed your input to understand what had gone on, and they would give you the benefit of anything they learned that might reflect on the technical problem?

MR. IPPOLITO: That's correct.

MR. ROISMAN: Did you, at the time that you started this whole TRT process, did you perceive that you would need to have the conclusions from OI before you would be able to have the Staff reach final conclusions about the plant safety? Was that linked in any way at the time you started the technical review team process?

MR. IPPOLITO: Yes. If you read the plan, the plan identifies OI as a possible impediment to meeting the

intended schedule. I think I identified in there that there are not sufficient people to complete these things in time for us to reach a licensing decision around 1 October of '84.

MR. ROISMAN: And why was it necessary to wait for OI to finish its work in order for the Staff to complete its work on the review of the plan?

MR. IPPOLITO: At the time, I thought it was necessary.

MR. ROISMAN: What was your reason or why did you believe that?

MR. IPPOLITO: Since effectively, I had the responsibility for total integration of all issues to their conclusion, that's the primary reason for it. I thought I had to wait to see what affect the OI reports could have on Comanche Peak.

MR. ROISMAN: In your determination to divvy up the responsibility for review between OI and the technical review team on issues of wrongdoing, where did you place the phenomenon, if it was one that you were aware of at the time, of employees who were not being forced to do something that they didn't believe they should do, but employees who believed that management was insufficiently supportive of their work and thus they were discouraged from doing their job as they thought they should do it?

MR. IPPOLITO: You should realize that when I assumed responsibility for Comanche Peak, I don't recall, as project director, requesting of OI any -- I take that back. There were about two instances that I wrote OI and asked them to look at something. Let's say a majority of the effort that was being done by OI had already been established there. I think we had some two, possibly three minor references for additional OI investigations as a result of what we as a team uncovered.

MR. ROISMAN: What was your definition, what was your working definition at that time, of what constituted the wrongdoing of harassment and intimidation? And by "that time," I'm talking about around June 11 of 1984.

MR. IPPOLITO: I personally had a difficult time in my mind separating management's style from intimidation. And this is after having read some of the OI reports. This uneasiness, I guess, stems from my personal background and personal knowledge of management, both here in the government, I mean in the Nuclear Regulatory Commission, and with the Navy, nuclear power program. But intimidation was defined, since it was the responsibility of OI, it was defined by OI at the time.

I think that subsequent to that, there were some formal hearings, pleadings, or whatever they are called, that established a definition of intimidation, so we

operated with that definition from that point on.

MR. ROISMAN: And this difficulty in your own mind between intimidation on the one hand and management style on the other, was it your perception that management's style was benign but intimidation was something of concern, and you just had a hard time drawing the line between the two, or was it that you thought they were both unacceptable and therefore the line-drawing was not so important?

MR. IPPOLITO: We're speaking theoretically here. There's an obsessive type of management style which is clearly unacceptable, but whether or not it results in intimidation, that's another issue. That's my personal feelings on the subject.

MR. ROISMAN: Now, when OI was doing its work as a result either of matters that you had referred to them because of what you were finding in your investigations or as preexisting work, was it your understanding that they were operating independently of NRR or were they operating under NRR's supervision?

MR. IPPOLITO: Oh, they were independent. They are independent of NRR.

MR. ROISMAN: Now, on page 3 of the May 1984 plan, there's a reference to -- and it says, "The technical review team may be called together for a specified period of time, dispersed back to the individual's parent office

and then reconstituted in whole or in part as needed to complete resolution of like issues." What was your understanding of what that meant and how you thought that the TRT was going to function?

MR. IPPOLITO: As project director, at least, one has to realize that the home offices for the people I'm working on Comanche Peak with would like to have their people back and functioning. That simply is a warning to everybody that I have on my technical review team that I reserved the right to call these people back should something develop after they have, let's say, completed their initial assignment. It was just, you know, a caveat that says, I still have them if I need them. That's all. It was just a thing of planning.

MR. ROISMAN: What was your understanding, again at that time -- and I want to keep stressing that, I'm interested in understanding the breadth of the project, and I may ask you later, certainly Mr. Noonan later, its evolution -- but at that time, what was your understanding of what would happen with respect to technical issues that arose as a result of allegations made after the date that technical review team was formalized? Who was going to have responsibility to look into those allegations, and where would those be taken care of?

MR. IPPOLITO: All allegations -- let me give

you some background. One of the first things I did, and I think anybody would do, is to find out exactly what has to be resolved, how much work there is out to be completed. One of the items was to try to reconstruct or to construct, identify all of the allegations that we had in hand at the time. We did this. We categorized them into the five groups, and as you read the plan, that's what the plan says.

What we did was that everything from, let's say, around March or April, every allegation that came into the technical review team, it was reviewed and categorized and put into -- assigned to the appropriate group within the technical review team. That's the way it functioned until I left.

MR. ROISMAN: Did you have -- let's assume that something that didn't happen had happened, and I want to know based on that assumption what you thought was going to be the way the technical review team would deal with it. Sometime after the technical review team had completed its work and issued its report, several allegations were made to the NRC that require investigation. Did you expect that if that should happen that that would be one of the occasions on which you might reconstitute in whole or in part the technical review team to evaluate those?

MR. IPPOLITO: No. It was clearly my intent at that point, in fact I was proceeding at the time of the

fifth session, to discuss turnover of allegations back to region 4. It was just preliminary. We had intended to do that. They were going to revert back to region 4 and their normal course of doing -- I mean maintaining and reviewing the allegation tracking system and to proceed along those lines.

MR. ROISMAN: Was it your perception that the purpose of the technical review team was merely to provide logistics support for the Staff to be able to deal with what was becoming a large volume of work that could not be handled in the normal channels, or did it have some purposes beyond that?

MR. IPPOLITO: I think you used the word logistics, and clearly that's not correct, my understanding of it. It is to provide resolution of those issues. Is there a problem or is there not a problem for those allegations that we were looking at? Clearly, that was it. But you have to remember, as I said earlier, that I was to use, to the extent possible, the line organizations whose responsibility it was to perform the functions they did perform, so once we caught up, then I expected the normal functioning of each office to take over and proceed and continue to do its business.

MR. ROISMAN: How did you plan to deal with the fact that people, let's say from other regions, who were

working on assignment from TRT or from headquarters working on assignment with the technical review team, and had developed not only an expertise in the subject area but also an expertise in this particular plant, how did you perceive that they would be brought into a subsequent evaluation of an allegation when it was only going to be done within region 4, as the technical review team didn't exist?

MR. IPPOLITO: I would think that when I turned the thing back to the region, the region would manage it as they see fit. If they thought they needed that same expertise that I had developed under the technical review team, they would ask for it and get it. These are just guesses. I really don't know. I anticipated to return this to the region and that they would manage it as they saw fit.

MR. ROISMAN: You did not feel that you needed the technical review team because the region did not have the technical expertise to evaluate some of these issues?

MR. IPPOLITO: Say that again.

MR. ROISMAN: Did you feel you needed a technical review team in part because the region did not have the technical expertise to evaluate some of the issues?

MR. IPPOLITO: That was part of the decision-making. The other was the large backlog. The

other was -- I think you recall the region was pretty well committed to providing much of their Staff to the Waterford construction program, and there just were not enough people around.

MR. ROISMAN: On page 5 of the May 1984 plan, under the general heading "Inspections, regulatory actions," this sentence appears: "Particularly significant is the retest/inspect effort as the applicant plans to rerun approximately 25 preoperational tests to confirm system readiness subject to various modifications and design changes." Was it your understanding that what was being proposed to be done by the applicant was to use some form of a readiness review of modification design change work in lieu of something else, to establish the adequacy of the modifications and the design?

MR. IPPOLITO: I don't know. I'm not even familiar with what you're saying.

MR. ROISMAN: You're not familiar with the sentence?

MR. IPPOLITO: I'm familiar with the sentence, but what you added to the sentence, I can't follow.

MR. ROISMAN: Are you familiar with the concept called readiness review? Does that have any meaning to you?

MR. IPPOLITO: Not right now, no.

MR. ROISMAN: Was it your understanding that the

applicants were going to do these preoperational tests as a substitute for some other regulatory requirement?

MR. IPPOLITO: My understanding of what this is, and if I -- I stand to be corrected -- and that is the applicant had run a large number of tests, but subsequent to those tests, the system had undergone modification, which placed into question the suitability of those tests, and as a result, they had to retest. This required additional manpower to rewitness or to inspect those tests, and that is what this alludes to.

MR. WESSMAN: This is Dick Wessman from the Staff. Fundamentally that's correct. This is typical of most power plants, they may run tests and may run over a couple of years, modifications may be made or test data may be invalidated so they have to rerun selected tests to confirm that the plant or the systems meet the appropriate criteria, and that was what was going on at this point in time.

MR. ROISMAN: It wasn't your understanding that the tests were being run as a substitute for confirming that the modifications or design changes otherwise met regulatory requirements?

MR. WESSMAN: I don't know about the term "substitute." They were just having to rerun tests because changes had been made to systems or test data had not been

completely validated in a previous run of the tests.

MR. ROISMAN: I want to understand a little bit more about the -- your understanding of the difference between the wrongdoings issue and its review by OI, and the effort by the technical review team. Let me try to approach it this way: When the technical review team had an allegation of a particular technical problem, let's assume that the allegation comes from someone who said, in addition to the fact that I think this particular component of the plan is not properly built, the reason I never said anything before was because I was being pressured to keep quiet about it; so we have a technical problem and we have what I assume would fit your definition of a wrongdoing.

Was the technical review team supposed to find out the answer to the question, why did this technical problem, assuming that on investigation you found the technical problem was real, why this technical problem did not get reported in the informal system of reporting at the plant? Was that part of what the technical review team's mission was to do?

MR. IPPOLITO: Part of the technical review team's mission was where a possible wrongdoing such as that was uncovered, what we do is ask OI in a memorandum for OI to initiate an investigation of that. Meanwhile, I would follow that up with discussions, I or my immediate staff,

to assure that we had a coordinated review of that item, both technical and wrongdoing.

The logic, I think, is clear. If we go in first, we stir up the information, the information may not be as clean for the subsequent investigation, so if we both go in at the same time, ask our questions quickly and of the right people, then we both satisfy ourselves that we got the best information possible to address the issue. So in those cases we would try to coordinate our technical review team effort and the OI effort, and we did that a number of times on-site.

MR. ROISMAN: My question was, was part of the technical review team's mission, as you understood it, to answer the question, why? Why is this technical problem, assuming that after looking at the allegation you confirm that the technical problem had in fact not been previously identified and it was a real problem that should have been, why it wasn't previously identified? Was the technical review team ultimately supposed to have an answer to that question?

MR. IPPOLITO: No. OI would have an answer to that question. OI would investigate that wrongdoing.

MR. ROISMAN: Let me change the example. Assume that the problem arose, alleger came in to you, said there's a technical problem over here that has not been

detected before, and the reason was because the inspector who was supposed to have detected it was not properly trained and did not therefore understand that that was a problem. I take it that would not constitute an OI wrongdoing. Would you consider that the technical review team was supposed to not only determine whether the technical problem was real, but also try to determine why it was that the technical problem had not been reported?

MR. IPPOLITO: We would investigate the sufficiency or adequacy of the training program for those people.

MR. ROISMAN: Was that in part in order to be able to determine how much further beyond the allegation you should look to determine -- in other words, this alleger only saw one thing and they only knew this one inspector who they thought had not been properly trained, so they gave you that piece of information. You go out and investigate it and find that the technical problem is real. You look at the inspector's qualifications and discover he really wasn't qualified, and therefore we think we can say with a reasonable degree of confidence, the reason the technical problem was missed was the guy wasn't qualified.

Was it the technical review team's responsibility to begin to look at all the other places where the lack of qualification of that person might have

produced a problem that no alleger had ever seen?

MR. IPPOLITO: I was following you right to the end.

MR. ROISMAN: A problem that you didn't otherwise know about, this same inspector inspected a thousand things.

MR. IPPOLITO: Using your example, the technical review team would pursue the training to see, to try to determine whether or not in our opinion it was generic.

MR. ROISMAN: You mean the inadequacy of training?

MR. IPPOLITO: That's right. This is not to say that we would go -- and let's say if there were 8000 people on site -- we would not go see the training records for 8000 people. We would audit until we were satisfied that it looks like there's a generic problem here. Once we were satisfied, that there was or wasn't, then we would stop. That's the way we performed our responsibilities.

MR. ROISMAN: What about looking at the other piece of it? Let's assume that in your look, as a result of this allegation, you found not only that this technical problem had occurred, but that on this inspector, A, inspector A was unqualified, and that it was a result of something that didn't relate to other inspectors, only inspector A was unqualified. He was really badly trained,

didn't know what he was doing. Would the technical review team consider that part of what its responsibility was, then, to go and inspect all of the things that that inspector had evaluated to determine whether other technical problems slipped by the process because this one untrained inspector was doing the inspections?

MR. IPPOLITO: No. We identified -- the modus operandi, if you will, of the technical review team is to determine whether or not they feel, after doing their review, that there was or was not -- that the allegation was substantiated or not. If it wasn't substantiated we would stop there, and the burden as to the depth and breadth of that problem was placed on the licensee.

MR. ROISMAN: Do you know why that decision was reached, why it was decided that the technical review team would stop at that point?

MR. IPPOLITO: Because I could not possibly follow that course of action in everything that technical review team was doing. The 40 or 50 people on site was totally inadequate to review each of the things for breadth and depth. That was not the way we set it up and clearly not the way -- we just couldn't afford it and it was not or responsibility.

The responsibility for building that plant, for building it safely, was the licensee's, and once we had the

suspicion that they were possibly not comforming then it was up to him to provide the depth and breadth and provide corrective action.

MR. ROISMAN: Why did you not stop with confirming that the technical problem was real? Why did you even go the next step in our hypothetical and look to see if the training program was generically defective?

MR. IPPOLITO: As far as I'm concerned that's another technical issue. It would be a QA/QC issue. Was the training program adequate?

MR. ROISMAN: Isn't it also a technical issue as to whether or not that QA or that group of QC inspectors may have missed a thousand other defects?

MR. IPPOLITO: I've answered that. I've said we looked into it to the extent that we are satisfied that there is or is not a problem. If there is, if we're convinced that there is, we don't go back to see if the man had been there seven years, we don't go back seven years to find out what the man did. That's up to the licensee to do and that is what he was told to do.

MR. ROISMAN: I understood the conclusion, I was trying to understand the reasoning.

MR. IPPOLITO: The reasoning is it is impossible for the technical review team or any other group to come in after the plant is built to try to -- we don't have enough

people nor enough time to go into that depth, and it is the responsibility of licensee's, in any event.

MR. ROISMAN: I was trying to understand why the technical review team even took on the responsibility of finding out whether in their judgment they thought that the problem was generic or not. Why wasn't that also treated as the licensee's responsibility? Why wasn't it sufficient for you merely to confirm that the alleger's statement that this particular defect had gone undetected was correct and then say to the licensee you find out whether it is generic, find out what caused it and do whatever reinspection or rework that leads you to.

MR. IPPOLITO: I think I wanted to satisfy myself that is this an isolated case or is this larger than isolated. Clearly, you are right, it takes us a step further, but it still is an audit to the extent that we could say, I believe it is generic or from what I have seen, it is not generic.

MR. ROISMAN: As you went through the work you were doing, did you develop any opinion as to whether or not you felt that the approach that the technical review team was taking, this distinction that we have been talking about, wrongdoing goes to OI, we look for whether a problem is generic but not necessarily the full breadth and depth, whether you would be able at the end of the technical

review team to say with confidence that the facts justified them, that the plant was safe or you felt that the only thing the technical review team could do was to determine whether it was indeterminate or unsafe?

MR. IPPOLITO: I have no idea how to answer that question. My personal opinion --

MR. ROISMAN: Did you think that the technical review team was inherently incapable of saying this plant is safe, was that really beyond what it could ever do?

MR. IPPOLITO: Clearly, the responsibility of the technical review team was to identify those areas of weakness that we discovered during our review. The applicant is responsible to take that and to determine the extent and breadth of the problem. Apparently that's happening now.

MR. ROISMAN: Is it correct that your immediate supervisor, the one who established what would be your marching order, so to speak, was Mr. Eisenhut?

MR. IPPOLITO: That's correct.

MR. ROISMAN: And that you met with Mr. Eisenhut, I assume, on a number of occasions even before you developed the technical review team plan to determine how you should approach this, is that how you approached that?

MR. IPPOLITO: The answer is I met with Mr. Eisenhut many times between my initial assignment and

the development of the plan, but the responsibility for the plan was mine. What I needed was mine. How I would do it was mine. I put it down on paper, and it went through the normal concurrence chain, and it was developed by me, and he concurred in it, and as you can see from the front of the plan, so did the other responsible office directors.

MR. ROISMAN: So the plan originated with you and then Mr. Eisenhut had to review it and approve it rather than he giving you the outlines of the plan, saying, fill in the details?

MR. IPPOLITO: That's correct.

MR. ROISMAN: Ms. Garde wants to ask you some questions dealing with what we have called -- I don't know what you call it -- the surprise visit in April of 1984, and she will ask you some questions about that.

MS. GARDE: I have a cold, so if I am not coming across clearly just ask me to repeat the question.

The report, your report dated -- the cover letter is dated July 13 from Mr. Eisenhut to Mr. Spence, which is the cover letter for the special review team report. It starts out with an executive summary and then goes into the background for each section, and under section A, management organization, you talk about an entrance meeting, the afternoon of April 3; and do you have this report with you?

MR. IPPOLITO: No.

MS. GARDE: I'll read you the sentence then. "The afternoon of April 3 the special review team arrived on site unannounced. The team spent the afternooon of April 3 and the morning of April 4 meeting with applicant's senior corporate management, site management, site QA management and document control supervision, being briefed on the organization functions and locations of areas under their control." I have some questions on that.

MR. IPPOLITO: Go ahead.

MS. GARDE: In the categories of personnel that you met with, senior corporate management, did you attend all these meetings?

MR. IPPOLITO: No.

MS. GARDE: Were you at the meeting with senior corporate management?

MR. IPPOLITO: Yes.

MS. GARDE: Who was at that meeting?

MR. IPPOLITO: Oh, God.

MS. GARDE: Let me give you names. Was Mr. Eisenhut with you?

MR. IPPOLITO: For the Staff? I was senior Staff representative there. Paul Bemis, the special team leader, was also there. That's my recollection. We met with Mr. Fiker, I think maybe John Merritt, to tell them,

we're here, we're going to do a job, we want your cooperation, we don't want any impediments of doing a quick look.

MS. GARDE: This meeting was on the site?

MR. IPPOLITO: Yes.

MS. GARDE: Mr. Fiker was on the site.

MR. IPPOLITO: Correct.

MS. GARDE: Is that what you refer to when you say applicant's senior corporate management?

MR. IPPOLITO: Yes. The only time we met with management was at the site.

MS. GARDE: So this --

MR. IPPOLITO: I call Lou Fiker corporate management. I think he was executive vice-president or vice-president.

MS. GARDE: This paragraph, then, does not include the reference to the meeting between Mr. Eisenhut, Mr. Hayes and Mr. Britten, that's not referred to in there?

MR. IPPOLITO: No.

MS. GARDE: Okay, then the next, do you remember anyone besides Mr. Fiker and Mr. Merritt being at that meeting? Was Mr. Tolson at that meeting?

MR. IPPOLITO: I just don't recall.

MS. GARDE: The next category that you name -- going back to this meeting and to each of them that I talk

about next, if there's minutes of this meeting --

MR. IPPOLITO: No.

MS. GARDE: There was none -- that you prepared?

MR. IPPOLITO: There were, to my knowledge, there were no minutes. The report that you see is intended to tell you the whole story of the special review team.

MS. GARDE: But there are drafts to this report?

MR. IPPOLITO: I don't know.

MS. GARDE: If the FOIA office says there are drafts to this report --

MR. IPPOLITO: Then they exist.

MS. GARDE: The next category is site management which is different in this report than site corporate management. Who does that refer to?

MR. IPPOLITO: I don't know.

MS. GARDE: Do you want to look at this?

MR. IPPOLITO: Yes. Wait, she has one. What page is it?

MS. GARDE: Actually, I think it is page 3 that doesn't have a page number on it, right after the table of contents.

MR. IPPOLITO: It does have a page number.

MS. GARDE: Starts A, management organization. Do you have that?

MR. IPPOLITO: Oh, you have a different --

MS. GARDE: Okay, I think we have the same thing but you are back after the executive summary.

MR. IPPOLITO: What I have is not -- yours and ours are different. You must have a previous draft or something.

(Discussion off the record.)

MR. NOONEN: Back on the record.

MS. GARDE: Tom, during the break, we coordinated our --

MR. IPPOLITO: Let me try to reconstruct what happened.

MS. GARDE: Okay, that would be good.

MR. IPPOLITO: The whole endeavor was for me as new project director to find out what was happening first hand as quickly and without any -- try to make it as complete a surprise as possible. When we hit the site, often I have to talk to management, saying I'm here to do my thing, and I would like certain things from you, and get their cooperation. And that was achieved. That was with senior corporate. Then we had a number of other meetings. My recollection is, like, the document control was unique to Comanche Peak, so we got site management/head of document control to describe the process to them. We tried to do that up front so we could understand the system at that plant at that time. These were these various levels

of meetings that we had. From that, we just, then, each of the specialists that I had went out and started his investigation.

MS. GARDE: Okay, let me back you up a little bit. For senior corporate management you named Fiker and Merritt. Site management, that's where we broke, you hadn't named anyone. Have you -- who was --

MR. IPPOLITO: I remember Vega was there. George may have been there, should have been there.

MS. GARDE: You don't remember?

MR. IPPOLITO: I just don't.

MS. GARDE: Site QA management?

MR. IPPOLITO: I guess that was Vega, wasn't it?

MS. GARDE: So your only recollection is Mr. Vega?

MR. IPPOLITO: Yes.

MS. GARDE: You don't recall whether Mr. Tolson was there?

MR. IPPOLITO: No.

MS. GARDE: Document control supervision, Mr. Hutchinson?

MR. IPPOLITO: I don't know.

MS. GARDE: To the best of your knowledge there's no notes of these meetings that would indicate who was at them?

MR. IPPOLITO: No.

MS. GARDE: You said that you wanted this to be as complete a surprise as possible. Was it a surprise?

MR. IPPOLITO: From the look on Mr. Fiker's face, it was.

MS. GARDE: What did you tell Mr. Fiker was your task when you arrived?

MR. IPPOLITO: As stated in the report. We wanted to determine the degree of management control over construction, inspection and testing, and I wanted to get information on which to base -- help me develop the plan.

MS. GARDE: Did you tell him that you were going to be looking at allegations?

MR. IPPOLITO: No. Excuse me, I said that -- I just told them two things as stated.

MS. GARDE: Management control and information which would serve as a basis for --

MR. IPPOLITO: That's correct; that's all he knew.

MS. GARDE: Did you tell him that you were going to be going out on the site doing actual inspections?

MR. IPPOLITO: Yes.

MS. GARDE: And did you tell him you were going to need access to documents from the vault?

MR. IPPOLITO: Yes.

MS. GARDE: What was --

MR. IPPOLITO: I'm sorry, you're saying something now -- we tried -- I think the answer to that is no. I didn't -- our purpose is to try to hit the vault and see what's there at the vault at the time without pre-knowledge. So to the extent that we could do this, we did. We knew where the vault was and that was the purpose of the initial meetings, get the lay of the land; where is what; how is it supposed to work. And then we hit the vaults and we hit the different -- one or two, I think, of the document control satellites, and the other things we did.

MS. GARDE: Mr. Ippolito, in your experience at the NRC, how common is the type of surprise, unannounced visit that you made on April 3?

MR. IPPOLITO: I personally do not know of any other that's ever been done. There may have been, but I'm not familiar with them.

MS. GARDE: Now, what was Mr. Fiker's reaction?

MR. IPPOLITO: His reaction was surprise but cooperative.

MS. GARDE: Now, if you go through the next several pages, a little over two pages, of your report, you talk about management organization, how the project is set up, and at page 2 you say, "The current positive management

attitude is a strength exhibited at Comanche Peak for both operations and the engineering and the construction sides of the company." What is the basis for that statement?

MR. IPPOLITO: Let me set aside that question for a moment. The very purpose of this report was not to resolve technical issues. It was to determine the degree of management control over the construction of that plant and to give me information on which to base a plan to do what I was asked to do. That's all it was. I personally -- if you want to go to that level of detail, I cannot go to that level of detail. The people involved that were involved in doing this could answer that, and that is the team people themselves.

MS. GARDE: Well, Mr. Roisman is going to ask the questions on the executive summary. Maybe it would be appropriate for you to go through those first, Tony, and then I'll follow with the follow-up questions. We'll go through the executive summary first, and then if you have not answered or there's something to be clarified, I'll pick it up.

MR. ROISMAN: Let's start with, in light of what you just said to Ms. Garde, are you the author of the executive summary?

MR. IPPOLITO: No.

MR. ROISMAN: Who is?

MR. IPPOLITO: Paul Bemis.

MR. ROISMAN: Do you endorse what's there?

MR. IPPOLITO: Yes. I signed it.

MR. ROISMAN: Did you endorse it because you knew it was right or because you trusted Mr. Bemis wouldn't have said it was there if it wasn't right?

MR. IPPOLITO: I selected the people. I had good people. This was the conclusions of their findings, and that was satisfactory with me.

MR. ROISMAN: Looking at the executive summary on page 4, this statement appears: "The team's findings indicated that the applicant's management control over the construction, inspection and testing programs is generally effective and is receiving proper management attention." What is meant by that statement?

MR. IPPOLITO: Within the context of this quick look, the degree of control of the applicant's management, I had to determine as to whether construction should continue. Some of the information that I was receiving early on was describing the construction control as out of hand. I had to make the finding personally myself whether or not this was in fact the case. Is construction out of hand, and what that means is that, hey, we looked, 10 days or whatever it was, less than 10 days. What we saw, it is not out of hand. That's all it says.

MR. ROISMAN: Did you look to see whether management was in proper control or was it only relevant for purposes of this look?

MR. IPPOLITO: This look only.

MR. ROISMAN: To determine that they were in charge, not that they were doing the right thing, but whatever was being done was being done at their direction?

MR. IPPOLITO: I don't know how to separate the two.

MR. ROISMAN: For instance, to use a hypothetical, I take it they could have been in control of a massive program of harassment and intimidation, which they were firmly behind, 100 percent, everybody in control and everybody was marching in lock step to the orders that came down from control. That would be controlled action, correct?

MR. IPPOLITO: Yes. That's not what I had in mind.

MR. ROISMAN: Tell me what you had in mind.

MR. IPPOLITO: What this report says, in total, says we went and looked at various aspects. When we went to look, we looked at -- and it identifies to you the papers they looked at, the NCRs and the inspection reports and packages out of document control. What I saw there does not indicate to us that this is out of control. They

examined them. They were in order for the most part. What's here is not out of control.

MR. ROISMAN: So your statement was intended not only to communicate --

MR. IPPOLITO: Sorry, not my statement.

MR. ROISMAN: You signed it.

MR. IPPOLITO: All right, I see what you mean. Fine.

MR. ROISMAN: If your signature on it means that I shouldn't use the phrase, "your statement," tell me so and I won't --

MR. IPPOLITO: I'm responsible for this document.

MR. ROISMAN: Is it all right with you if I call the statements your statements?

MR. IPPOLITO: So you understand I'm responsible for this document. I would have questioned anything that I thought was not supported.

MR. ROISMAN: You made an effort to determine with respect to these statements what the basis was?

MR. IPPOLITO: Based on what the information is here.

MR. ROISMAN: Just what we find in the report was the basis you used for determining that the executive summary was or was not supported?

MR. IPPOLITO: That's correct.

MR. ROISMAN: You made no effort to evaluate whether the report itself had a basis?

MR. IPPOLITO: I couldn't have. Six individuals -- the logistics as well would not have allowed it.

MR. ROISMAN: Did you make an effort to take a few isolated instances to see, in your judgment, you thought they had done the proper job reaching conclusions based on what they had learned?

MR. IPPOLITO: Paul Bemis was satisfied that these were in fact -- that in fact did happen.

MR. ROISMAN: Do you know whether Paul Bemis went to his individual people and in effect questioned them to make sure that they had a good basis for what they were saying?

MR. IPPOLITO: That's my understanding.

MR. ROISMAN: Did you ever ask him that question, do you remember?

MR. IPPOLITO: No, but what I did say was I wanted to be sure that everyone on the team agreed to the report in its final standing, and they all agreed to the report in its final standing.

MR. ROISMAN: As written?

MR. IPPOLITO: As written. Everybody agreed to it.

MR. ROISMAN: Everybody thought it was right.

Is it your understanding that the basis for -- just looking at this statement for a moment -- that the real basis for this statement is the material gathered by and observed by the members of the special review team which is just summarized in the report -- these other data that would form the basis for this, including their own observations?

MR. IPPOLITO: I think when you look through the report, if you look through the report, it mentions what they looked at. They looked at certain NCRs. I'm looking at page 34. "Review of the design calculations for pipe support." They looked at support and list exactly what they looked at. They told you exactly where it was. This is what they looked at, and based upon what they looked at, okay, and this is exactly what they did. So it wasn't -- and here on page 28, conduits. They list exactly what conduits they looked at.

MR. ROISMAN: I just wanted to be clear that it is not the basis for this statement, and the same statement or an expanded version of it appears in the body of the report on page 2, which is what Ms. Garde had read to you before we went back to the executive summary, the basis is not just what is in the report but it is also what the report references as having been looked at?

MR. IPPOLITO: Yes.

MR. ROISMAN: Do you know what criteria were used for making the judgments as to whether, based upon that data that was looked at, one would say that management did or didn't have control, did or didn't have a positive attitude?

MR. IPPOLITO: Information, I believe, is within this report. What this report is telling you is that they examined the program. Was the program all right? Talking about management QA/QC, for instance. We went, in fact, I think Paul Bemis himself went to corporate headquarters and looked at the QA/QC program. What it is supposed to be, and based upon the plan that was approved by the NRC or the ASME codes, whatever the ASFR and the requirements were established for whatever we're looking at, formed the basis for them to look at.

MR. ROISMAN: I understand that, but if the report had contained in it statements that said, we looked at this particular drawing and the drawing conformed to procedures, then I could understand without asking further how it was that you could determine the drawing conformed to procedures. It is when the report includes statements such as those that are more general, "Management control over construction inspection and testing programs is generally effective and is receiving proper management attention." How did you know that you had looked at enough

of the plant in that visit to be able to have a conclusion on that? What criteria were you using to decide whether you could give a positive answer or give an indeterminate or a negative?

MR. IPPOLITO: I made a statement earlier about what this report should be used for. It was -- it was a quick look at that moment in time. Does it look like there is control? The technical review team did the rest of it. This just allowed me to say it looks like they are in sufficient control for them to continue while the technical review team does its effort. I made this abundantly clear in new reports, and Ms. Garde is fully aware of how this report at the time was taken out of context. I placed it in its proper context.

It is a very special report. It was a quick look to do two things and it did it. Didn't say to establish acceptability of the QA/QC program forever and ever. The team did not have the knowledge of all of the allegations of all of the issues when they went down there. They looked at just what they had in their hands at the time. It was a quick look.

MR. ROISMAN: I understand that. I'm not trying to ask you the question of whether or not this report represents the definitive answer to the question. What I'm trying to understand is, what were the criteria that were

used for purposes of this report to be able to answer the question at all. Did you, for instance, have in your head before you went down there that if half of the problems that were alleged to exist were found to exist that you couldn't make this kind of a positive statement about management control, or did you -- what criteria did you use to decide whether you could make the statement or not?

MR. IPPOLITO: I was prepared to report back to Mr. Eisenhut if this team found that there was not sufficient management control over construction, and I would, based upon my judgment and the team's input, I would make a recommendation to Mr. Eisenhut as to what to do at that point. That was clearly -- we thought of the possibility of that and we were aware that that might happen. But based upon the various elements of this report, the five areas or six areas looked at, this is the sum of those five or six areas.

MR. ROISMAN: We're still passing in the night. I'm afraid that you are treating my questions as a challenge to the correctness of the conclusion. That's not the purpose of it.

MR. IPPOLITO: No, no.

MR. ROISMAN: The purpose is to understand the basis for the conclusion. I can understand in the report the basis for a conclusion that a pipe support base plate

design using concrete expansion anchor bolt requirements was evaluated and a conclusion was made about it. There are written criteria that deal with those issues. Your people went down, presumably looked at the relevant documentation, compared it to the requirements and came up with a yes or no. This one I can't find any written criteria, so I'm trying to find out what were the criteria. How did you know that they didn't have management control? What factors would you look for or what factors did you look for to decide the answer to that question?

MR. IPPOLITO: What we looked at were the drawings, in fact, controlled effectively. That is, there is a procedure set up to control drawings. We, the team, became familiar with those procedures. Were they in fact controlled according to those procedures? For each of the areas looked at that was the type received in storage, the procurements, all things were looked at, the procedures that established were accepted by the NRC Staff as an overall program. The answer is yes.

MR. ROISMAN: I'm glad you mentioned drawings. Let's take a look on page 6, still in the executive summary. Page 6 under the general heading "Quality Assurance/Quality Control," under the category 2, weaknesses, "Both of the weaknesses appear to relate to problems with drawings. Number of the strengths, with the exception of now having

computer system for drawing control instead of stamped drawings, relate specifically to that."

Can you just discuss with me, as best as you understand it, how the existence of the drawing weaknesses and whatever strengths there were form a basis for the conclusion that there was adequate management control with respect just to the drawing question?

MR. IPPOLITO: My understanding of what they found, for instance in part 2-B, if you will, the weaknesses, is that the team really couldn't say that you could not build a plant with 300 changes with the drawing. They said it would be extremely difficult, not that it couldn't be done. That's a weakness. They said it would be difficult to do, and it is prone to error. It is that type of thing. It could be done. Then when you add that to -- they went out and looked and whatever they looked at -- and when they went to look at certain -- from these drawings they looked at the equipment itself, they found, my recollection is that they found pretty good -- what was there was all right. What was built was satisfactory.

MR. ROISMAN: Is it your understanding of what they did was they took the very packages in which they found, let's say, 300 CMCs or DCAs and went out to look at the component and determined, after having themselves gone through all the DCAs and the CMCs for that packet, how this

was supposed to be built and they then did an inspection of that thing, whatever it was? And they determined that someone had properly worked their way through the 300 and built it right? Is that your understanding of what they did?

MR. IPPOLITO: Yes.

MR. ROISMAN: And that this was done with all of the ones that they found that formed the basis for the statement in 2-B?

MR. IPPOLITO: Whatever it was.

MR. ROISMAN: Is it your understanding that 2-A, the one certain drawing packet issued to the field containing nonapplicable CMCs and DCAs, that there also they went into the field and determined that on those packages it still had been built correctly?

MR. IPPOLITO: That's my understanding.

MR. ROISMAN: Did the fact that those drawing packages had these deficiencies in them, did you attempt or did the special review team attempt to find out why, why that existed?

MR. IPPOLITO: One, our primary purpose was to determine whether or not this was under control; it was not to try to determine root causes. Did they have enough control over this thing? And if it fell out, it fell out. When this thing was issued, I think it is a matter of

record that this report was given to the technical review team to follow up on. All of the issues and everything that was done in here -- there was a list of things, is my recollection -- and that was turned over to the technical review team for more in-depth review.

MR. ROISMAN: Is it fair to say that the existence of these document problems did not indicate that there was adequate management control, at least as to those documents?

MR. IPPOLITO: I guess that's right. Yes.

MR. ROISMAN: Would it be fair to say that based upon what you looked at as to the question of management control over documents, that piece of the whole puzzle, that what you saw indicated that there was not proper management control over documents?

MR. IPPOLITO: I don't believe so. I don't think that's what this report says. I think it says that there was. There are some weaknesses in it, but management knew what it was doing. That's what this report says.

MR. ROISMAN: At the bottom of page 5 in executive summary under the review findings category, the carry-over sentence goes to page 6, indicates there appears to have been a communications problem on the on-site QA/QC chain in the past, but according to interviews conducted during this review, the problem has and is being corrected.

To what does the reference, "a communication problem in the on-site QA/QC chain in the past" refer?

MR. IPPOLITO: Apparently during the interviews -- and that's a section in this report, describes more clearly what that means -- that during these interviews, people did identify that there had been some organizational changes. My recollection is that when we arrived, they were in place and people felt more comfortable with the people that were at that time and place, and that's what the interviews seemed to indicate and that's what he reported.

MR. ROISMAN: If the communication problem that had existed in the past still had existed on the site when you were doing this review, would that have been a basis for concluding that management was not in control of construction, inspection and testing programs?

MR. IPPOLITO: I won't say — I won't answer that. Tony, it depends upon what the facts are. I don't know. You want to hypothesize? It all depends; the answer is it all depends on how bad it is.

MR. ROISMAN: Exactly whatever your people learned in the past. What if they heard everything you're telling me they heard about the past and the only thing they heard different was that all the people they interviewed said nothing has changed?

MR. IPPOLITO: Since we're hypothesizing, if

these interviews indicated the reverse, I think that I would have to look deeper into it before I would make the conclusion that you're asking me to make.

MR. ROISMAN: Do you remember whether you yourself were aware at the time that you did this surprise visit in April of '84 of an event called the T-shirt incident?

MR. IPPOLITO: Yes.

MR. ROISMAN: You were aware of that?

MR. IPPOLITO: Yes.

MR. ROISMAN: Do you know the extent to which your people investigated, if at all, the facts underlying that?

MR. IPPOLITO: What people?

MR. ROISMAN: The people on your special review team.

MR. IPPOLITO: This report tells you that as a minimum we interviewed a number of them. I don't know how many. And in fact, as a matter of record, you have the names of the people and their statements and their involvement, so you know who are the T-shirt people. You know their names. You have their statements, their unsanitized statements. That was provided you as a matter of record. You were there, I gather; isn't that right?

MR. MIZUNO: Yes, that was provided to Billie

Garde, I believe, in June of 1984.

MR. ROISMAN: I want to be clear that what we have here is all that special review team had for purposes of evaluating that event and factoring it into the general conclusions.

MR. IPPOLITO: That's it.

MR. ROISMAN: Still looking at page 6 in the executive summary, the statement appears that "Management and craft at Comanche Peak appeared to be competent and management to possess a positive attitude which is a strength of this project." What did you mean by the phrase "positive attitude"?

MR. IPPOLITO: I meant by that that their whole intent was to complete this project safely and on schedule. And when there was a problem, they attacked the problem head on. That's what this says.

MR. ROISMAN: Is the basis for that, regarding the management's possession of a positive attitude, is that from the interviews with the management people that were conducted by you and other SPRT?

MR. IPPOLITO: It is not only that but you also get this feeling from the interviews conducted. If you read the report that's what it tells you.

MR. ROISMAN: I'm trying to understand. I've read the report. I want you to tell me and I want you to

tell me straight up, is it everything that you saw there that made you reach that conclusion or is it the interviews that you had with the people?

MR. IPPOLITO: Everything we saw.

MR. ROISMAN: When you looked at a document and found it was in order, that reinforced your conclusion or helped create the conclusion that management possessed a positive attitude?

MR. IPPOLITO: Yes.

MR. ROISMAN: In the statement under the general category QA/QC, still in the executive summary on page 6, under strength, the first strength is the QA/QC training program is extensive and comprehensive. Was the review that was done by the SPRT of the QA/QC training program itself extensive and comprehensive?

MR. IPPOLITO: Within the context of the purpose, I would say it was, but within the context of total program, forever, the answer is no. It was just not enough time nor enough knowledge of allegations and whatever have you to make that finding.

MR. ROISMAN: Are you saying that what we probably should do and what you intended that should be done with the conclusion statements, wherever they appear in the report, is that they should all be qualified by the statement, to the extent of our look, this is our

conclusions. Not that we know that we looked enough to be able to make this as a definitive conclusion?

MR. IPPOLITO: Thank you for saying that. I have been trying to say that since we started telling you. That's the only purpose of this thing.

MR. ROISMAN: Did you ever, before you started your look, did you have some criteria that you used to decide how extensive your look would have to be in order to reach any conclusion about anything?

MR. IPPOLITO: No. You are describing this as though it were a rather sterile thing that has happened before. This was a one-of-a-kind type thing. It was a technique I used to determine, and I repeat again, what should I do with that plant? Where am I with that plant? Where are they with that plant? If the negatives were in my judgment and the judgment of Paul Bemis and the remainder of the team, if it brings that into question, that would have determined the course of action different, possibly, than what we did. We might have issued a show cause order at that time if they were negative. We're not sure. But clearly what this thing did, it gave me time to develop what I call the plan and to execute the plan. That's all this document does.

MR. ROISMAN: Is it fair to say that in that short look, you might very possibly have missed items which

if you had seen them would have dramatically altered your conclusions?

MR. IPPOLITO: I will agree to altered but not -- I can't use the word dramatically because I know that the technical review team did find things in the document control area, I think, and in other areas that were more severe than what is described here. I'm saying, I think that there are areas of weakness that were discovered over and above this, and clearly, I was aware of this, that there was this potential.

MR. ROISMAN: To the extent that the technical review team looked at the same, either specific or general questions that this SPRT looked at, is it your opinion that reliance in trying to reach some conclusions about the plant should be placed on what the technical review team did rather than on what the SPRT did?

MR. IPPOLITO: I don't know what the technical review team did after I left the program. But clearly it was my intent that this was an input to the technical review team. They were given this report. They said, given this report and the other information you have, go pursue these areas. And I think that that's an input -- this was one of their elements as well as a whole bunch of other inputs that they had to consider in their review process.

MR. ROISMAN: I'm not talking about the underlying data. As I understand it what the technical review team was supposed to do is to take all the data that the SPRT gathered and use that along with whatever data it gathered, and at sometime in the future reach some conclusions about QA/QC, drawings, what have you. I'm asking just the conclusions portion of the SPRT. From what you knew about the technical review team during the period that you were in charge of it, is it fair to say that with respect to any conclusion, whether it is positive or negative, that's contained in the SPRT, that the better basis and therefore the more reliable conclusion is the conclusion of the TRT rather than the conclusion of the SPRT?

MR. IPPOLITO: The answer is the technical review team conclusion has to be better. There was more information, more time, more in-depth examination of the area.

(Discussion off the record.)

MR. ROISMAN: Ms. Garde is going to have questions in more detail about the body of the report.

MR. IPPOLITO: I wish you luck.

MS. GARDE: Thank you. Can you go back to the page that we switched back to Mr. Roisman on, A, under management organization?

MR. ROISMAN: This is in the body of the report.

MS. GARDE: Now, on page 2, I read you a statement about the current positive management attitude. Do you see that? That's the first full paragraph.

MR. IPPOLITO: Yes.

MS. GARDE: Mr. Roisman proposed a similar statement in the executive summary and I want to ask a couple follow-up questions to that. When you say "the positive attitude appears to manifest itself in the attitudes of the workers, the training and its consciousness for quality," is this opinion based on the interview of the 21 QC inspectors?

MR. IPPOLITO: Billie, what each of these chapters attempts to -- it attempts to outline what they did and what the conclusions were. To that extent, it stands on itself.

MS. GARDE: Let me back up a little bit then. You didn't write this report.

MR. IPPOLITO: Correct.

MS. GARDE: Then Mr. Bemis wrote the whole report?

MR. IPPOLITO: He was -- my recollection -- he had the management of this part A and was responsible for integrating the total report.

MS. GARDE: Okay, and the rest of these sections --

MR. IPPOLITO: Are primarily --

MS. GARDE: -- from the inspectors that went with you.

MR. IPPOLITO: Each inspector wrote their input.

MS. GARDE: Okay. There's attached to this sanitized versions of the 21 interviews with QC inspectors. In discovery we received the unsanitized versions.

MR. IPPOLITO: You received all of them.

MS. GARDE: But that's all there is?

MR. IPPOLITO: No, no, no. If you read this report --

MS. GARDE: Okay, we have all of them.

MR. IPPOLITO: The ones in the report are those with a problem to be further investigated. The others that were not a problem were not included.

MS. GARDE: We have in discovery all 21 interviews.

MR. IPPOLITO: Yes.

MS. GARDE: The conclusion, the positive attitude in the attitudes of workers -- to the best of your recollection the only workers that your team people talked to were the 21 that were officially interviewed?

MR. IPPOLITO: No. Each inspector or person on the team talked to the crafts and the QC inspectors when they went to look at, say, a pipe hanger. They talked to

the people themselves. How are things going? Whatever have you. And I think if you -- my recollection is that they have indicated in there that each, I think, each of the groups that some of them do, things look pretty good. These guys seem to be happy with what they are doing.

MS. GARDE: To the extent that Mr. Hayes and Mr. Eisenhut talked to workers on the site, does this report, this statement include their opinions of what the workers said?

MR. IPPOLITO: No.

MS. GARDE: Did they ever share with you their opinions about what the attitudes of the workers were? This is not a trick question.

MR. IPPOLITO: I'm trying to think of when and how Mr. Hayes or Mr. Eisenhut would know. My understanding is that they were down at the site one time where they talked to people, just one time, and I happened to be at the site at the same time and I happened to be with them at the same time.

MS. GARDE: But this statement is not intended to reflect their opinions?

MR. IPPOLITO: That's right.

MS. GARDE: Okay, on the training, says, "positive attitude appears to manifest itself in attitudes, workers and the training." Is that part on the training, does that

come from the inspectors' work in reviewing QA/QC training?

MR. IPPOLITO: That's my understanding, yes.

MS. GARDE: The last of that, "and its consciousness for quality," how was that conclusion reached to the best of your understanding?

MR. IPPOLITO: I think it is the sum total of everything the person did.

MS. GARDE: What person?

MR. IPPOLITO: The person who wrote this section, Bemis.

MS. GARDE: Are you saying that that statement is Bemis' opinion?

MR. IPPOLITO: Where are you?

MS. GARDE: "Its consciousness for quality" -- "its consciousness for quality." Is that a collective opinion of everybody on your team or is it only Mr. Bemis' opinion?

MR. IPPOLITO: That is a collection because Mr. Bemis did not talk to everybody. He got inputs from the various people on the team in this area.

MS. GARDE: On page 2, Number 3, project management meeting, this basically is a summary of a Saturday -- apparently Saturday morning project management meeting.

MR. IPPOLITO: Yes -- we were there, and they

said if you want to sit in, fine.

MS. GARDE: How many of you sat in on the meeting?

MR. IPPOLITO: I don't remember. I know Paul Bemis did. Who else, I don't know.

MS. GARDE: Were you at the meeting?

MR. IPPOLITO: No.

MS. GARDE: Was anyone else besides Mr. Bemis at the meeting, any of the other team people?

MR. IPPOLITO: I'm not sure.

MS. GARDE: Okay, on page 3, quality assurance, quality control, item number 1 gives a list of procedures that were reviewed by your team to determine whether or not, as I understand what you explained to Mr. Roisman, there was control of the nonconformance process, identification of nonconformance process. Was there any attempt made to look beyond NCRs to determine whether or not other documents were being used to log nonconforming conditions?

MR. IPPOLITO: Like IRs? I just don't remember. I don't remember that at the time we had knowledge of that problem. I'm not sure.

MS. GARDE: And you didn't look for that problem?

MR. IPPOLITO: I don't think it was known to me, and therefore if it was not, it probably was not known to this group at the time.

MS. GARDE: If you had an allegation -- you said you had about 300 allegations --

MR. IPPOLITO: Not at this time.

MS. GARDE: You hadn't looked at any allegations?

MR. IPPOLITO: No, my people were in Washington trying to come up with whatever that New Mexico one was. This was not with me. That is what they were doing at the time.

MS. GARDE: Knowledge that the Nuclear Regulatory Commission as an organization had was not necessarily transmitted to the team at all?

MR. IPPOLITO: That's correct.

MR. CHANDLER: If I could ask you to wait until the request is through so we have the question on the record and then the answer, rather than mid-way through the question, it might help.

MR. IPPOLITO: I will do that.

MS. GARDE: Which of the members were in charge of the quality assurance/quality control look?

MR. IPPOLITO: On page 3, executive summary, Paul Bemis, section chief. He had -- we tried to identify who was expert in what area.

MS. GARDE: Okay, I didn't understand that the in the executive summary, the people's names with their expertise necessarily would coordinate with who did what in

the bulk of the report.

MR. IPPOLITO: We tried. These were the specialists. We tried to use them in their specialty.

MS. GARDE: To the extent you remember, if you could tell me that, if it was Mr. Bemis, that's your understanding for QA/QC.

MR. IPPOLITO: That was Mr. Bemis. That I am sure of.

MS. GARDE: On QA/QC training, who was that?

MR. IPPOLITO: I would guess it is Bemis, yes, but, excuse me. I think there's a Lou Jackson. Louie Jackson I think was also involved in QA/QC, so I think between the two of them, they covered, I think, all of the areas in QA/QC.

MS. GARDE: I'm going to skip to the end of the report now. On page 60, starting section I, formal interviews of the QA/QC personnel.

MR. IPPOLITO: Yes.

MS. GARDE: This section is a narrative, I assume, correct me if my assumption is wrong, a narrative of what was gleaned from the interviews conducted with everybody?

MR. IPPOLITO: That's my understanding.

MS. GARDE: Now, on page 62, there is an area in this narrative which goes into the inspectors being

questioned regarding intimidation, and the inspectors' ability to identify problems with no suppression in this area.

MR. IPPOLITO: What paragraph?

MS. GARDE: Paragraph 3 talks about inspectors questioned as to their ability to identify problems. Do you see that?

MR. IPPOLITO: Okay.

MS. GARDE: And then next paragraph goes into feedback, next paragraph goes into communications were improving, and the assignment of a new site QA manager was a positive step in improving communications, and the next paragraph on, intimidation by craft. Now, your statement to Mr. Roisman about how wrongdoing issues and how harassment and intimidation was handled raises at least in my mind some questions about who was pursuing the harassment and intimidation questions with these inspectors during these interviews. Was OI present at these interviews?

MR. IPPOLITO: The purpose of this exercise was to determine whether the things that I had been hearing as well as -- again, the basic objective, does management have control over this thing, what are the problems. One of the problems that had been identified is that there had been intimidation. So one of the things we did is that knowing

that this was a contention, if you will, asked the people, do you have problems? Again, if they had said yes, we would pursue the problem. The technical review team would meet with OI and pursue the problem.

It was just factfinding. Where are we? What should I do, how much should I do? That was the questioning. Questioning these people that we did indicated that they were not intimidated.

MS. GARDE: How were these people selected?

MR. IPPOLITO: I believe it tells you.

MS. GARDE: Says random but --

MR. IPPOLITO: There's one exception.

MS. GARDE: With the T-shirt.

MR. IPPOLITO: That's right.

MS. GARDE: When you say randomly selected, you don't mean statistically correct random sampling.

MR. IPPOLITO: Heavens, no.

MS. GARDE: Then how was your random sampling chosen?

MR. IPPOLITO: Oh, gee -- what the reviewer or inspector tried to do was get a few people from the different areas, and coupled with the inputs from the other team people when they wanted to talk to individuals, and you know, that was it, plus the instructions that they should interview all of the T-shirt people on site.

MS. GARDE: Okay, on page 63, second paragraph, "Interviews of management indicated they were very supportive of insectors and sensitive to inspector concerns." Who are you talking about in that?

MR. IPPOLITO: Whoever the listing is that you have. They should be there. I'm not trying to be -- I just don't remember. I was not there. I don't remember.

MS. GARDE: Okay, in the second to the last paragraph, small letter b, "In addition to formal interviews, numerous informal discussions were held between the NRC team personnel and site managers, craft, inspectors, engineers and office personnel." Are those written up anywhere?

MR. IPPOLITO: No.

MS. GARDE: So to the best of your recollection, there's no summaries of --

MR. IPPOLITO: Excuse me. I don't believe there are. In other words, what you received do not contain these type of things. Whether or not there are notes or whatever, I have no idea.

MS. GARDE: Okay. Just a minute.

(Discussion off the record.)

MR. ROISMAN: A last question for you on the SPRT. Is it fair to say that the purpose of the SPRT was to make an evaluation of the current status of management

control over the plant rather than to attempt to determine whether and the extent to which it may not have been in control in the past?

MR. IPPOLITO: Yes.

MR. ROISMAN: Following the SPRT work, I assume you began your work on the development of what eventually became the technical review team plan that we discussed earlier this morning?

MR. IPPOLITO: Yes.

MR. ROISMAN: After you had developed that plan, its implementation until you were no longer head of the technical review team was under your control and supervision; is that correct?

MR. IPPOLITO: Yes.

MR. ROISMAN: I want to ask you some questions about the process that you were using for or having your people use for the purpose of doing the evaluation. Let's take a specific, if you want, and you can give me an example of one in particular, a technical allegation that you had, and sort of walk me through. How did, from the moment that you knew the allegation, how, as you understood it, was it to function, how was the technical review team supposed to look at that?

MR. IPPOLITO: Let me step back one step before that. Since we inherited so to speak, the team inherited a

group of allegations and technical issues, one had to examine them, try to understand what they are saying and then group them in some fashion to make sure that things of like subject are in the same area or in the same groupings, so that -- and from that effort, it looked like we can set all of the allegations into five groupings plus some miscellaneous.

Now that we had done that, and we had established a shorthand, if you will, for each of these categories, each allegation that came in subsequent to that would be examined, was it a QA, electrical, whatever have you. What we tried to do is we tried to state the allegation. We would then give that to -- we would assign it to a group and that would go to the group leader.

MR. ROISMAN: When you tried to state the allegation, what did you use to determine exactly what that allegation was?

MR. IPPOLITO: As you know there are a number of ways that we get allegations. Some make statements to the NRC and in the statement you will find, if you carefully read it, you might find, although not specifically stated allegation, you will find something that says something is wrong here. We would go through that document and extract from that document what we believe to be some of the problems that the person is trying to identify.

MR. ROISMAN: Did you go back to the alleger at that point to make sure that at that point you had the allegation clear?

MR. IPPOLITO: Some, yes; others, no. It depended, I think, considerably on what we had. In other words, some of the allegers gave real detailed statements that were transcribed --

MR. WESSMAN: Let me correct something there. I think you are discussing the period in which we were still identifying and sorting the initial list of allegations, and at that time, we did not go back and talk with the allegers. Once we had the technical review team assembled on site, we made a decision as to which allegations required further pursuit with the alleger to be sure we understood what the issue was.

MR. ROISMAN: So your first cut at trying to develop what the allegations were was you took whatever existed and made an effort to determine what the allegation was from that, and then once that list was put together, decisions were made by, in effect, by the technical review team team leaders, I assume, should we ask this guy to be clearer on this or --

MR. IPPOLITO: Excuse me, they were instructed that if they based upon the information that they had, not only the brief statement -- we kept an essential file, the

total statements, so that the particular reviewer could come and read the total statement to make sure that we, as managers, you know, properly took and placed it in its proper context so they could read the total paragraph or page or chapter or total statement to make sure that we had characterized that allegation correctly. If even after doing that, they had a problem, they should come to my staff, and we would attempt in some way or other, either meet, call or try to clear up the understanding of this.

MR. ROISMAN: You get your list of allegations, those are put together, categorized, categories are then assigned to people who have responsibility?

MR. IPPOLITO: Correct.

MR. ROISMAN: Let's take one of those allegations and sort of walk me through in general the process that was used to evaluate the validity of the allegation.

MR. IPPOLITO: I think that we issued instructions to the technical review team. They were dated --

MR. WESSMAN: June 5, 1984, technical review team guidance.

MR. IPPOLITO: Within it are detailed instructions of what they should do. But not only that, the total team was briefed by both Darrell Eisenhut and Ben

Hayes about -- and I think these are the instructions that come out loud and clear, is that each of the reviewers should go behind the paper. Another expression used, go kick the tires.

This was the modus that these people were supposed to use. Don't go look at that one NCR. Go look, pick a random sample, as well as that one that's identified by the alleger. Get a random sample and then go beyond it. Go make sure. Go interview people, talk to people, if they are still around. And that type of review process is what they used. I think this document here tries to tell you that.

MR. NOONAN: When you used the word random, that's not statistical random. That's just random, pick things, put it together. Thank you.

MR. ROISMAN: Lawyers' random.

MR. NOONAN: Right.

MR. ROISMAN: When the allegation was assigned to the particular person to look at, if when they looked at that allegation they concluded that they didn't fully understand it and they went to talk to the alleger to find out what it meant, what if they didn't find the alleger right away? What would they do to find that alleger?

MR. IPPOLITO: They themselves would not look at the alleger. All they knew is that this was alleger X.

They would come to either Annette or Dick Wessman or R.C. Tank, who we had a master list, so to speak, and we would attempt, one of the three would attempt to locate that person. We have taken whatever action we can, even sending people on travel to other parts of the country once we located the person to try to do this.

MR. ROISMAN: I guess there are several places, as you probably know, where it indicates the alleger could not be located.

MR. IPPOLITO: We tried the best we can with the data we had.

MS. VIETTI-COOK: We went to the personnel files on site to try to get their address, phone number, sent letters, et cetera. Dick might remember some other things we did.

MR. NOONAN: Let's do this: On allegation, when you get to me I can maybe explain what we did subsequent to this time, if that's not too late for you.

MR. ROISMAN: No, but one of the questions I'll ask you is the extent to which the work already done was treated by you as done, and if what you tell me is everything that Tom did, I reevaluated and redid and therefore, what he did doesn't matter, then I can stop asking questions about this, but my understanding is some of his work was relied upon by you, and continuation of his

work might have been done differently by you than by him.

MS. VIETTI-COOK: If we didn't contact him before we looked at the allegation, we always tried to contact him in a feedback interview. We tried to contact everybody in a feedback interview even if we didn't contact him initially because we felt we understood the allegation.

MR. ROISMAN: Did you work through, when you were having difficulty finding people, did you work through Citizens Association for Sound Energy or through Ms. Garde to locate people?

MS. VIETTI-COOK: Yes.

MR. IPPOLITO: I personally called Ms. Garde for one or two names in particular, and to Juanita Ellis for one or two as well. In fact, Juanita Ellis found one or two, they were visiting her at the time and we were lucky enough to find that individual.

MR. WESSMAN: We did talk with CASE several times, and I remember on allegation identities that may have been specified by case, we said we need to get a particular individual that Citizens Association for Sound Energy identified as allegers X or Z, and in some cases they could help or in some cases they could not or would not put us in contact with that alleger.

We did things like attempting to go to last known address, last known telephone number, if relatives

were identified in personnel records or whatever, we sought to contact them. We made what we felt was the best possible effort. If all telephone efforts failed we would send a registered letter to the last known address in an effort to have it forwarded, but I think we made a reasonable effort to locate the individuals insofar as we could.

MR. ROISMAN: Do have you any sense of what percentage of the allegers you were unable to reach?

MR. IPPOLITO: I think Vince could answer that. I think the final box score on that was completed under his auspices.

MR. NOONAN: I'll get the number for you.

MR. IPPOLITO: I would think it is a majority, right, Richard?

MR. WESSMAN: At the end of the effort, my recollection is a total of nearly 70 allegers to date, I may be slightly off in the number, my recollection is at this time we probably have contacted in excess of 50 of them. Many of those are only in the close-out phase because during the on-site phase, some of those, based upon the statements and information we had, we determined we didn't need to talk to them during the on-site portion as we already discussed.

MR. NOONAN: I have the numbers available.

MR. ROISMAN: Let's go back to the on-site portion. How did your people proceed with the investigation of an allegation on site? Let's assume that they had an allegation that seemed on the surface to be sufficiently clear, they didn't need to talk to the alleger at that point, they went to the site to look at the thing and found that didn't confirm the allegation. There didn't appear to be anything there which was consistent with the statement by the alleger. What was the next step to pursue, if any, with respect to what the on-site facts were?

MR. IPPOLITO: I don't know what I could add over what I said earlier. If we had an allegation in a particular area, one obviously goes and looks to see what are the requirements under which that thing is to be built, designed or whatever have you, understanding the basic requirements, and doing whatever it takes to determine whether or not that device or system or that paperwork is in fact comfc ming to those requirements.

MR. ROISMAN: Let's say that you have an allegation that NCR 465 was improperly dispositioned by the supervisor, use as is, without any engineering evaluation, although you needed an engineering evaluation to decide, use as is, and your inspector -- that's a very clear one, you presumably wouldn't have to go to the alleger -- you go to the NCR control, pull out the 465, take a look and find

the signature of an engineer on there, indicating that the "use as is" disposition had an engineer's approval. What would you do in that case?

MR. IPPOLITO: I'm hoping he would have started with an understanding of the NCR system and what it should be. Given that, then he would then get a copy of the NCR and understand it, go and examine the system. Then I believe he would interview the people involved, if they are available, and try to find out what they can, you know. Why was this signed off by the engineer. Go talk to the engineer. What is the basis? There's nothing apparent here that justifies "use as is." What is the rationale behind it? There's got to be something written that says, here's why I'm saying what I'm saying.

MR. ROISMAN: My hypothetical was that the NCR was dispositioned "use as is" without ever going to the engineer. Your person finds that it is signed off by an engineer. Let's assume there's a statement on there that explains why the engineer thinks "use as is" is okay. Your person has a piece of paper that appears to be in direct conflict with the statement that the alleger has made.

One possibility is that the alleger has the wrong number. Another possibility is that the alleger has the right number and was incorrect, and the third is that the NCR was altered subsequent to the time that the alleger

became aware of it and that the company has in effect forged the document by adding a post-disposition engineering evaluation on it with the engineer's concurrence. How did your person investigate to determine which of those possibilities was the correct one?

MR. IPPOLITO: I'm not sure which of the many various examples, what he would do, but what his instructions were is to look behind the paper. Don't only take that one thing. If we can, talk to people, talk to the alleger, talk to the people on site. Take a random sample in and around that area because if that one seems to be a problem, maybe there are others in that general area at that general time frame. These are the techniques that a person would use but he would try to go beyond it, and including interviews.

MR. WESSMAN: We also went out and looked physically at the components and made an engineering judgment as to the adequacy of those engineering components that are the subject of the NCR.

MR. SHAO: It happened quite often that the NCR is not properly closed and my people started looking and found out it was properly closed. In that case we went back to the alleger. In many cases the alleger says, oh, maybe I left. He left the site maybe a year or two ago. He didn't know that it was properly followed up and in many

cases the alleger accepted our finding.

MR. ROISMAN: Was that done during the time that the people were still on site or after the site visit part of the TRT was done?

MR. SHAO: In many cases it was done on-site but some cases it was done off-site. Happened many times.

MS. VIETTI-COOK: Or there was a lack of communication between the QC inspector and the engineer that wrote "use as is." They didn't bother to tell the QC inspector and I don't know that they had to, but he wanted to know what the basis for that "use as is" was, and it was not communicated to him, but eventually we communicated that to him and at that point he was satisfied once he understood the basis for "use as is."

MR. ROISMAN: All right, let's go on with the example. Let's assume that your inspector evaluates the allegation and finds that it was meritorious; that is, the alleger said if you look at this thing, you will find a defect, and your man goes, and he looks, and he says, there is a defect. Now, at that point, as I understood from what you talked about earlier, he would not try to find, if you will, the root cause, the why of that. Is that correct? He wouldn't try to find out why did this defect show up here at a time when it should have been picked up six months or a year, whatever it is, a year ago.

MR. IPPOLITO: That's correct.

MR. ROISMAN: But that he would try to see what the generic implications of that were; is that correct?

MR. IPPOLITO: Could this problem be in other areas?

MR. ROISMAN: How would he know which other areas to look at without knowing what caused the first one? Let's assume again that it is an NCR that was not properly dispositioned.

MR. IPPOLITO: There are NCRs in the electrical area, in the mechanical area, there are NCRs in the system area --

MR. CALVO: I think we're missing a very important step. You jumped from the point of the NCR and found something wrong with it. The next step is you must establish the safety significance of the find. If it is safety significant you proceed to the implications, but if you find no safety significance you can very well take care of it at that time.

MR. ROISMAN: Let me ask about that then. I appreciate you telling me at what point that step comes in. If you don't know what caused the failure to detect, how do you know whether or not, how did you know whether or not it had safety significance?

MR. CALVO: If I may, if I know the NCR and I

know the component of the system that the NCR was addressing, then by knowing the component and the role that the component plays in the plant safety, then I can assess the safety significance.

MR. ROISMAN: Well, that's right, but --

MR. CALVO: For instance, if the NCR has to do with emergency lighting or a particular panel, and because it has reference to that particular component and the assessment is made, there's no reason to pursue it because there was no safety significance. We acknowledged the fact that this was an isolated case, and we like to know whether this problem identified -- presumably the QC inspector thought it was safety-related significance. We maybe extended our review to include other NCRs that fall within the same classification, "use as is." We did that many times in many cases.

MR. ROISMAN: My concern -- and maybe I don't fully understand the line between safety-significant and defect -- but I take it that there are procedures for doing certain things at the plant, and one could, in retrospect, in getting down with a microscope, take a look and decide while that one thing was supposed to have been done when we really look at it now in great detail, it wasn't a safety-important thing that it be done. Am I correct so far?

MR. CALVO: That's correct.

MR. ROISMAN: How do you know if you don't find out why did this thing which the QC inspector, let's say, mistakenly believed was safety significant, why did this thing happen? How can you know whether or not it had an implication for safety significant matters even though it is in itself not safety significant?

MR. SHAO: Let me give an example. Say we pour concrete. The purpose of concrete is to achieve a final ultimate strength of on pier site. But in order to achieve the ultimate strength you pour concrete, make tests, whatever is right. In the process there may be a lot of violations here and there. Maybe the water/cement ratio isn't right. Maybe this inspector didn't look carefully, but the bottom line is if the concrete had the right strength that's what really counts, even though they may have had some safety violations. The final question is did the concrete have the right strength, so even though you may have certain violations, they really don't have safety significance if the final concrete has the right strength.

MR. ROISMAN: I can understand concrete, at least a little bit of it. If the reason that the proper mixture between the concrete and the water was not -- that there was an improper mixture between the concrete and the water and that was not detected, if the reason was that the

concrete inspectors had been directed by their bosses to forget about that, they have been told, look, we're pouring concrete, we have only five days to get this poured, I don't want a lot of nit-picking about the water/concrete mixture. When we're done we'll make sure it is 4000 psi, So forget about it.

MR. SHAO: It is not good practice.

MR. ROISMAN: I'm glad we agree on that. I take it also that the presence of that attitude by the supervisor that could have caused somebody to miss something in another area where you ended up with a deficient component -- how, without finding out the underlying reason for why the defect was not reported, how will you know whether or not you have the safety-related significance?

MR. SHAO: Very good question. We say now, you have all kinds of violations. Maybe in this area you're lucky, no problem in concrete. But maybe the same crew may work somewhere else and somewhere else may have problems, so what we do is we say for this particular issue, number 16, whatever it is, we say no safety significance because we look at the final stress, but we put in appendix P, applicant make sure this doesn't happen somewhere else. It may have safety problems.

MR. ROISMAN: So not only -- well, let's go back.

Then, really, during the SSER 7, 8, 9, 10 piece of the technical review team, the absence of knowing the answer to the question why makes it not possible to know with certainty that there really are not other areas related -- other problems in that same area that were never detected because of an underlying root cause which you are transferring to SSER 11's responsibility; is that right?

MR. SHAO: We know something is wrong there. We want applicant to address why the something wrong didn't affect other places.

MR. ROISMAN: You are saying now that the philosophy that Mr. Ippolito talked about earlier this morning, which is this responsibility is the applicant's, continued right on through this TRT.

MR. SHAO: Applicant have to tell us why, if they have a violation here, if it happens somewhere else, why is it okay.

MR. ROISMAN: In your judgment, is the first step, if the process were to have been carried forward by the staff as opposed to being transferred to the applicant, is the first step after you determine that there was a deficiency in the reporting system, although admittedly it turned out not to have safety significance, the first step to carrying out the evaluations we have been talking about is to determine why?

MR. SHAO: Right.

MR. ROISMAN: Then having defined why, you can then reinvestigate as to whatever why tells you to do, and I take it it would be very difficult in your judgment to do it in the reverse order, which is to deal with the problem without ever finding the why and then hold the answer to the question why until a year after you completed correcting the known problems.

MR. CALVO: I missed that.

MR. ROISMAN: Let's stick with the concrete example. You know when you are through that this particular pour, this particular concrete did not produce an inadequate concrete strength, but you know that it was not because of compliance with procedures, it was in spite of failure to comply with the procedures. You've decided that part of the responsibility of the technical review team will not be to try to find out why didn't you comply with the procedures. That responsibility will be left eventually to the applicant to find out why didn't they comply with procedures.

MR. SHAO: It is our job to let applicant know we find something wrong there, and they should give us an answer why they did it and maybe it happened somewhere else or not.

MR. ROISMAN: But if the applicant's approach is

to say we will never answer the question why for anything we determine does not have safety significance, then you'll never get the answer to your question; is that correct?

MR. SHAO: No, applicant is supposed to look at these issues in generic sense, and they have to decide whether there is safety significance in other plant or not, not limited to area.

MR. ROISMAN: They can't do that until they know why, can they?

MR. SHAO: They have to first, this happened here, let's say in the auxiliary building. They have to decide whether it happened in other places and evaluate accordingly.

MR. ROISMAN: Before they even decide where to look and how much of the other concrete to look at, don't they have to first find out why didn't procedures get followed on this one pour?

MR. SHAO: I think they should.

MR. ROISMAN: That was my question. Before you can decide whether we should look only at the pours in the auxiliary building or whether we should look only at pours that took place only in the month of March, you have to know the why that this pour had the improper procedures.

MR. SHAO: I agree you have to look at why and if the problem is localized or is not localized, what

happened to one guy or maybe 10 guys.

MR. IPPOLITO: The breakdown in this control, if you look at the instructions that the people, my technical review team people were given and look at the organizational structure, there's a dotted line that goes from every group leader to Mr. QA/QC. When one finds a technical problem and confirms it and the problem happens to be no one is watching, whatever example you used -- every morning I met with my group leaders and they were told every morning that they have to be cognizant of the fact that when they look at a technical area, it might identify weaknesses in the control, the quality control and quality assurance area. They are to make sure that dotted line -- that the QA/QC knows of it. So in other words, if there's a breakdown in the way they control whatever it was, the water or what have you, then that control procedure should have been identified to our QA/QC people as part of looking at all of the problems from the various groups.

MR. SHAO: And it was identified in QA/QC.

MR. IPPOLITO: Right.

MR. ROISMAN: The process of the movement of these issues from the technical people looking at specific hardware problems in QA/QC, was it the technical people who referred it to QA/QC or was it QA/QC that reviewed the findings and work of all of the technical ones and decided

which ones to look at and not both?

MR. IPPOLITO: We prefer the former, not the latter.

MR. NOONAN: It was a combination of both, a combination of both.

MR. SHAO: The table, appendix P was prepared by the QA and the engineering people together.

MR. ROISMAN: Am I correct -- this may be for both Mr. Ippolito and Mr. Noonan -- am I correct that after your initial site visits which ended around September, that the volume of people available --

MR. IPPOLITO: I'm sorry, October 12.

MR. ROISMAN: Thank you. That the volume of people available and the number of site visits that could be made subsequent to that time was significantly reduced over what could be done prior to that time, that you had more resources to go do site visits?

MR. NOONAN: Not correct.

MR. ROISMAN: You had the same amount of capability or more?

MR. NOONAN: Same or more.

Let me go back to the why. The whys are important, and I don't deny that, but it is possible in the future the why might not be important. The applicant could come to us and say, here's what we think is why but it

doesn't make that much difference, and we might agree with that. I don't want to lead you down the path that we'll require him to go back and decide why for every specific item that we identify. There might be some reason that we would accept it is not important to look at the why, and when I face that I'll make that decision. Right at this point this time I want to leave that open.

MR. ROISMAN: Other than them coming back and saying we're going to assume that the why is plant-wide and address it as a plant-wide failure, what other ways can you imagine that the why might be irrelevant.

MR. NOONAN: Mr. Shao's situation might have been limited to one thing. If that concrete has the right strength yet, that group of people maybe did do things not quite according to procedure, that why might not be as important other than for that particular element. They didn't follow the procedure but we know the hardware is okay. The why is not as important as if those same group of people were used in other parts of the plant. That's kind of some logic. I can see a potential where a guy could come back and tell us that.

MR. ROISMAN: But in the context of Mr. Ippolito's SPRT, look where he was looking at the generic question of management control, how would the fact -- unless you are talking about somebody who literally had no

connection to the rest of management on the site, which of course is an impossibility of appendix B being complied with -- how could it not matter?

Let's say that it was 10 people, they had their own supervisor, own QA/QC people and worked only on the auxiliary building, and the applicant comes back and says, we've checked the concrete strength for everything in the auxiliary building and it all passed muster. We did not find out why. In a number of pours we didn't look at the stuff but it doesn't matter because we know they only worked on one building. Why is it not still important to know, was the reason we didn't look at those whether they themselves had a flaw or whether it was because they were not properly instructed by the supervisors for concrete on the plant, or the supervisors for QA/QC on the plant or something like that?

MR. CHANDLER: I think we're veering off course here somewhat and straying into what Staff may look to in the future in terms of requirements for activities we will be looking at, in terms of get well programs, SPRTs, whatever, rather than the retrospective of what the TRT did and how it did it, and why it did what it did as documented in the various SERs, and rather than go into speculation as to what the Staff will be looking for and why, if we could maybe keep our focus back on the point.

MR. ROISMAN: Mr. Chandler, I looked at that because Mr. Noonan raised it. I also looked at it because I thought that Mr. Shao's sense of confidence in the work done in his area was, and in Ippolito's confidence in his people was in part based on a conviction that some day, somebody would answer the question why, and therefore, remove the last element of uncertainty that may have existed.

I don't think it is irrelevant, looking at the past, to know whether everybody who did this thought that was going to happen. And I thought it was useful, I'm not getting into any detail with Mr. Noonan, I wanted to understand what the scope of that statement was because all of the people here who passed the ball first to Mr. Livermore's group and later to the applicant may find it relevant to know whether the why will ever be answered.

MR. CHANDLER: I haven't raised any concerns up to this point. Unfortunately, in what the interchange indicates now is that we're into a realm of speculation as to future activities that likely go, I think, beyond the realm of technical review team and thoughts and intentions of that particular program. That's why I raise that right now.

MR. NOONAN: We are going to look at the whys. We told the utilities to look at those. I don't want you

to think there might not be a case where I would say, I won't look at the why. There might.

MS. GARDE: Mr. Ippolito, let me take you back to May 1984. After you had written the plan, it was approved, according to the cover sheet, by Mr. DeYoung, Mr. Denton and Mr. Collins on June 5, 1984, and about a week later you sent it to the board via board notification. Was there any modification to the plan that you initially wrote up? Is this what you initially wrote and sent Mr. Denton for approval?

MR. IPPOLITO: Yes. My recollection is there's one revision; is that correct?

MR. WESSMAN: We did a revision on July 1 of 1984. My recollection was we changed the schedule, one of those enclosures slightly. I don't think we did any real changes in the text of the document.

MS. GARDE: This was after it was approved, not before?

MR. WESSMAN: It was revised after it was approved and all those who approved it were given a copy or else participated in the decision to revise. I don't recall the exact sequence of events.

MS. GARDE: Did the plan as it is written here, and I've read this, but did Mr. DeYoung, Mr. Denton and Mr. Collins all concur in the objective, to put the

objective of this plan, which was to put all the licensing issues to bed, if your looks put all the allegations to bed? Was that the objective of this project you proposed?

MR. IPPOLITO: What this plan attempts to do is to take and integrate the responsibilities in all of the areas. They are, by signing that, agreeing to a number of things as stated in the plan. One, yes, they recognize I am going to orchestrate this effort. Secondly, it asks for people, and that people are committed to this effort for at least the period of time that I estimated initially there, and whatever I changed from that point on. That's what they were concurring in. They recognized the existence of this project, directorship, if you will, and their agreement to support it as stated. That's what they were concurring in.

MS. GARDE: Now when you started pulling together the individuals to take down to Comanche Peak, you pulled together a team of around 50 individuals more or less?

MR. IPPOLITO: Yes.

MS. GARDE: And you arrived, if I recall this correctly, around the first part of July of '84.

MR. IPPOLITO: July 9 -- July 8.

MS. GARDE: Now, from then through the rest of the summer, would you say that the field work done during

that time period was -- Vince, you may need to help answer this, 50 percent of the field work done going to the SSERs? What percentage?

MR. IPPOLITO: If not all, a very high percentage of all that was done. I left the project about October, somewhere mid-October. My understanding is that the last group, which was the QA/QC, was pretty much off site at the time. He may have gone back once or twice for clean up, but most of the site work was done.

MR. NOONAN: I would say most of the site work at that point in time was done, because when I came on board I talked to the group leaders and asked if they needed to go back and most of the answers were no, with a few exceptions I think.

MS. GARDE: I want to focus on the area of your work which responded to allegations. When this program plan was written up it was addressing about 400 allegations, I think. The number of allegations grew throughout your field work; isn't that correct?

MR. IPPOLITO: Yes, and I think that when I left it got up to somewhere in the 600s, somewhere in that neighborhood.

MS. GARDE: And since that time period, Mr. Noonan, if I'm correct, it has grown again.

MR. NOONAN: Last count it was in the range of

around 900, although when I came on board it was at about 600. We asked the Staff to go back and recount. The number changed pretty rapidly. Some of them were broken so what might have counted as one allegation was now counted at two. It is around 900, in that ball park right now.

MS. GARDE: Where new allegations were identified, either in old documents or as you were doing your work, was the field work and the plan to resolve those allegations developed essentially on the spot? Did you during your visit say, this is how we're going to deal with these plans -- excuse me, these allegations?

MR. IPPOLITO: I guess --

MS. GARDE: Let me back up. When you had an allegation, there was an allegation review sheet prepared; is that correct?

MR. IPPOLITO: For the new ones, yes. This document that I'm looking at here is --

MS. GARDE: What is it?

MR. IPPOLITO: A technical review team guidance, and I think it is something that has been published. As part of that there was a sheet to be filled out for new allegations and tells you, this document tells you what to do with them. They are fed into the system, and they are given to the appropriate team leader.

MS. GARDE: Okay, Mr. Chandler, we don't have

that document. That's one of the ones the FOIA office has not yet released and that would be real helpful and would have been in preparing for this meeting.

MR. CHANDLER: I will take a look and see what the status of that is.

MS. GARDE: If it would be possible for us to look at it over lunch, that would help us along.

MS. GARDE: My understanding is that an allegation review sheet was filled out?

MR. IPPOLITO: Yes.

MS. GARDE: As new allegations were identified, you had the 400 when you went down and the number increased. Was the allegation plan, how to deal with the allegation developed while you were there on the site?

MR. IPPOLITO: The difficulty I'm having with trying to answer your question is that your question seems to say that there's one single theme, you know, in the allegations. The QA/QC, there could be many, many areas, and many nuances to each of the areas. All I did as manager is say, here's your total work effort, team leader, organize it, get it done, work within this framework, and some other general management procedures that I had established. How he factored -- dealt with a specific add-on was pretty much his call.

MS. GARDE: What documents would I have to look

at in order to determine what your team leaders did in July and August of 1984?

MR. IPPOLITO: I don't think -- I think the best you could do -- I think initially there was a lot of investigation, nothing in writing. Digging, digging, digging. Then we got to the point where we could start writing, and I think the SSERs or the write-ups for each individual allegation or group of allegations is dated, so the outcome of these write-ups is probably all that you have.

MS. GARDE: Let me give you an example.

MR. IPPOLITO: Excuse me. I'm reminded that for each allegation, we have a file. Within the file is all of the information, all of the records that the person used to -- that he used in developing his conclusions regarding that or that family of allegations.

MS. GARDE: Okay, each allegation had -- let me give you a hypothetical. You have an allegation that comes from a newspaper article. That's the source of the allegations. What's the first step that your team followed when they were faced with this allegation in the newspaper article that takes it from the newspaper article to the SSER? What's the first thing that was done?

MR. IPPOLITO: Pick one that in fact did happen and I don't remember -- the allegation had to do with some

subject area. That was assigned to the proper team leader. As part of his review, he tries to establish the genesis for this. We try to help him, meaning my group tries to help him. Some of these newspaper articles did identify people. To the extent that we could talk to these people and find out more about these things, we did. Other than that, we then tried to understand what the allegation was about and proceeded to establish again what the accepted program would be, the procedures that implement that program, and track it down that way.

MS. GARDE: Where does something get put on paper in that process? Where did the technical review team members put something down on paper in that process?

MR. IPPOLITO: I'm not -- part of their review?

MS. GARDE: Yes. Okay, I think we're talking across each other. If I could go back in time, and I went into the technical review team records in July of '84, okay, what documents did the technical review team develop that identified the allegations? You have allegations coming from a lot of different sources -- newspaper articles, word of mouth, hearings -- you know, a whole group of areas. How did that get put on a piece of paper which then starts its process through the Nuclear Regulatory Commission and ends up in these SSERs?

MR. IPPOLITO: I think I answered that one time.

I'll repeat it. What was done is that we would take the item, be it from a statement made by somebody, identify the item, try to describe the item, create a file on that item with its background and whatever we have that supports that. That file then would be given to the group leader for his work.

MS. GARDE: So there's no standardized form? If I went and looked at the allegation files there's no standardized form in the allegation file which says "this is what the allegation is" so that I could sit down myself, look at the newspaper article and look at the way you defined it and compare the two allegations?

MR. IPPOLITO: Yes, you can. You can take -- the final characterization of the allegation is contained in the SSER. So you could take that and you could go back to our records and you should be able to find the genesis for that, so in other words, you can check.

MS. GARDE: I should be able to see each step.

MR. IPPOLITO: If you look at pages that go before and after this thing, that's not the way you would read it, but that's the way we read it. You would be able to tell that difference.

MS. GARDE: Tony will finish up.

MR. ROISMAN: We talked earlier about the extent to which you talked to allegers, and I'm interested in

getting some sense of, to the extent that you know it, to what extent were you able to talk to allegers before you did site visits, before you did the on-site work?

MR. IPPOLITO: I would say we did -- maybe about 20 percent of what we did was beforehand, if you will.

MR. ROISMAN: How much of it while on site?

MR. IPPOLITO: Maybe another 10 or 20 percent. Again, I have to remind you that where we thought we understood it, where we had detailed statements or detailed records of what the allegation is, we didn't feel the need to do it, you know, at the front end. Those where we didn't understand, there was a standing direction; where you didn't understand, you got to try to find out and clear that up.

So I'm saying that's what's happening at the site. So you know, since all of the work was done, most of the site work was done by the middle of October, I have to assume that at least people believed that they understood all of the allegations or had asked to talk to people to make the clarifications, but nonetheless, we had started before I left the closeout of these things, okay, and that was carried on after I left. And I think Mr. Noonan can talk to that later, but you know, that's where we are on that in that one area.

MR. WESSMAN: During the course of the site tour

we talked to somewhere between 15 and 20 allegers. Those were the ones we felt we needed to talked to to clarify issues they already raised or in a couple of occasions they were identified to us as a new alleger during the course of our time on site.

MR. ROISMAN: What was the value, in your judgment, of site visits as compared to the work done after the site visit? What were your people getting by being on site that they couldn't get if they didn't go to the site? What sort of things?

MR. IPPOLITO: We had -- at the site we had all that we needed. We had the documents right there. Those were the documents we wanted to see, not something that could be sent to us. The systems were installed there. Right there. Let's go look at them. Let's see beyond the problem that was identified. In other words, if it is a hanger in this area, let's look at hangers in other areas. The third dimension is that you could not get out of working out of an office up here.

MR. ROISMAN: In your judgment was it valuable to be able to go in and see the whole file in which some particular document that you may have been interested in was placed, rather than to rely on the applicants to send you the document?

MR. IPPOLITO: Our objective was to

independently, at random, try to establish whether or not an allegation or issue was in fact substantiated. I think that we had to do this.

MR. ROISMAN: I guess what I was driving at, sometimes at least, in our experience -- I don't know what yours is -- sometimes when we ask the applicant for a document, we get a document in a certain form. Then we learned the same document is available in another form, not necessarily with the material that we got the first time changed, but with more things attached to it.

Was it advantageous from your perspective -- if you wanted to see an NCR, was it advantageous for you to be able to go to the NCR file and see the NCR as it appeared in the file rather than to say to the applicant, send the NCR 465 or whatever? Were there some advantages to that?

MR. IPPOLITO: I guess if you speak of an NCR, the NCR is what it is. You could make a photocopy of it or whatever you want. It is still the NCR. I think that we did more than that. We independently selected not only that NCR, probably and randomly picked on either side of that NCR a number of others. We did it ourselves, we didn't rely on someone else to pick our sample, so I think that's the advantage you have. You could look in and see a document package that is maybe a foot thick, and you see one that's only, you know, like three pieces of paper in it,

and you might say, that looks like one extreme and another extreme. I think I'll find out why. These are the type of things that the reviewer can take advantage of.

MR. ROISMAN: When you use the words "sample" and "random," you're using the lawyers' sense and not --

MR. IPPOLITO: Yes. Vince's comment is still appropriate.

MR. ROISMAN: Generally applicable.

We're happy to break for lunch unless you want to hang here.

MR. IPPOLITO: Does that mean we're through with me?

MR. ROISMAN: We're never through. It means when we come back from lunch we don't intend to start asking you questions.

(Whereupon, at 12:20 p.m., the meeting was recessed, to reconvene at 1:00 p.m., this same day.)

AFTERNOON SESSION (1:05 p.m.)

MR. CHANDLER: I would like for the record to note that the Staff did provide to Ms. Garde a copy of the document entitled "Technical Review Team Guidance," dated June 1984, which she requested prior to the break.

MR. ROISMAN: We're delighted, and for the record, this is the first time we've ever seen it.

Mr. Noonan, there came a time when you assumed responsibility for the technical review team. What I would like to know from you, first, is to what extent were any of the procedures or processes that Mr. Ippolito discussed this morning changed by you after you took over?

MR. NOONAN: Okay, when I took over basically there were some instruction that Darrell Eisenhut gave me. Number one, no changes in staff, at that point in time. I shouldn't start restaffing with different people.

Number two that the work was done basically at the site by the technical review team people, group leaders. Their work was not totally completed but for all practical purposes was done. I should start working on getting the SSERs written.

Number three was allegations. I should become personally involved in the allegations, go out and meet Ms. Ellis, meet Ms. Garde, and talk to the allegers myself as many as I could practically do, and then start thinking

about the hearings and how we were going to handle them and Staff positions. So that was the four things.

My instructions to the Staff was basically to write the SSERs. They had done the work. They know how to write SSERs, do it. I didn't get involved in that process at that time. What I did was concentrate on the allegations and I spent the first probably six weeks getting familiar with the allegations, the system we had, and I decided that I wanted to improve on that system by providing better organization and recordkeeping. I wanted to make sure that we had -- you'll hear it many times, auditable file, for the allegations. I wanted the files to be complete so that we knew how the allegation was handled, if the allegation was indeed the way the allegers stated it, the feedback, start tracking where we were addressing SSERs and how it would be eventually closed out. The system was changed from time to time. We put it into an organization.

Basically, we took the regional force system that they had at that time, brought it up to Bethesda and started working with it from that point on to make it to what I felt was more organization to the system and also putting it on a computer link. That's kind of the way we worked the allegations. We did make some ground rules as far as working with the allegers. The ground rules basically were stated by me and they are in a document that

we wrote. Basically, it is the agency policy on the allegers. We asked individual technical people, when they talked to the allegers, particularly when they provide feedback, treat the allegers with respect. Don't question their motivation, don't get involved in that. Treat it as factual until such time as you decide from a technical basis that it is factual or not factual, and don't challenge the allegers.

Early on, I think we had a couple cases and I can't recall exactly what they were, but where the Staff got argumentative with the alleger and it wasn't necessarily Staff's fault, but I didn't want to get into that kind of environment. If the alleger said it was that way, do it that way. Provide the alleger with feedback from the technical staff and see if the alleger agrees. If he doesn't like it, find out why. Try to get it on the record why. If the allegation wasn't correct, the Staff misinterpreted the allegation, didn't write it down correctly, whatever that was, then by God let's get it right and address the right allegation.

That process basically took us -- at least my involvement was pretty deep until November and December, and at this time, the Staff was working on SSERs. I put together a panel that was intimidation and harassment panel. I also put together a contention 5 panel. I set up a new

type of organization where I had basically just three people reporting to me. I should say four, because in this allegation I assigned a specific individual to be responsible for the allegation system rather than have all the technical groups working on their own allegations and eventually being coordinated into one group. I had one man assigned to make sure the allegation system was put in a form we could handle and deal with. The last was working with the utility on the set-up of the CPRT, putting out our concerns, talking about, Mr. Utility, you now have all our concerns addressed, we want you to come back -- and these were the letters and finally the SSERs.

MR. ROISMAN: Let's go back to the allegers for a second. At the time you took charge of the technical review team, essentially two of the technical review team letters, September and October, were already out. There was a letter in November and finally one in January of 1985. Explain to me how the changes that you made with regard to dealing with the allegations of the allegers and the allegers themselves, how did that change, if it did at all, tne development of the technical review team letters, the development of the subsequent SSERs, or is this a separate track done in some way separate from that whole process?

MR. NOONAN: No, they are tied together. Basically it didn't affect the two letters that had gone

out so much. It basically affected the SSERs because we told all parties that while the letters were there there were still additional things to bring forth, and those could have been things we brought out while we were putting this alleger system together. I looked for things where it said we couldn't contact the allegers. Why couldn't we? Let's fix the process to make sure we have a record to say we did contact them or if we didn't, why we didn't.

So in our files you should find something in that file that says we contacted the alleger and there will be a transcript there to indicate that or there will be a letter there. If we did not contact the alleger there would probably be a piece of paper saying we sent a registered letter and got it back, and a few refused to meet with us and that should be in there also. Anything would be updated as far as what might have been in the letters, but the SSERs should now reflect the current view of the Staff.

MR. ROISMAN: Can you give me some idea of what, or in some detail -- you went through it very quickly and I'm not sure I understood it and certainly didn't remember it all. What were the things you changed about how allegations from allegers were dealt with by the Staff from what had existed before you came in?

MR. NOONAN: Organizational was the big thing.

I felt we needed a system where we could find out the allegation number. We had given everybody a number because we didn't want names to get out -- who was working on the allegation, where it was addressed in the SSERs -- so it was an organizational procedure.

Sometimes we need to provide closeouts, everything will be closed out, there has to be a record for my purposes at least of managing to make sure I know who did it. Did they look at the right allegation, are we sure it is right, and where is it closed out. We played back what you call commission policy on allegers, put through all of the technical people. We sent copies to every technical person. We set the ground rule. When you talk to allegers, technical people have a tendency to look at the technical answers, and I didn't want them to become argumentative with the alleger. The alleger believed what he believed. He wasn't necessarily always right. I didn't want to challenge him in a meeting like that. I thought we could do it on paper.

MR. ROISMAN: In the technical review guidance team document we got dated June 1984, there are some instructions in there for dealing with allegations and the alleger which appear -- sorry, there's no page number. It is in attachment 3, and it is on the third page of the attachment under paragraph G. I want to know, are there

other instructions that you added to this beyond these that dealt with how people should be dealing with the allegers? If it is in a document, say I did this a supplement to this --

MR. NOONAN: I believe I did read that when I came on board and put it in the file. Basically we started with a set of instructions that followed much along the Diablo Canyon lines, the treatment of the Diablo Canyon allegers. We took the policies followed on Diablo Canyon and put together a document that said here's how we will treat allegers from this day forward. It is different. I don't want to call it a supplement because I didn't use it as a basis for any other document.

MR. ROISMAN: So we'll be able to find it and I assume it is coming in the course of things, what is it called? What should we look for?

FROM THE FLOOR: I think procedures for closeout of the allegers.

MR. ROISMAN: What did you do when in going through your procedures you identified an allegation which in your judgment had not been properly closed out but was already the subject of a published technical review team letter. Did you go back and do a further site analysis, send people back on the site again?

MR. NOONAN: I would have made the people available to the site if necessary. We always asked that,

do you need to go to the site to answer the allegation or is this something you already covered. We provided feedback to the person. I would have given it probably at that time -- this time I was setting up kind of a different organization and I would have given it either to Mr. Shao or Mr. Calvo. Those were the two people who were going to become responsible for almost all of the technical work. I hadn't put the new organization in place yet, but I was going in that direction.

MR. CALVO: To supplement what Mr. Noonan is saying, we did in some cases follow up allegations, set up a team to go back to the site because new information resulted from the allegers or new allegations altogether. So it was a judgment on our part whether we had to go to the site or maybe the information we had was good enough in our SSERs in some kind of way to cover that particular new allegation or new ramification of that allegation.

MR. NOONAN: We had people at the site this month looking at new allegations.

MR. ROISMAN: The next question, what did you do with allegations which you learned of subsequent to the time of the original technical review team site visit?

MR. NOONAN: They would have been logged into the system so we have a record of it. They would have been given to my technical people for resolution and then

addressed in a formal supplement to another SSER, and I think at that point in time, we hadn't officially put it out. All the allegations we addressed over and above what Richard looked at are covered in SSER 7 to 11, or will be covered in the next edition. I haven't fully decided. I might put it into an appendix.

MR. CALVO: The electrical instrumentation group give status on new allegations or follow-ups which come up after the SSER number 7. We indicated which they were, and in the process of evaluation gave the status, what conclusion we had reached at that time. The process is still going on.

MR. NOONAN: As of September 15 we took the allegation files, brought them back into the region. The region now has responsibility for any allegation that appeared after September 15. We're handling the ones before that time. The region will transfer to me if there's a need for any technical evaluation?

MR. ROISMAN: What would they look at where there wouldn't be a need for technical evaluation.

MR. NOONAN: Depends. Could be strictly an inspection allegation that they could handle themselves.

MR. ROISMAN: Could you give me a "for instance" so I understand the distinction?

MR. NOONAN: Could be that something -- a cotter

pin was left out in certain things. The region could look at that themselves. If it was true they might want to get the technical staff involved, but depends on what the resolution of the region evaluation was. We're going to be informed of all the allegations. We do know at this time what all the allegations are, so it is communication between us and the region.

MR. ROISMAN: Is the region following your guidelines in how to deal --

MR. NOONAN: In general. They we close them out in terms of SSERs and they close them out in terms of inspection reports.

MR. ROISMAN: But how they do their investigation, in the way in which they deal with the allegers? Did the directives you gave to your technical review team staff on how to deal with the allegers, rewritten ones that you developed, have you given that directive to region 4?

MR. NOONAN: Yes.

MR. ROISMAN: Are they required to follow that as a result of you giving it to them?

MR. NOONAN: I don't know about "required." I fully expect them to follow it to the best that they can.

MR. ROISMAN: Are you in effect auditing their work on that?

MR. NOONAN: No. I'm talking to them and I talk to them almost daily, so communicating with them.

MR. ROISMAN: Why did that alleger investigation work get transferred to the region rather than staying in your office?

MR. NOONAN: That's the way it does business. The region normally looks to the allegations. We're through most of the allegations. We've looked at almost all of the allegers. You haven't seen the final disposition of some of the allegations, but as far as the Staff work is concerned, most of it is completed.

MR. ROISMAN: Do you have a rough idea of how many allegations are contained in the already published SSERs and how many allegations that your people will be dealing with where there is still no published resolution?

MR. NOONAN: I'll give you numbers. I think around 700-some allegations that probably -- yes, probably closed in the SSERs. Probably another 300-some being basically worked on by my staff here, our staff, and there's a few down in the region now, less than a handful probably.

MR. ROISMAN: What mechanism, formal mechanism exists that if an allegation is received by the region through the new system and has allegations that are already being investigated that your people will be made aware of

the new allegation?

MR. NOONAN: That's done through my allegation coordinator. I put one person in charge of allegations. That person basically communicates with the region frequently, sometimes more than once a day. That information is brought into our system. We know what's being done and I have put together a system where we can track not only allegations but board notifications. We know who is doing what.

MR. ROISMAN: Do I understand it is not yet determined what form the published resolution of the 300 or so allegations you're still looking at will take?

MR. NOONAN: No. The NRR Staff will close them out in future safety evaluations being written, an appendix to the evaluation and the region 4 staff will receive them as inspection reports.

MR. ROISMAN: Not in one future SSER but maybe as part of several future SSERs.

MR. NOONAN: As they are done.

MR. ROISMAN: Those allegations, to the extent they are related to that subject.

MR. NOONAN: Yes.

(Discussion off the record.)

MR. ROISMAN: You expect them to be an appendix to a future SSER.

MR. NOONAN: Yes. We have what we call normal licensing activities to be resolved. SSER 12, the normal SSER went out. The next one will more likely have an appendix in them.

MR. ROISMAN: Those will not necessarily be related to the subject matter of the SSER; you use that as the convenient way of getting it out?

MR. NOONAN: Yes.

MR. ROISMAN: The allegations that have not yet been closed out in published SSERs, is there any way they are being treated that is different than the way in which earlier allegations were being treated in terms of the nature of the investigative work that you do or how you deal with the allegers or any of that?

MR. NOONAN: Only in the respect that you always try to change to improve the system. That's the kind of changes that I would expect at this point in time, something that we felt could have been done better. We are now doing better.

MR. ROISMAN: To the extent that field investigations would have been done if this were an allegation that had been in Mr. Ippolito's hands in June of 1984, they would be field investigated now?

MR. NOONAN: Yes, if required, Staff will decide that.

MR. ROISMAN: There are no different set of criteria, the same Mr. Ippolito used in deciding when to field investigate would in effect be used?

MR. NOONAN: Yes.

MR. ROISMAN: You mentioned that you had -- one of the changes that you had made was the establishment of contention 5 in the harassment/intimidation packages. Can you just put them into the context of the process that was under your jurisdiction? Were they expected to participate in the development of any of the SSERs to start with?

MR. NOONAN: No, not in development of the SSERs. The contention 5 panel would be basically to see if the Staff was adequately addressing the concerns related to the allegations. Did we do a good job, were there things that we were not answering correctly, is the Staff position articulated properly, does the Staff have a basis for that position? The contention 5 panel was for that.

The overall charter contention 5 panel has been published, to see what the effects would be on QA/QC. Intimidation and harassment panel basically was a panel of people put together to address those specific issues, not look at the technical aspect but take what the Staff found and treat it in terms of intimidation and harassment, and that document stands by itself right now.

MR. ROISMAN: Well, the reason I was asking the

question is that it appears that having now seen the published report of the harassment/intimidation panel, that the panel essentially adopted the work done by the consultant EG&G, which was itself an evaluation of available materials as opposed to a raw research job.. Started with what was available, looked at the record, transcript and all the other available materials.

That, at least on its surface, appears to me to be different than what appeared to have been the original mandate of the harassment/intimidation panel. And I wonder with regard to 5, that there has been any similar modification in the role that you see the contention 5 panel playing from what had been indicated in its original authorization documents.

MR. CHANDLER: I think once again we're straying out in areas not related to the technical review team.

MR. NOONAN: There is a change, but you're right. Were getting off. Questions on intimidation/harassment, I would like to have that addressed to those people that worked on that. On the contention 5 document, panel, the document stands as it is. Those documents are in the record.

MR. ROISMAN: Talking about the original document.

MR. NOONAN: Yes.

MR. ROISMAN: Beyond what you described, what other, if any, modifications did you make in the approach that had been taken in the development of the technical review team when Mr. Ippolito was in charge of it, insofar as either producing technical review team letters or producing SSERs?

MR. NOONAN: I'm not sure there was any real change in approach. I might have used different techniques. I might have not been satisfied with the answers that I saw. I basically wanted to make sure that Staff had their conclusions and that they could articulate the basis for those. What do we need to do to do that job? That's what I would have done.

MR. ROISMAN: In the development of the work you did, to what extent were the limited budget of the technical review team constraints on the things you thought you needed to do?

MR. NOONAN: We as an agency always have limitations on budget. One thing I did do, when I came on board in October I also brought on board a contract person so we could handle the contractual problems that we normally incur. By that I mean getting people on board and available people and monies. Up to this point I haven't really had any -- I had sufficient resources to do what I needed to do.

MR. ROISMAN: I think we'll have no further questions for you, and I would like to start on SSER number 7 with Mr. Calvo.

MS. GARDE: Mr. Calvo, I'm going to ask my questions based on SSER 7, which you also have in front of you. On page beginning on page J-3 and going on to page J-4, there's a description of the concern and allegation tracking system and the review methodology. This document says that the technical review team determined the validity of each technical concern or allegation and assessed its safety significance, its potential generic implications and any indication of potential plant breakdown.

Going back through each one of these, could you please describe what was the basis for the determination in these areas in your category, which would be all the electrical allegations covered in here?

MR. CALVO: The basis of intimidation of the validity? I guess we can go to J-7. I guess this is in essence the electrical instrumentation group summary. We had about nine categories. Next we have the subject matter for each category and the correct characterization, with the characterization of the concerns and the allegations in those categories.

The first category was electrical cable terminations. How do I determine the validity of each

allegation. What we did, we took all the available allegations in the electrical instrumentation systems and tried to put them in nine bins, in accordance to the type of allegation there was. For instance, in the category 1 we put everything that had to do with electrical terminations. Or hardware related, sometimes QA/QC related. We went down the line. When we get to the electrical cable terminations, we look at the allegation and are trying to determine the validity of that allegation. If we have the specificity it is very simple. Inspect the particular installation or look at a particular document but always go back to the installation; we try to do that.

Then that will determine the validity of that allegation. The question is, what we do after we determine validity. If it is determined to be adequately substantiated then we try to determine what are the ramifications of this particular allegation. What were the generic implications? Was any more problems like this on the plant?

MS. GARDE: Before you go into that, when you say if you determine that it was adequately substantiated, now, what do you mean by the term "adequately substantiated"?

MR. CALVO: The description or the characterization of the allegation. For instance, the allegation says, if the specificity will say cable XYZ was

terminated improperly, we confirm that that particular cable did not confirm with the drawings, we say it was an allegation that -- it was adequately validated, adequately substantiated. The allegation was correct. No further to go into that if the specificity was there.

I must add, most of the allegations, they were mostly very general. There were very, very few -- count on the fingers of your hand -- that had any specificity in it. When you are confronted with that type of allegation, it was a global allegation, I had to make a judgment where to look to see whether it has some merit. I could not focus on any particular area. I must go to the plant and pick an area of the plant where the greatest conglomeration of this particular installation I could find.

In the electrical systems one place you found the greatest concentration would be the cable room. In the electrical termination we figured out the greater majority of the cable termination was in those areas, and more logically we will find the problems in there, and that's what we did.

MS. GARDE: Let me restate what I think you said. Where there was programmatic concerns raised with no specific basis, cable number, drawing number, you would design an inspection program which would give specific information, come up with a set of examples or drawings to

look at, then go look at those drawings to reach the conclusion on the programmatic concern raised by the alleger?

MR. CALVO: We call it approach to resolutions. Those indicated how you go about tackling this particular problem, what we should do with the allegation. Was it specific or was it generic. We always try to go forward enough, looking, reinspect enough to determine whether the allegation, valid or not valid, it has some possible generic implications.

MS. GARDE: Let's stick with a small number of specific allegations. I want to make sure I understand. Where you had, for example, cable termination numbers or cable numbers, and I went and kicked the tires, as the term has been used, and you found that that particular cable or cable termination was correct as you looked at it today or July '84 when you looked at it, did you make any attempt to determine if, between the time period when the allegation was made, say the person left the site in January of '84, and that is the extent of his knowledge, and July '84, when you were looking at it, did you make an attempt to determine whether between January and July those cables had been corrected, NCRs had been written, the problem had been found by the utility and adequately dealt with?

MR. CALVO: Not in the specific time frame. We

look at the installation up there at that time, could have been done for the last 10 years. We look at that information pertaining in that particular area we felt was the problem area.

MS. GARDE: When you say a specific allegation was not substantiated, that term means that at the day you looked at it, that particular component was acceptable?

MR. CALVO: The particular component was acceptable, in some cases. In other cases I could not reach that conclusion because it was not enough information to reach that conclusion. In some cases I could say it. If it was specific enough, told me exactly what it was, you correct it.

MS. GARDE: That's the ones we're talking about now, specific allegations?

MR. CALVO: That's correct.

MR. NOONAN: If I can just interrupt one second, when the Staff looked at the allegation, they made a determination whether or not the allegation, they could say that it was a -- they could validate the allegation. A lot of things could happen in the normal work process at the plant that could have changed things from -- if there had been a year span there could be a difference, so I guess what I'm saying, normal work done at the plant could have taken care of the some of the problems alleged by the time

the Staff got there. Normal work.

MS. GARDE: I want to understand what his SSER means. I already know what you think. Tony is going to ask a clarifying question.

MR. ROISMAN: I want to be clear about this. Do I understand the way you did the investigation it is possible that the following could happen: A worker sees a condition in 1982 that is nonconforming. He attempts to raise it with management and they reject it. Sometime after that he leaves the plant site. He eventually becomes an alleger and his allegation shows up on your desk. After the plant has been deemed to be completed, the defect is still there, still in the plant, still at the place he saw it. But management learns that the alleger has gone to the Nuclear Regulatory Commission. Now they know that he is pressing that issue.

They go in then, after all their inspection work was presumably done, and they fix that problem. You now show up sometime after June of '84, and you go to look, and you see the physical hardware, and it is not -- no problem anymore. That it is possible that at that point, you will write on your sheet, this is not substantiated, there isn't a problem here, and never have gone back to find out in paperwork whether the correction was made in the normal course, as Vince just said, or whether it was made after

applicant had represented that it had completed all of its work on that component, and maybe only because of the existence now of an external alleger.

MR. CALVO: If we go back to the basis that you have a specificity, the specificity was an NCR number, that would have forced me to go to the paperwork. If the alleger was that person that you say that sometime in the past brought up a particular problem that it was corrected, then I think if the specificity was there on the paper, where that would force us to look into that.

If the problem was just the hardware item, no paperwork trail for it, we did not go to verify the fact that, yes, it was truly an allegation corrected by management because I would not know where to look at it. I guess that particular aspect of it, I would consider that's part of the QA/QC program. Looking at the programmatic concerns, how things evolved throughout the plant. There was not a way for me to recreate the crime and say, by the way, you are right, but they have corrected it. If the specificity --

MR. ROISMAN: The normal course of the look at allegations did not include an automatic look to see whether problems which the allegers, whether specific or general, problems which the allegers said existed and which on review of the hardware you found were not there, there

wasn't an automatic, let's look and find out whether this thing got fixed only in the last month or whether it got fixed within a month of when the problem was raised and this alleger just never knew it got fixed.

MR. CALVO: Even if we had done that it would only apply to a handful of allegations because the specificity was not there. There was no way I could recreate that kind of trail.

MR. IPPOLITO: Isn't it a fact, unless one wants to make the assumption that the applicant would totally violate all of his procedures, his QA/QC procedures, any modification done on that plant would have had a record of some sort, regardless of whether it was done today, yesterday, a week ago, a month ago, a year ago? Would there not have been a record that a modification had been performed and the time it was performed?

MR. CALVO: Should have been. In the ideal world, there should have been.

MS. GARDE: My question assumed the paperwork was there. It was more directed to when were corrections made.

MR. IPPOLITO: I would be surprised then. You did what you did, Jose. I would be surprised in looking over that data, that control package or data package, that his people, and I know the people who were working on this,

would not have looked at the whole package, would not have known that there were modifications done at a certain time.

MS. GARDE: You are going further than I think my question is. When you say was adequately substantiated, I wanted to understand that.

MR. CALVO: The focus of my review was to validate the allegation, but I don't stop there. I went a step further. I know that allegations reflecting this issue, whether they were there or not. If it was not validated, I would go the same way whether it was validated or not validated. To satisfy myself if the allegation was an isolated case and also provide me the basis, what I will tell the applicant to do to look in a more global way in the plant.

MS. GARDE: In the case where you have specific information, component number, NCR number, you look at that and everything looks all right, acceptable --

MR. CALVO: With the standpoint of the NCR paperwork I always double check by looking at the installation. I felt the paperwork was the QA/QC responsibility. My job was the product. I want to be sure that the product was okay regardless of whether the paperwork was telling me one thing or the other.

MS. GARDE: Good. I'm glad you clarified that. If you had a specific allegation and you only had a handful

of those with that type of specificity and it was not substantiated as being a problem, you still expanded the scope of that allegation. So you looked at, for example, cable numbers, if you had a particular cable number, and that cable was acceptable, you still expanded the scope of what you looked at so that you looked at other similar cables.

MR. CALVO: I did that on a general basis. Of course there are exceptions to the rule. It was a judgment in one case to do it or not to do it. In most cases that's what I did. I wanted to be sure I was looking ahead to the future. Any new allegations in the future I wanted to be sure I had the umbrella over these categories so I didn't have to send the team back to Dallas again. We wanted to be sure we put the arms around it. We spent enough time down there already.

MS. GARDE: Programmatic concerns. If you were given a general allegation with not very much specificity, you then developed a program to look at specific components, documents which would tell you whether or not that programmatic concern was substantiated; is that correct?

MR. CALVO: You say programmatic concern, an allegation has general connotations. Every time -- for instance there were allegations on cable separation. Allegation says you have cable separation problems on the

plant. No other information than that in some cases. We had a choice. We could go and pick up a little system in the corner and find out that it may be representative of the others, but on those we truly concentrated in three areas, in the cable spreading room, in the control room and the shut-down panel. We thought if there were problems we would find it there. We concluded there were some generic implications, some cases we did find problems with generic implications, but it was limited to it was my engineering judgment and the people working for me at that time. It was not a trail of a map that we draw, let's go from here to there. It was just concentrated on the area, be sure to pick up enough samples here and there and determine the implications.

MS. GARDE: Going back to J-8 -- J-4. I want to go through your process in this sentence because I have other questions on generic implications and other things in the sentence. We've now gone over how they determined the validity of each technical concern or allegation. The next part of the sentence is "and assessed its safety significance."

MR. CALVO: Let me go back to determinations. We can pick up any category and generalize it. A lot of the allegations we had were in our judgment associated with non-safety-related systems as defined in the FSAR. It also came to our attention that maybe the QC inspectors were

considering everything either safety or not safety. To them it was safety so we felt they were treating them as safety-related, the kind of quality must also be reflected to be safety-related. Every time, whether it was safety or nonsafety, we also tried to look at enough of those things around to find out there was not generic implications. Why spend more on this. We did what we could. We looked farther into the safety-related even though there was no allegation, and concluded whether it was safety or nonsafety, that's what we ended up.

MS. GARDE: Where in the process did you assess the safety significance of an allegation, was it at the beginning or at the end?

MR. CALVO: Neither, all through it. It was not -- it was at the end when we write the conclusions. It was when the process was going on if it was nonsafety-related, although we agreed the QC inspector could not have made a difference. I guess if it had been safety-related, maybe my judgment, my generic implications, kind of arms around it maybe would have been a little bigger arms. I would say that's something to look further into it. Then we also jump into safety-related features if we felt it was appropriate.

MR. IPPOLITO: Unless things have changed, does it not have a section in it that talks about safety

significance at that specific or group of --

MR. CALVO: It does, but it is a very general form. It doesn't convey the kind of message. Say the significance is, say, something like the installation appeared to be undetermined. Doesn't add to the kind of thinking we tried to do there. Most of the characterization is not. Everything has safety significance. The the degree is what we tried to determine in relation to all the generic implications of the plant.

MS. GARDE: Going back to the general concerns that didn't have a lot of specificity that we're talking about, you used the term random, and am I right in assuming that you are not talking about statistical --

MR. CALVO: That would be with lawyers.

MS. GARDE: Is there any consistency to the number of documents you would look at to determine whether a general concern was substantiated?

MR. CALVO: To be honest I was more worried about things I found to be correct than not correct. Once I found problems with installations, then in my mind would think, well, appears that we have a problem. Appears it is not an isolated problem. Appeared that the utility would have to look into it. I would say that's one for root causes and for the generic implications. The ones I didn't find problems I always worry, because I thought, do I look

at enough of them? Do I have to go further?

MS. GARDE: I need to know how you reached the conclusion, what was the basis for your conclusions not to go further? What's your auditable trail?

MR. CALVO: I don't want to give you a litany. You want to ask me the ones that I found something wrong with, whether I felt it was enough that I didn't have to go any further? I think the auditable trail, if I found something wrong with a particular aspect, for instance electrical separation we found problems, do you try -- it is an auditable trail but the action required from the applicant is to inspect all the electrical separation for that particular type of electrical system, that's better than any auditable trail. The whole thing got to be revisited in hundreds of numbers of magnitude.

MS. GARDE: That's not my question. There are things that you did not pursue, that you did not find a problem with, and they kind of dead end. That's the end of it.

MR. CALVO: Right. If I found a problem --

MS. GARDE: What did you look at to make that determination, how much?

MR. CALVO: It's not numbers. Sometimes bias, sometimes it is all contained in the SSERs. That's the general auditable trail, and from here you go to the

reference documents that we had as part of the allegations package. That will support this auditable trail. Numbers will mean nothing. What areas they will look, in some cases you got numbers, but the question is whatever numbers I give you, the important part is the actions that are required. If I required no actions the question would be a good question. But if I found problems with the separation in the control room packages and I say -- and that was validated, I asked the applicant to reinspect every panel for Comanche Peak, what better auditable trail do you need?

MR. ROISMAN: I want to ask you a question on that issue. You seem to be making an assumption, sticking with your control panel problem, that if you find a problem in the control panel, asking the applicant to reinspect all the control panels, reaches as far as you could conceivably reach so there was no need to look farther yourself, but if you don't know why there was a problem in the control panel, how do you know making the applicant look at the control packages would take care of the problems? If the why was equally applicable to noncontrol panel stuff, then your hundred percent look at the control packages would not have made them look broad enough.

MR. CALVO: You're right, but again I must look at the allegations and put some bounds around them, you see. I got the allegation. I got problems with separation in

the control packages. It was not mine to establish the root cause why you had problems in there, therefore you must have a problem somewhere else. The applicant could look at this problem and determine whether he had problems in the cable trays or whatever else, but as far as my scope of work it was limited to the allegations having to do with control panels.

MR. ROISMAN: There was an operating assumption that, at least in your group, was used that the language of the allegations as given you by the alleger defined the outer limits of how far you would require the applicant to go. If the alleger had said, in every time the applicant did an electrical inspection of the plant, they disregarded deficiencies if they would be time-consuming to repair.

If that had been the allegation, and you had gone to the alleger and said, how do I find that, and he said, well, go to the control packages and you'll find separation problems that never made it to NCRs, so you go to the control panel, look and say, he's right, I found these problems, but the scope of the allegation was that they were dropping the ball on deficiencies all over, and the one example that he happened to have for you was control panel.

Would your operating assumption make you then require them to reinspect the entire electrical system of

the plant or would you still have limited your requirement to reinspect the control panels because that was the only specific area where you found the allegation confirmed?

MR. CALVO: No, I guess for instance, I think it is yes and no. It goes back to the judgment, the significance of it. If I feel that the allegation provided me with some bounds, okay, normally we went outside the bounds of the allegations to establish -- there was no other problems in other areas of the plant.

The control room panels -- we don't ask them to fix the control room panel, we ask them to do every panel in the plant, so it will be enough from the standpoint of the argument, why get out of the control room because the allegation did not tell me to go to the control room.

We went further. We felt if it was a problem in a particular installation, we felt that maybe the same problem will occur in other areas of the plant, so our action was not only to concentrate on the control room, it is to go to all the panels in Comanche Peak and determine whether you had the same kind of a problem, so it was not what the allegation told us, it was what the judgment of the group told us.

MR. ROISMAN: How do you know to stop at the control panels all over the plant? How do you know it should not have also included the cable spreading room or

how do you know it didn't include all of the --

MR. CALVO: It is a matter of experience, of knowledge with this kind of installation. Had to do with the separation between flexible conduits. We felt, based upon what we found -- there were some drawings and specifications -- that the application of the regulatory criteria was misinterpreted. We feel if it was misinterpreted there, it may have been other places too. Depends on the case in question.

MR. ROISMAN: The question is, what's the basis for deciding that if the procedure was misinterpreted for let's say the cable separation, if it was misinterpreted for cable separation, it wasn't reflective of a failure plant-wide to understand many different electrical procedures, not just cable. How were you able to know that you could -- that you had gotten your arms around the entire problem with only the knowledge -- without ever having answered the question, why did this procedure not get understood? How did you know whether you had put your arms around enough of the problems?

MR. CALVO: If I understand you correctly, if you had problems with the electrical separation procedures why don't you have problems with the electrical termination procedures? Every electrical NCR we had, that problematic problem comes back to the QA/QC. If you look at the cable

separation, for instance, on page J-44, action to the utility, evaluate the adequacy of the QA/QC program. This is page J-44, has to do with the electrical category number 3, electrical equipment separation, under actions required by the utility. "Evaluate the adequacy of the QA/QC program as related to the deficiencies identified above to establish root causes and appropriate corrective actions. These actions should be integrated with other actions addressed under the electrical instrumentation category 6, electrical QC inspector training and qualifications and QA/QC category 88 as built and QA/QC category 1, design process." The inference from one -- mistakes from one procedure to the other, that was feedback into the QA/QC, the programmatic overview. What are the implications, what else they can make out of that based on the programmatic assessment of the procedures?

MR. ROISMAN: Do you have a judgment as to how you believe that process is supposed to be implemented? Let's stick with the cable separation problems in control room panels. At this point, I take it, you do not know why it was that the proper cable separation procedures were not followed. All you know is that you looked at some and found that they were not followed?

MR. CALVO: No. In this particular case I know why, but again it was not the why for me to resolve. I

know the why was a personal why, but I want to be sure that that why was confirmed by the utility by looking further into it. I know why. My personal opinion it was a misunderstanding of the regulatory requirements versus the electrical specifications as transcribed into the drawings. That was our evaluation but there could have been other reasons.

Our scope was limited to identify those problems, identify generic implications and then the monkey was back on the utility's back for them to assess the root causes and reevaluate whether we have generic implications. We left it that way. That was the purpose of our review. That was limited to do just that.

MR. ROISMAN: Would you consider it to be part of an answer to the question why if it were true that the reason for the misapplication of the regulatory requirement, as put into the plant procedures, was an innate bias within the plant procedure writers to always look for the least amount of regulatory control? If that were true, would that be what you would call a "why did this happen"?

MR. CALVO: If I happened to know that. But how can I ascertain by looking at the procedure whether that was a bias?

MR. ROISMAN: I wasn't asking that. I was asking, is that the kind of answer which one ought to be

able to either prove or negate in trying to answer the question why?

MR. CALVO: Are you asking me for an opinion about that?

MR. ROISMAN: Yes.

MR. IPPOLITO: An opinion of wrongdoing.

MR. CALVO: Again, my review -- again, I'm not trying to evade the answer -- concentrated into the work product. That was my main focus, was the work product. Quality in the installation. The installation hardware was installed in accordance with requirements and I was using the procedures available to how that had been accomplished. Also we had the knowledge of what the requirements were so we know what procedures were to be followed and translated into drawings and in the installation. That was the focus. Whether that could have been my opinion or not, I don't know.

MR. ROISMAN: I'm not asking whether you hold that opinion on the substantive issue, I'm just asking whether in your mind if that were a fact, that the reason why the procedure got interpreted the way it got interpreted was because there was an innate inclination built into the management attitude of the plant to look for the minimum amount of regulatory control, is that the kind of answer, if it is true, that you would expect to find in

a root cause investigation when you say to the utility, find the root cause?

MR. CHANDLER: We're straying again.

MR. ROISMAN: We're right in the words of the SSER. The purpose of the meeting is to discuss the meaning of the words in the SSER and I'm looking at words on J-44 which he read which include the word "root causes." If you're not happy with the stipulation it is too late to change them.

MR. CHANDLER: I would like to stick with the stipulations.

MR. ROISMAN: It appears in paragraph F on page J-44.

MR. CALVO: In this case, you're trying to generalize. In this particular case, the hypothetical situation that you are setting up does not apply to this particular case because I was aware of the problems with the interpretation of the regulations as reflected in the procedures in the internal memoranda. So in this particular case, that hypothetical situation that you are trying to establish does not apply. That would be my answer. If you're trying to say "what would you do," I don't know.

If I happened to know that that was the case, that I had printed as an allegation, I would have to look

further into it. You see, in this particular case the hypothetical situation does not apply because I happen to know the root cause of that problem, so in essence I'm asking the utility if I'm going to review their report and evaluation of their root cause, I'm expecting to know what the root cause is for the particular case.

If you read the hypothetical situation, if I happen to know that that's the reason for it, then I need more information to reach a conclusion. I cannot accept that face value. I got to dig into it and reach a conclusion and give you an opinion.

MR. ROISMAN: My question was, did that fact exist, was that kind of information, would that fit -- if it were true, would that fit what you call the root cause? Is that the type of thing which could be a root cause?

MR. CALVO: Again, I'm not trying to evade the question. You're getting me outside the purpose of my review, that is, to look at the quality of the installation. You bring me to a different level that I have not had an opportunity to think about what I would do in those circumstances.

MR. IPPOLITO: Using his typical example, he's clearly indicating that you sense or smell or feel a degree of improper action. What you normally would do is to say this feels like it is something that's wrongdoing, bring it

to my attention or Vince's attention. It then might be referred to OI to look into.

MR. CALVO: You can go further than that. If the situation is there, it wouldn't come to me because the way the system was set up that had been taken care of. I'm here nice and clean, looking at the quality of the installation. It will never reach my level because I only look at the technical merits of the allegation, not if there was wrongdoing. That's somebody else's responsibility on that level.

MR. ROISMAN: Let me ask Mr. Ippolito a question. Is it your understanding that to the extent that the root cause of a particular problem when traced all the way back was that management had an attitude about safety that was not to do what the regulations required down the middle but to try to get by as cheaply as possible, that if that were the root cause, that that's a root cause which would be of interest and the investigation would be being done at OI and not by the technical review team at all?

MR. IPPOLITO: You are coming at it rather strangely. We went out and looked at a number of allegations. Some were proven to be correct. We asked the licensee, go and determine the root cause. We expect it. Were they not 5054 floaters?

MR. CHANDLER: I don't think so.

MR. IPPOLITO: We expect them to do exactly that, find the root cause. If the root cause happens to be that someone in their organization did something that he wasn't supposed to, I expect to know about it or the NRC should expect to know about it. We are not defining root cause. We're not limiting it. They have to go find out what's wrong, to our, the Staff's satisfaction.

MR. CALVO: If you take the technical input, whatever the determination was made, and combine those together, if you find out that it is valid, that wrongdoing, then yes, for the sake of the discussion, that should be considered the root cause, but I'm saying within my scope, the only questions I'm prepared to give you a truth answer for is those I'm familiar with and those are only related to technical merits.

MR. ROISMAN: So in other words, your own capabilities, your own competence really stops at the point that the root cause stops being completely confined in the technical area and enters the more non-technical area of management attitude or harassment, intimidation, or falsification of documents or any of those kinds. It is telling me, I can tell you what failed, but I can't tell you if you are talking about -- and why it failed technically, but I can't tell you why it failed if you talk about human failure.

MR. CALVO: What was the underlying allegation to come to me to evaluate the technical merits? Whatever happened here, that part didn't come to me. The merits only come to me. That has been the general rule. I'm sure I had followed the thing up, maybe I don't know if it is to the point that I got involved into the area. That could have been a mistake. That wasn't the intention. That was the way we perceive ourselves to do the job, just the technical merits.

MR. IPPOLITO: I'm assuming what you say by that question, if Jose was doing an inspection and found or suspected there was something wrong, in other words a deliberate falsification or what have you, is that what you're saying?

MR. ROISMAN: No, I'm assuming he has no particular suspicions. I'm saying if you take any of the examples as they actually appear in SSER 7, you can postulate the possibility that the reason, the real reason why the condition existed was something that goes back to, for lack of a better term, management attitude, an approach to safety that was different, and what I'm understanding Mr. Calvo as saying is, if that's true, the scope of his investigation stops before he would ever know that answer.

MR. CALVO: But also provides an input for somebody else's decision, that conclusion.

MR. ROISMAN: Okay.

MS. GARDE: Mr. Calvo, I would like to continue this line of questioning with a specific example. Let's take allegation number AQE-1. On page J-19 the characterization of the allegation is that an electrical inspector was pressured not to write nonconformance reports in several instances. In one case the QC supervisor instructed him not to write an NCR for control room cables removed out of proper documentation. Now, let me ask a preliminary question. There are a number of words that to me flag wrongdoing. Was there referral of this allegation to OI? Is there anything in here -- I read through the allegation disposition. It doesn't say anything about that.

MR. NOONAN: We made sure anything that should be referred to OI was referred to OI. Everything in this SSER that might involve OI work, that's my knowledge.

MS. VIETTI-COOK: Can I input to this? When we first pulled these allegations together, the way that we did it was we asked OI, give us all the OI reports that you have done to date. Dick Wessman and I reviewed those OI reports, and they had completed their work. OI had completed their work as far as wrongdoing was concerned. We looked at it from the technical standpoint. What could this mean to the plant? What could what OI hasn't covered mean to this plant? And we looked at it from a technical

standpoint and that's a big bulk of the allegations that came from OI reports.

MS. GARDE: This may have in fact come from an OI report.

MS. VIETTI-COOK: I can tell you it did.

MR. CALVO: The intimidation panel on a search for the conclusions went through the allegations and contacted every group leader and determined where was the technical merits of that allegation.

MS. GARDE: When did you and Dick do that? When did you do that review of the OI reports?

MS. VIETTI-COOK: Prior to the technical review team being joined together. This was the very beginning. When we compiled the list of allegations we read OI reports. We looked at prior region 44 inspection reports, hearing records --

MS. GARDE: This is before you got to the site in July?

MS. VIETTI-COOK: Right, and we put together files that put maybe pages of the transcripts in the file that gave them, you know, the words of what the allegation was.

MR. NOONAN: Since the SSER has been written, where the Staff might have said this has been turned over to OI, I made sure it had been. We have gone through that

process.

MS. GARDE: In theory at least, all these technical allegations that have wrongdoing flag words in them, if you will, there should be a conclusion and a response by OI on the wrongdoing issue?

MR. NOONAN: In general, the OI report should address that issue. Did we miss some? Probably.

MR. IPPOLITO: Wait a minute. There either has or there is, is what they are saying.

MS. GARDE: Has been or will be or is now, but I haven't seen it?

MR. IPPOLITO: Right.

MR. ROISMAN: Mr. Noonan, when you get the report back from OI, if OI reports back and says, yes, this person was pressured, it is correct, there was wrongdoing, does that get fed back into a determination of how the root cause investigation is supposed to take place?

MR. NOONAN: The way the process should work, if that determination is made by OI, depending on where it sits, it would go back to the technical group. If it hasn't been incorporated into the program plan, it will be, by some mechanism.

MR. ROISMAN: You mean to make sure that the look for root causes and for generic implications now takes into account at least one of the deficiencies that

Mr. Calvo had determined technically had merit, now appears to have been caused at least at one level by pressure as opposed to caused by bad training or an inspector who was an asleep or some other cause system.

MS. COOK: But the bulk of these, OI had already done their work. Then we picked up the technical part of what they had already done. When we found something that OI maybe hadn't done yet, we turned that over to them.

MS. GARDE: Now if you turn to page J-49. You find that AQE-1 becomes part of a large category of allegations detailed on that page. Your resolution of these allegations and what you did to determine whether or not there was validity, safety significance, generic implications is then supposedly detailed on this page, right, on these pages?

MR. CALVO: Let me explain a little bit. If you look at the table, I did a little different than maybe everybody else, but it will give you an idea to understand how these allegations work. J-19 gives you the allegations and give you the categories and sometimes one number before the other number. The category with the allegation is in the first number to your left. As the allegation has other ramifications to other areas, other categories, I put it in the next number to the right.

So AQE-1 only looks like it is addressed to

category number 5 but keep in mind this is nonconformance reports. This is just a quick look, a limited look at some of the implications of the nonconformance with the electrical installing, but mostly for the purpose to relate it back to support up the installation itself. As you see at the end, this is terminated that -- wait until you see what the QA/QC has done before an overall conclusion is reached on nonconformance.

So in that context you must look at AQE-1. Based on what they say, I could not do very much with it. It is very general, very global and doesn't tell me exactly what to look for.

MS. GARDE: Let me stop you there. I would like a specific answer if you can give one. If you can't just because you can't remember, just clarify that. In this case, either did you or would you have gone back and talked to this electrical QC inspector? Would you have interviewed him to determine what more details he could give you about that allegation?

MR. CALVO: I tried. I can not give you a specific. I tried to talk to everyone who came up with an allegation. I tried to talk to everybody about the foundation of these allegations. If it was available and they were willing, yes, I would ask them, not only do I talk to him to tell me more about it, but when I write the

SSERs I say this is what I did with the allegations. It has to do with, in essence, if I'm to give credit to an AQE-1 alleger, a lot of this will be found in the electrical, you may have contributed to some of the things we found because it could have been anyone.

Maybe we found NCRs wrong, maybe it was because of what this person said in here. If we go through most of them, probably some of the things we found for one also may apply to this one, so it is very difficult because of the generalization of the allegation whether you had answered or talked to him, we did try to talk to everybody.

MS. VIETTI-COOK: Were you referring to AQE-41?

MR. CALVO: AQE-1.

MR. NOONAN: Let's take a 10-minute break.

(Recess.)

MR. NOONAN: Let's go back on the record.

MR. CALVO: I want to say something for the record. You asked me a question. We had contacted the allegers responsible for AQE-1. We tried to contact him on January 29, 1985 and were unable to contact him. That's all the information that I had.

MS. GARDE: Okay, I'm going to continue on page J-49 for a couple of minutes. We were talking about AQE-1 as an example of the process that you followed in making certain decisions and evaluations. Now, the list of the

allegations that are in item number 4, I assume coordinate with the numbers that are given in item number 2. Is that a correct assumption? These allegations as listed will match with the numbers?

MR. CALVO: Right, right.

MS. GARDE: When you go into the description of how you responded to all of these various allegations, which were characterized as the validity of the generation and disposition of electrical nonconformance reports was suspect. That's how you characterize all these different allegations. You indicate you pulled a random sample of 75 electrical NCRs and conducted numerous interviews with QA and QC engineering personnel. When I go to the documents which hopefully will be made available, will the 75 electrical NCRs and notes of your interviews be in that material?

MR. CALVO: I don't know offhand. Sometimes we did keep the NCRs. Sometimes we just went to the vault, would look at the NCRs and put them back and didn't make copies of them. Sometimes we don't note it.

MS. GARDE: You may or may not be able to reconstruct what you looked at to form the basis of your opinion.

MR. CALVO: Offhand, I don't know, okay?

MS. GARDE: Also says that you reviewed 25 of

the 75 NCRs to determine if the QC inspectors who closed out the NCRs were qualified to do so. How did you go about doing that? How did you look at their qualifications?

MR. CALVO: In essence the same as what we did in the electrical instrumentation number 6, but again we were trying to handle this particular allegation. I believe these particular allegations are coupled with the other categories in the SSER. I was trying to find out AQE-4, if that was coupled with something else. Only belongs to this one so it was not coupled to that one, but we conducted this because the same person who did this did the QC inspection certification for the 25 cases, but keep in mind, I don't know what your interest in this is, goes back to the conclusion where AQE-6 is all extensive. We required that all the electrical QC inspectors' files be assessed and the impact on plant safety will be determined, so we have to be revisiting this, regardless of the outcome of the 25.

MS. GARDE: You mean that the QA/QC --

MR. CALVO: Not in this case. In this case I didn't pass it to the QA/QC. In this case we kept it -- we set forth actions based on the electrical QC inspector, highlighted generic implications to others. That will be forwarded and addressed in the QC training.

MS. GARDE: You are jumping a little bit ahead.

It looks to me as if this was not referred to the QA/QC.

MR. CALVO: I agree, but the subject matter is the same is what I'm saying. Maybe it has not been referred but the subject matter is the same.

MS. GARDE: The subject matter is referred to QA/QC?

MR. CALVO: AQE-4 is characterized by the closing out of NCRs by qualified inspectors. I'm saying, the technical review team found that in all 25 cases, the QC electrical inspectors were qualified. Their certification files were current AQE-4. In the 25 out of the 75 cases we selected -- but again that problem doesn't go away because we made a conclusion. You still have the overall conclusion of the electrical and inspection qualifications, training and qualifications where we make a more far reaching conclusion where yes, you have problems with them. So you say here we miss it because we selected 25, but here we caught it, and the conclusion is that you must ascertain the quality, the qualifications and training of all QC electrical inspectors irregardless of where they found it.

MS. GARDE: How does that resolve the question raised in AQE-1, that an electrical inspector was pressured not to write nonconformance reports in several instances? How does resolving AQE-4 --

MR. CALVO: That's not.

MS. GARDE: Okay, according to the chart in appendix P, AQE-1, -2, -3 are not referred, and there's a lot of them that are not, but that is not referred to QA/QC.

MR. CALVO: Everything in this allegation category, not the individual allegations, the whole electrical nonconformance activities, I refer to QA/QC. Look on page J-53.

MS. GARDE: The whole category is?

MR. CALVO: Regardless of what the fund was.

MS. GARDE: When you referred this whole category to the QA/QC part of the technical review team, is it your understanding that they would come to understand why this happened?

MR. CALVO: No, to pick up the conclusions in the findings and couple it with -- arrive at a programmatical assessment. That also is coupled eventually with B, so if you look on 53, really, you have the QC inspection, category C, QA/QC, that's how the whole electrical was done. In fact, in most cases, because it was just a little input to the overall programmatic, input from the mechanical and the electrical, and the QA/QC would put that together and come up with the overall conclusions.

MS. GARDE: I want to repeat what we think you are saying.

MR. ROISMAN: Whatever extent the AQE number 1 is investigated, it is investigated either in an OI report or it is investigated in your evaluation, and there's no further investigation of it that you are aware of that's done by the Staff, but the conclusions of those investigations are passed on to QA/QC for SSER 11 to determine what, if any, broader implication should be drawn from what we have already found out to have yet another investigation; is that correct?

MR. CALVO: That's correct.

MS. GARDE: Let's go back, then, to the beginning.

MR. NOONAN: You understand now when you talk about the OI things, that I am in the process of looking to make sure that anything in the SSER, we thought there was an OI action that indeed was communicated to OI and that process is ongoing. That's not part of the technical review team.

MR. ROISMAN: Is there supposed to be a place where all that will be ultimately drawn together? Let's say you find 15 percent of the items that OI had previously looked at, you now think in light of what Mr. Calvo and the other people did that they ought to look again, and you ask them to look, and they complete that and all the other ongoing looks and there are a whole bunch of conclusions

from that. Is there a place where all that gets fed back into some future SSER or will each stand by themselves to be evaluated, not in some single Staff document?

MR. NOONAN: Talking about the technical parts?

MR. ROISMAN: The consequences of the OI look at wrongdoing.

MR. NOONAN: That's a separate office. I can't really say. When their results come out, I think right now all that I'm aware of -- hang on a second.

(Discussion off the record.)

MR. NOONAN: There are only a few reports that are not out now, so the technical review team probably had access to that kind of information. Is there a single point that it comes together? I don't know yet. I don't know.

MR. ROISMAN: The question was, how does the technical review team -- or let's deal with the past. How did the technical review team integrate into any conclusions that are reached in the SSERs prior determinations made by OI, beyond looking at any technical problems OI may have identified that you have not previously looked at, and let's say OI concluded that this person got harassed and intimidated by this person. Was that integrated into --

MR. NOONAN: Not in the technical review team,

no.

MR. ROISMAN: Just stands for use by the licensing board or any party to the proceeding for whatever purpose they want to make of it, not in something that the technical review team is supposed to do?

MR. NOONAN: That's correct.

MR. IPPOLITO: Excuse me, I have to add to this. The normal functions, or the normal interface rather between OI and the program officers, particularly NRR, is that a suspicion or allegation of wrongdoings is provided to OI usually through the regional administrator or through Dirks. He performs -- OI performs an evaluation and submits a report to the -- my recollection is to the applicable regional administrator -- Bill Dirks and I think there are three copies. Anyway, if the conclusion of the OI report is that there is wrongdoing is confirmed, it now becomes a matter for INE or the region to take action against the licensee and/or the person who does the wrongdoing. That's the wrongdoing part, enforcement action.

MR. NOONAN: I'm referring to the technical review team now.

MR. IPPOLITO: That's the wrongdoing end of it, handled through enforcement actions. What we have done, and since the -- as Annette said, there was a large number OI reports, 10, 12, done when we first came aboard and we

extracted from those reports the technical part of it, so the total picture is being resolved. There have been some enforcement actions resulting from OI reports form the technical things that have now been addressed in the technical review team reports. There's nothing left that's not done.

MR. ROISMAN: That's only if you use what appears to be the operating assumption that you're using, which is that wrongdoing is always limited to whatever OI finds someone did wrong and there's never a generic implication of wrongdoing. What you're saying is that you never assume a generic implication to a wrongdoing finding. You never assume that anything else in the wrongdoing example that OI confirmed has affected any other part of the plant; is that right?

MR. IPPOLITO: The wrong -- no, no. The wrongdoing itself -- and that's what you determine, a degree of the enforcement action. If it is pervasive you will see a large enforcement action and it will be so written up and so cited and they will be so fined.

MR. ROISMAN: But the scope of the wrongdoing is limited by the allegation that the OI people are looking at.

MR. IPPOLITO: Whatever it takes to identify that there is wrongdoing at the site. It all depends on what the item is.

MR. ROISMAN: What I'm trying to understand is when you were incorporating into the orginal technical review team the results of OI investigations, some of which had findings of wrongdoing and proposed fines were issued or are still outstanding with regard to that, the technical review team did not use those as generic implication indications to define the scope of how far you would look to see how bad the problem was.

MR. NOONAN: Let me interrupt here a second. I'll take an example. If there was a wrongdoing finding by OI that says a QA inspector falsified records, it would be our responsibility to see what that QA inspector did to find out how that work was affected. That's what the process calls for. That's what we're doing.

MR. ROISMAN: What do you do with a finding that the inspector was harassed by a high level supervisor? Do you look at all the people that high level supervisor supervised to determine whether their work was also affected?

MR. NOONAN: Our process calls for us to look at the quality of that plant. How was the quality of that plant affected by that intimidation. That's what the process calls for us to do.

MR. SHAO: The question is, how did you handle the OI findings on Messrs. Dunham and Atcheson?

MR. NOONAN: I can't remember Dunham. I think you need to ask the particular group leader.

MR. ROISMAN: And Mr. Atcheson?

MR. NOONAN: Mr. Shao. He would look at those particular allegations, technically.

MR. ROISMAN: Both those gentlemen are public. We can speak without fear.

MR. CHANDLER: We have made commitments to various individuals not to disclose their names, irrespective with the arrangement you have with them.

MR. NOONAN: I do have at least verbal promises we would not use people's names.

FROM THE FLOOR: Can we strike the names from the transcript?

MR. CHANDLER: Off the record.

(Discussion off the record.)

MS. GARDE: I'm not going to ask anymore questions on AQE-1. Let's go back to the beginning. I'm still on the first sentence on J-4. We got up through potential generic implications. The next phrase is "any indication of potential management breakdown." Now, how did you determine that, whether there was indication of potential management breakdown?

MR. CALVO: I think I based -- I don't remember that I addressed that subject, but I believe that the SSER

actions provided an input to the QA/QC to factor this into the overall programmatic assessment. There is nothing in here that addresses the potential management breakdown. It is just the technical output, the conclusions and the findings in the referral to the QA/QC for further looking into which may presumably address the management breakdown.

MS. GARDE: Mr. Calvo, on page 11 and 12, J-11 and 12, you have the scope of concerns and allegations by category, and category 6 on page J-12 is management attitude.

MR. CALVO: You're getting into the area of the test program, group summary, and I was not the group leader for that particular review.

MS. GARDE: Who was?

MR. CALVO: Keimig was responsible. Richard Keimig.

MS. GARDE: Is he region 4?

MR. CALVO: Region 1.

MR. CHANDLER: I think it was our understanding that you didn't have questions in this area.

MS. GARDE: No.

MR. CHANDLER: Misunderstanding?

MS. GARDE: We asked for someone who was in charge of each SSER and we thought that they would be able to answer the questions contained in that SSER.

MR. NOONAN: Let's go off the record.

(Discussion off the record.)

MS. GARDE: Any indications of potential management breakdown, to the extent of your work in SSER 7, will have been kicked over to QA/QC?

MR. CALVO: That's correct.

MS. GARDE: Did you make conclusions on management breakdown and give Mr. Livermore your opinions on where you saw potential management breakdown from your SSER, or did you just give him the conclusions of your individual inspections and investigations?

MR. CALVO: No, I don't believe I had done that, because it would have been a limited conclusion based on a very limited review I had done with the electrical allegations so it was hard to see how I reached that conclusion based on the investigations I did.

MS. GARDE: You relied on Mr. Livermore to reach conclusions on potential management breakdown based on your factual findings?

MR. CALVO: When you read potential management breakdown on this SSER number 1, I think the review methodology may be applicable to all of them and may not be applicable to me because of the limited scope of the allegation. Whether he has done it or not, SSER number 1, that subject is addressed in there, if I remember.

MS. GARDE: Page J-8, under 3.1.3, the second paragraph, do you see that?

MR. CALVO: Yes.

MS. GARDE: You say that "The generic implications of the findings and the root cause of each situation as appropriate are also presented." Now, when did you -- is it through this document that you are sending your conclusions to the applicant?

MR. CALVO: That's correct.

MS. GARDE: Okay, and before this there was the letter, which I think was the September 18 letter.

MR. CALVO: Also brings up the subject the root causes and generic implications to the applicant.

MS. GARDE: Now the bottom paragraph of this page gives a list of concerns raised by allegations which either could not be substantiated or have no safety significance with respect to the items identified. We discussed before the definition of "substantiated." We've talked about safety significance. You had a clarifier on the end of this which says "with respect to the items identified." Now --

MR. CALVO: Talking about the last paragraph on page 8?

MS. GARDE: Yes.

MR. CALVO: That's right.

MS. GARDE: Let me take, for example, regarding the installation of electrical cables. You had an allegation regarding installation of electrical cables. I think there may have been more than one in that area.

MR. CALVO: Yes. Go ahead.

MS. GARDE: If your conclusion was that there was no safety significance, was it limited only to those items that you specifically look at there that are identified in the SSER?

MR. CALVO: That's correct. And also to whatever generic umbrella we put around them. Everything is limited to the allegations and the umbrella we put around them.

MS. GARDE: The size of the umbrella should be in this and supported by documents?

MR. CALVO: That's correct.

MR. ROISMAN: On page J-9 at the end of the first paragraph, you indicate that the E&I group concludes that there are concerns about the adequacy of TUEC's, at the end of the first paragraph. The same statement appears at the end of the third paragraph. Now, just so we will know, are all the bases for that conclusion contained in or referenced in this SSER?

MR. CALVO: That's correct.

MR. ROISMAN: Did you make any determination not

revealed in the SSER as to why these inadequacies in the QC inspection program existed?

MR. CALVO: No. Again, my review scope is to assess the quality of the electrical installation as defined by the allegations in the umbrella provided to establish generic implications. If we found deficiencies in those areas, we referred the matter to the QA/QC group for further look into the programmatic consequences of it; so all this in here, all he does is summarize in each category of SSERs Jose's -- this is another input for QA/QC for them to reach the overall assessment.

MR. ROISMAN: At the bottom of J-9, you do offer your own at least tentative generic implication finding with respect to the inadequate qualification of some electrical QC inspectors; right.

MR. CALVO: That's correct, but I'm also referring to QA/QC category 4, training and qualifications.

MR. ROISMAN: So sometimes when it seemed to be fairly obvious that there was a programmatic or generic implication, you did not feel constrained and were perfectly willing to say so, even though you were then going to leave the final word to the QA/QC people?

MR. CALVO: That's correct.

MR. ROISMAN: You were not attempting to, in reaching that conclusion, define the scope of what the

generic failure might be nor the scope of what the root cause might be.

MR. CALVO: Agreed.

MR. ROISMAN: What you tried to do in the SSER is wherever you had enough information that you felt like you could articulate an opinion that would be useful, you gave it.

MR. CALVO: That's right.

MR. ROISMAN: If you didn't think you had enough and your mandate didn't call for you to get that additional information you referred it over to somebody else and said, you find out what the generic implication of this might be. I don't have an opinion.

MR. CALVO: This is my findings, couple it with yours and you come up with an overall assessment. That was the way the technical groups were coupled with the QA/QC group. That's the way it was.

MR. NOONAN: I would like to clarify something. You are hearing Staff say this appears in the QA/QC SSER or it has been turned over to QA/QC. The process we went through, the information that Jose would have had that we would call QA/QC implications was given to Livermore to see whether or not they might affect his conclusions, not that he would go in and reinvestigate anything at this point in time. They were there to see what impact they would have

on the work he did and his conclusions and to tabulate them in the SSER. That would be given to the applicant and the applicant told to address these things.

MR. ROISMAN: I can assume tomorrow when we get to Mr. Livermore, your answer that you take the conclusions from the other SSERs at face value without independent assessment, the answer will be yes, I took them at face value without independently investigating that?

MR. LIVERMORE: Ask me that tomorrow.

MR. ROISMAN: Mr. Calvo, on page J-10, the next to last paragraph, you have this statement: "The E&I group conclusion that the problems found with electrical cable terminations, electrical equipment separation and control room ceiling fixture supports, together with the findings concerning inadequate training and qualification of electrical QC inspectors are an indication of programmatic weakness in QC." First question: What does the phrase "programmatic weakness" in QC mean? What are you meaning to convey with that statement?

MR. CALVO: Okay, "programmatic" indicates that it may be -- that based on the concerns highlighted by the allegations, appears as an indication that it may be some problems, maybe not only with these things that we found wrong; maybe there are some others that may also be wrong, so he may cut on the wide access.

MR. ROISMAN: Are you suggesting that by the use of the term "programmatic" that they could appear in every part of QC where those kinds of considerations would be relevant?

MR. CALVO: I'm trying to remember what I did mean by putting that in there. It indicated that in essence the electrical system in my opinion did not have a clean bill of health yet but looks like further looking into these areas and the implications in other areas more would be ascertained to determine whether the concerns highlighted by the allegations are isolated cases or they cascaded into the other areas. I'm not saying that it is, I'm not saying that it is not. I'm saying it is an indication of it. The question is that we need an answer to find out how far-reaching it is. That's what I mean.

MR. ROISMAN: Did you form any opinions or do you have any now as to what the process is that would have to be undertaken to answer the question which you are in effect posing by that statement?

MR. CALVO: Every SSER in each category provides certain actions. Those actions, how those actions are going to be accomplished and the feedback resulting from those actions will give the Staff a clue whether this statement can be supported or not supported. We have not gone quite far enough. We raised the flag at this point.

Those actions, the implementation of those actions will determine whether this is just an isolated case given by the allegations or it has more far-reaching, you know, far-reaching --

MR. ROISMAN: In this document you have recommended what courses of action you think need to be taken.

MR. CALVO: That's correct.

MR. ROISMAN: Can you direct me to those that you think are the ones that particularly need to be taken in order to answer this concern?

MR. CALVO: I guess you can look at each item if you want it. I guess the one that seems to be -- we can go to page 31. I guess we found some problems with the terminal locks and we want to take and -- we have to evaluate and find out which other problems are in the area; and if we found other problems in addition to those we are building this case, and we go back to Number 2 and got some problems in here with butt splices. And I guess the butt splices brings another concern; the question is how many more of those things do you have? If it is limited, the action by the applicant indicated that it is only limited to those areas in the control panel where we found the butt splices, we found additional splices in the cable traces, that will have far-reaching ramifications.

So the actions are taken, you build your case into the programmatic problems where you have more problems than was expressed in the SSER or are you going to stop there. We're trying to establish whether it is an isolated case that goes down deep instead of wide.

MR. ROISMAN: Looking on J-31 as illustrative, at 6 E, is there someplace else where you have articulated what your criteria are for the applicants to evaluate the adequacy of the QC inspection program to establish root causes and appropriate corrective actions? Is that documented somewhere?

FROM THE FLOOR: J-35.

MR. CALVO: The documentation, I'm sorry, where set forth the criteria we would like the applicant to follow to establish root causes -- no, there's no criteria that I believe that we formulated. In the SSER as well as our letters prior to the SSER we used those general terms; and again, we are waiting for the applicant's response and when that response comes, we are in the process of reviewing it and will determine whether this has been properly covered. But there was no criteria that I know of at least in the electrical SSERs, and I don't believe in the others, that set forth that criteria for establishing how you should go look into root causes, whether you should consider the technical merits or other aspects.

MR. ROISMAN: When you use these causes, did you have in your head -- as you told me earlier about one of the root causes; that you already had a pretty good idea what you thought the root cause was, you were going to see if they found it -- did you have a good idea as to item 6-C, how you wanted them to go about establishing root causes?

MR. CALVO: If I give you my opinion, more or less is result-oriented. I'm not asking somebody, if I found a problem, like in this problem of butt splices or cable separation -- two concerns that were highlighted more often than any other in the electrical systems -- I just pinpoint the problem area, and if I want to know whether this particular area becomes just like a little pimple or a cancer I want the applicant to look further into it. If he finds further problems in the plant, the results, if he finds problems with separation or butt splices, again the case has been built.

Maybe it is not only with this area that the technical review team has identified; you have it in other areas of the plant, and then maybe you can couple the things up and you establish, find out why it was that kind of a problem, and maybe you concluded after you finish that you may have to go further because it appears what you did here may also cut across other disciplines.

The point in question, you asked me before how

you reached in some cases your root causes. Because I have enough information to reach that conclusion with the electrical QC training and qualifications. There was enough supporting information that we reached that conslusion of possible problems of certification with the records. How you go from there to the others, it was a possibility that it may be also a problem in the other disciplines, but you don't know until you check the other disciplines and compare with the results in those disciplines also. Cast the same kind of doubt that the QC electrical qualifications and training files was discovered by the technical review team.

MR. ROISMAN: Was it your intent here that a root cause investigation could be foreshortened or eliminated if at an early stage it was determined that the particular deficiencies were no longer safety-related?

MR. CALVO: Say that again.

MR. ROISMAN: If in the applicant's investigation, looking at the items on J-31, if their investigation determined that all of the identified deficiencies were in areas which can now be reclassified as not safety-related, in effect, backfitting engineering judgment says not safety-related, if that conclusion can be reached, was it your understanding that no root cause needed to be found?

MR. CALVO: Again, all depends on the situation. If I know that, like I said before, we considered the allegations nonsafety-related allegations but we say, the reason it was provided to us was nonsafety-related but used safety-related procedures to identify safety-related piece of equipment we want to be sure that didn't precipitate into a safety-related area.

So the combination of the nonsafety-related and you didn't find it with the safety-related, you reach the conclusion that you don't need to go further. If the allegation indicates it was truly safety-related I think we would have gone a little further to ascertain, a little father down the way. Depends again on the situation. Depends upon the concern. The area.

But keep in mind that at the end, it is not the individual contribution. It is the integral approach, all the things combined, that come forward and tell you what was the root cause. Whatever you learn from the electrical, the mechanical, you can couple those things back and forth; and the integrated approach for all this cumulative findings, whether they are good or bad or in between, that will give you was there a root cause there or was there not a root cause.

MR. ROISMAN: Was your understanding then that this search for the root cause was an iterative process in

which you would make preliminary root cause conclusions in order to define the next level of look which might require you to then redefine and move on until you knew you had it on?

MR. CALVO: You asked for my opinion. Yes, that would have been my opinion.

MR. ROISMAN: Now, in going back to J-10 and this portion of the paragraph that we're looking at, where would you direct me to find, if it is in that document, the bases for your conclusion that there was an indication of programmatic weakness in QC?

MR. CALVO: On page J-10.

MR. ROISMAN: Says "The group concludes the problems found with this together are an indication of programmatic weakness in QC." I know where to find the conclusions for each of those. I'm looking for, is there a place where I would find the basis for your belief that given that those problems are found in those areas, there is an indication of programmatic weakness in QC?

MR. CALVO: There is not stated as such, but it is my judgment as I finish that review that I come to that conclusion. From the standpoint of safety, it was a safety conclusion. I felt that we found enough things in there that I feel comfortable enough that my review was far-reaching that I felt another look should be taken at it,

and this is reflected in all the actions. I felt that we should go a little further than we had.

MR. ROISMAN: Did you consult with your staff with regard to that conclusion?

MR. CALVO: Not in a direct way, but just a routine basis: Every day we set up the goals, if we find problems, where to look next, et cetera. So we were looking for these problems in installation we were looking for maybe it was generic implications. It was reflected in the way we did it.

MR. ROISMAN: Do you feel this part of the conclusion is essentially a consensus from those of you who worked on the electrical, or is this Jose Calvo relying on that underlying information without the concurrence?

MR. CALVO: I guess I would say it is mine.

MR. ROISMAN: Now, I want you in particular looking now at section 3.1.4, overall assessment and conclusions, how did this part of the report get written, and to what review, if any, was it subjected and how much of what we see here are your words and how much are somebody else's?

MR. CALVO: This was identical to my words, and there was quite a discussion on those words. But my words prevailed at the end, so it was not changed for all practical purposes.

MR. ROISMAN: Was this discussed among your team?

MR. CALVO: No, it was only another team member that came late that we discussed -- only two of us discussed this. We finished earlier. They promised me if I finished the Comanche Peak review they would let me go, but they broke the promise anyway, so we didn't quite finish earlier in the tour, and so it was mainly me and somebody else who -- and Angelo Marinos helped me put this together. When we had problems we called the the consultants over the telephone and discussed them. Asked them for their concurrence in each of the SSERs. So these reflect our thoughts, ideas, conclusions. It was not changed.

MR. ROISMAN: As you know, we will get, although we don't yet have, the drafts, if any, of this SSER.

MR. CALVO: For the SSERs. This is the summary. That was done by me and Mr. Marinos.

MR. ROISMAN: This essentially, if it is there in earlier versions -- the earlier versions are yours, the medium and the last version is yours?

MR. CALVO: That's correct.

MR. ROISMAN: Is there a portion of this SSER which was not put together that way, with it essentially being your words and not anybody else's; and if so, can you identify that?

MR. CALVO: All the SSERs, 1 through 9, we had a reviewer, and I was the group leader, so the initial drafts were done by the reviewer and I just approved them and participated in writing those things up in connection with what was required by the project. The technical merits, the findings, what happened, the flavor has not changed but the raw material was always there.

MR. ROISMAN: We don't have one in front of us so maybe I should wait for another day. If you can offhand take me to one and illustrate one where the reviewer had some words, and then those words, although in your judgment the substance stayed the same, the words changed.

MR. CALVO: I don't know if they are available or not. I don't have it with me.

MR. ROISMAN: The draft?

MR. CALVO: The draft. But we have in the record or it will be in the record the signature by the reviewer, the group leader, the director of the SSERs before they were put into this book.

MS. VIETTI-COOK: I understand the letter was sent from the freedom of information branch to you on Friday, so the information was dumped into the PDR on Friday for electrical. It just went in.

MR. CALVO: You have drafts signed by the reviewers that made up this report.

MS. GARDE: I don't have it yet. I got a call saying the electrical stuff was coming down to the PDR but I don't have that yet.

MR. ROISMAN: We had earlier boxes on structural but we don't have the drafts.

At the top of J-15, under the general title "actions required at TUEC," is it your understanding that --

MR. CALVO: Hold on. That's -- if you go back to page J-11 you're talking about the test program again and that's outside -- the man who did that is not here today. It is the same as you were asking before. Item 4, that refers back to -- I'm sorry, the heading. I take that back.

MR. ROISMAN: I'm still trying to deal with the generic thing. I understand that that person is not here. Is it your understanding that the total of the -- that the way in which TUEC is responding to this recommendation is to come to you within the confines of the CPRT?

MR. CALVO: Correct.

MR. ROISMAN: You were not expecting and as far as you know have not gotten some independent response to this that does fit within the confines of the CPRT?

MR. CALVO: Say that again. I'm sorry.

MR. ROISMAN: I'm trying to understand where you are expecting to find that TUEC will be responding within

the context of the CPRT.

MR. CALVO: That's correct.

MR. ROISMAN: Turning to page J-16, under electrical equipment separation, did you in the course of your evaluation draw any conclusions about the applicant's compliance with the NRC's requirements regarding the use of covered cable traces as substitutes for conduit covering of electrical cables, and whether the separation between covered cable traces could be the same one inch that was allowed by NRC regulations for electrical cable to redundant trains running through conduit?

MR. CALVO: The criteria governing the separation is contained in IEEE 384, as augmented by reg I-1.75. That criteria is set forth that physical dimensions on redundant systems must be separated, but it also provides -- also accepts analysis as a way around physical dimensions. We found out that that there was some disagreement between the electrical specifications ES-100 and this criteria contained in the IEEE 384; however, analysis could have been substituted to justify the physical dimensions we don't have to apply in this case. We would advise, and we found out that analysis has been on the files. However, we indicated that analysis had not been submitted to the Nuclear Regulatory Commission. We indicated they did not so we requested as one of our

actions for them to provide the analysis to the Nuclear Regulatory Commission for review. That will determine whether the analysis substantiates the fact that if the analysis can substantiate through fire testing that this is adequate, then the analysis will supersede the physical dimensions, so that is an action item.

MR. ROISMAN: It is yet to be done? You did not complete work on it?

MR. CALVO: We substantiated the allegation, we agreed with it. We're trying to find out whether at the time it was sufficient to justify the fact that you don't have to substantiate the physical separation.

MR. ROISMAN: Did you say the analyses were not in existence?

MR. CALVO: Were in existence at the time we looked at it.

MR. ROISMAN: Did you make an effort to determine whether they had been in existence at the time that ES-100 was promulgated?

MR. CALVO: No, but I'm not quite sure but I think the record will indicate the dates, but our augmentation to support this allegation in here -- I don't recall. Again, I was looking again at the work product, I was not concerned with the history, how it got there.

MR. ROISMAN: When we look at the underlying

documentation of work that went into the SSER, how much will we find in there that will show us, for instance, I just want to be clear, I know Ms. Garde asked you this earlier, I wanted to make sure I understood the answer. How much will we know, if you say we looked at 75 NCRs, which ones you looked at; will you have recorded the number even if you don't have a copy in the file?

MR. CALVO: In the majority of the cases, we did, but in the particular case you were asking me I was not quite sure. In the majority of the cases -- as a matter of fact, when you go to the public document room and get those SSERs signed by the reviewer, it is also a reference in there, and from those references, the NCRs are listed. A decision was made when this was published not to include the references.

MR. ROISMAN: As I understand it, the auditable trail should make it possible for us to determine what you looked at if we want to try to understand what you were seeing, and therefore what you had as a basis for your --

MR. CALVO: I hope so or I'm in trouble.

MR. ROISMAN: And it is auditable, not audible. We're not looking for a tape of what you did?

MR. CALVO: Maybe both.

MR. NOONAN: Let's break about five minutes.

(Recess.)

MR. NOONAN: Back on the record.

MR. ROISMAN: Mr. Calvo, is it correct that to the extent that you have referred implications of the various findings that you have made in SSER 7 to Mr. Livermore, that it was your intent and understanding that he would be responsible for evaluating the implications of those findings, generic or determining if it was appropriate root causes or whatever, and that that burden was not yours?

MR. CALVO: No, those were provided to the QA/QC group as input. What they did with them is whatever the group leader decided, whether he looked into the root causes, that was his decision. It was no clear lines of demarcation what they were going to do. It was his choice.

MR. ROISMAN: It would have been possible and not inconsistent with your understanding that a finding you made in which you said there was an indication of programmatic weakness in QC would end up with Mr. Livermore and he would do nothing with it?

MR. CALVO: It is possible, but the proof of the pudding is SSER number 11, and we all looked at it and we all commented on it and were aware that our concerns were covered in there.

MR. ROISMAN: Were there any conclusions reached in there regarding electrical and instrumentation control

matters that you did not agree with, that you do not agree with?

MR. CALVO: I don't think so. There was mostly programmatic and QA/QC problems. There was nothing in here that impacted what I had done in electrical. They were looking at the paperwork, looking at the hardware. Insofar as I know, had I read it, I may have some comments on it; but insofar as anything he has that invalidated what he has done, I don't remember that I found any of those.

MR. MC CRACKEN: We're ready to go on to SSER number 9. Thank you, Mr. Calvo.

MR. ROISMAN: Mr. McCracken, can you just tell us who you are regularly employed by when not working on this Comanche Peak technical review team? Are you a full-time NRC Staff employee? Which region, or headquarters, all that sort of stuff?

MR. MC CRACKEN: I'm full-time employed at NRR. At the time I was working on this particular effort, I was the section chief of the chemical and corrosion technology section in the chemical engineering branch of NRR.

MR. ROISMAN: Have you been involved with the paint coatings issue here since the formation of the technical review team?

MR. MC CRACKEN: No.

MR. ROISMAN: When did you get involved?

MR. MC CRACKEN: I picked up the technical review team function in, as I recall, early November of '84.

MR. ROISMAN: Who was your predecessor?

MR. MC CRACKEN: Phil Matthews. When the technical review team was formed, I would normally functionally have taken over that particular area, but I was tied up in another project rather full-time, so Phil Matthews, who had been my predecessor in the job that I had at the time, he was requested by me to take over this job, and he agreed that he would do so, and pending me being released or getting enough work done on the other project that I could then take it over at some point.

MR. ROISMAN: Did you have no involvement with supervising his work from that period of, I guess, around May until early November of '84?

MR. MC CRACKEN: No, I didn't supervise his work at all. I was aware of what he did. We had discussions periodically. When he had a site visit he would always come back and spend time talking to me about what he had done and what was going on, because I knew eventually I would pick it up, but I did not supervise him or tell him what to do.

MR. ROISMAN: Given that timing, is it correct that the bulk of the on-site investigation and the interviews with the allegers and the sort of gathering of

the raw data was done under his supervision rather than under yours?

MR. MC CRACKEN: The gathering of the raw data and the interviews with allegers on site were conducted under him. The feedback interviews with people after the work had been completed was done by me.

MR. ROISMAN: This SSER has essentially got two appendices to it. The first, correct me if I'm wrong, essentially deals with the applicant's request for an exemption of the paint coatings for post-accident performance and qualification of paint coatings, and the second appendix deals with deficiencies found in the application of paint coatings during the time the paint coatings were safety-related and had certain safety-related requirements; is that correct? Do I understand this?

MR. MC CRACKEN: Not quite. Appendix L is a function that was performed through the normal NRC chain of command normal offices. It was not a technical review team function. That's the first one you referenced. The second one, which is appendix M, does not only deal with deficiencies, it deals with our evaluation of the allegations and of the overall coating system at Comanche Peak.

MR. ROISMAN: But L is the one where the Staff has set forth the basis for its conclusion regarding the

paint coatings exemption request of the applicant's; is that right?

MR. MC CRACKEN: L is the one where the applicant's request to remove coatings from the Q list was evaluated.

MR. ROISMAN: Was that also done under your supervision, that evaluation?

MR. MC CRACKEN: That evaluation was ongoing, and had not been completed until about the time the technical review team evaluation was completed. At the end, I directly supervised the pulling together of both of them.

MR. ROISMAN: But there's somebody else, then, who made the investigation and the final substantive conclusions that are contained in appendix L, not yourself; is that correct?

MR. MC CRACKEN: The contributors to appendix L are listed on page 1-3. That includes, as I recall, approximately 12 or 14 various staff members. They provided their individual inputs to me. I then pulled them together in a total safety evaluation report.

MR. ROISMAN: Well, as I read this, it appears that you didn't author these words that are in appendix L, that they did. When you say you pulled the two together, they are two entirely different and separate appendices.

MR. MC CRACKEN: I was talking about appendix L

only right now. The people listed as contributors are listed on 1-3. They provided the inputs to me, and I pulled them together.

MR. ROISMAN: The judgments are theirs, not yours?

MR. MC CRACKEN: That's correct. However, in my function as section chief of that section which had the responsibility for that, I signed off on the overall appendix L, which means I concur with and agree with their judgments.

MR. ROISMAN: That's because you rely on what they did, not because you independently verified it.

MR. MC CRACKEN: That's not correct. I did go and independently verify a lot of what they did.

MR. ROISMAN: What didn't you verify?

MR. MC CRACKEN: I can't give you a simple answer to that. I did not accept, as I typically do not accept, any product at face value. I at least look into it. How much I did look into or how much I questioned, I can't tell you.

MR. ROISMAN: Was there a team leader among the contributors to appendix L?

MR. MC CRACKEN: No.

MR. ROISMAN: Who decided which tasks each person would undertake?

MR. MC CRACKEN: The review of appendix L was initiated, as I recall, in June of '84. Typically, when something like that comes in, the licensing project manager will inform each of the affected branches, the branches that he feels would be involved in that particular evaluation. Those branches will then assign individuals who will go and hear what's said. It is up to them to then put in their individual inputs to safety evaluation, which is then compiled within the division licensing by the project manager.

MR. ROISMAN: Who decided which people would work on appendix L questions?

MR. MC CRACKEN: That's decided by their own management, their various divisions, engineering, systems integration, so on.

MR. ROISMAN: Who decided which divisions to bring into the appendix L evaluation?

MR. MC CRACKEN: The project manager. That was at the time, I think, Spots Burwell.

MR. ROISMAN: Were any of the people in appendix L people who worked under your supervision?

MR. MC CRACKEN: The last one listed, Frank Witt, W-i-t-t.

MR. ROISMAN: I take it that the position that you hold normally, not your role in the technical review

team or in this SSER, it would not normally be the responsibility of your division or the thing that you are in charge of to decide the question that appendix L seeks to decide; is that correct? It is somebody else's responsibility?

MR. MC CRACKEN: That's incorrect. My normal function would have been to decide the question asked by appendix L. That would have been coordinated through me because it is a section which comes under chemical engineering and specifically chemical technology, therefore it would have been my function normally to do so. As I said, I was assigned full-time on another project at the time this particular effort came in, both appendix L and appendix M. There was -- the L part was initiated by Frank Witt, who is in my section, in my absence from that particular function.

MR. ROISMAN: I take it that the nature of the kinds of issues that appendix L raises, a substantial part of what's involved there are issues that would not normally fall within the expertise of the people who work under you, they relate to post-accident environment conditions and water flow and things of that nature that are not directly related to coatings. Is that correct?

MR. MC CRACKEN: The chemical engineering branch is responsible for a lot of areas in the post-accident

containment area. The survivability of coatings and knowing what those environments are that coatings have to survive under by necessity fall into chemical engineering.

MR. ROISMAN: You take input as to what those post-accident inputs will be rather than making independent judgments as to what the post-accident temperature will be or how much iodine you'll have in the environment; is that not correct?

MR. MC CRACKEN: That's not necessarily correct. In some cases, we take independent input from other individuals. In some cases we do it ourselves. Part of our function is looking at the environmental conditions in containment after an accident.

MR. ROISMAN: Looking at them or deciding what they are?

MR. MC CRACKEN: Looking at them to decide what they could be based on in different accident scenarios.

MR. CHANDLER: It is unclear to me that appendix L is something really within the ambit, I think, of the agreement between Staff and Citizens Association for Sound Energy as far as this informal meeting is concerned. I don't know how far you intend to pursue it.

MR. ROISMAN: I'm happy to focus on appendix M as long as you understand that Citizens Association for Sound Energy in Docket 1 will not have yet had a chance to

explore in detail the basis for the exemption requirement.

MR. CHANDLER: I understand that, and that's why I have not interjected at this point. The technical review team effort, as Mr. McCracken indicated, is appendix M.

MR. ROISMAN: I'm happy to limit it to that, but I want to make sure it is within the body of the SSER. I have one question as to the interrelationship. Is there any extent to which the conclusions reached in appendix M were influenced, either during the course of their development or in the final version, by any assumptions about whether paint coatings would ultimately be found to be Q or not Q for this plant?

MR. MC CRACKEN: No.

MR. ROISMAN: You treated whatever was originally deemed to be a safety-related requirement for paint coatings in making safety-related paint coatings evaluations; is that correct?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Can you explain to me the role of the Battell -- I'm sorry, Brookhaven, in evaluating the paint coatings issue as it fit into what the technical review team has finally done in appendix M?

MR. MC CRACKEN: The Brookhaven role, I think, is discussed in category 1 of appendix M, specifically starting on page M-24 and M-25, where we go through the

background of the backfit test program and the scope.

Brookhaven was on site before the technical review team was formed. They were working for the region in that particular case. They had done some preliminary investigation themselves, had issued a preliminary report, and when the technical review team was formed, we picked up on what they had done. We took the allegations that they had listed and worked basically from those allegations.

MR. ROISMAN: But my question in particular was, as originally formulated, there was not only to have been an interim report but actually Battelle was to have had a final report, and as I understand it -- Brookhaven, excuse me -- and that the creation of the technical review team superseded that responsibility for Brookhaven; is that correct?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Why was that done?

MR. MC CRACKEN: You have to ask somebody in management that issue.

MR. ROISMAN: Is Mr. Ippolito qualified? He's about to give an answer, and I didn't know whether that meant that he was in management or not. I don't know --

MR. NOONAN: Hang on a second. Let me ask.

(Discussion off the record.)

MR. IPPOLITO: It was just -- the review of the

adequacy of the paint coatings was, as McCracken identifies, was an ongoing review initiated by region 4 who was using Brookhaven as their consultants to review the adequacy of the coating, the coating procedures, coating QA/QC. When I took over, I said, fine, we'll make that a team within the technical review team, and we took over the contract and assigned an NRR team leader to it and we made sure that the allegations that relate to the coatings were all included in their review, and proceeded down that path.

MR. ROISMAN: As I understand it, the final conclusions that are contained in appendix M, to the extent that they are conclusions that were preliminarily investigated by Brookhaven, are not Brookhaven conclusions, they are conclusions by the technical review team; is that correct?

MR. IPPOLITO: At that point in time, Brookhaven's responsibilities changed and they became consultants just like Parameter provides consultants to the technical review team and a number of other companies. They became a consultant for the technical review team working for the technical review team team leader and were redirected at that point.

MR. ROISMAN: Did they issue a final report to the technical review team which then formed a part of the basis for appendix M?

MR. IPPOLITO: No.

MR. ROISMAN: How would we document Brookhaven's further input into the technical review team if there's not a final report from them? Mr. McCracken?

MR. MC CRACKEN: The Brookhaven people who remained involved were contributors to the various categories in the back of appendix M, which is attachment 2 to it. The names of those individuals are listed upon page 1-3, again with their various affiliations.

MS. VIETTI-COOK: Instead of reporting to region 4 they reported to Phil Matthews as technical review team team leader.

MR. MC CRACKEN: Yes.

MR. ROISMAN: But when they were reporting to region 4 they issued an interim report and when they reported to Phil Matthews there's no document that they signed and sent to represent their final conclusions on this; is that correct? So in that sense they changed their role.

MR. IPPOLITO: That's exactly what I said.

MR. MC CRACKEN: The role changed for the sections, the categories that they were responsible for in appendix M, they signed them. Those were transmitted to us and signed by them.

MR. ROISMAN: If I want to see what is their

final report all I need is a road map of which of the sections they authored within appendix M, and that will be the Battelle output -- I'm sorry, Brookhaven. Sorry. Is that correct?

MR. MC CRACKEN: Yes.

MS. VIETTI-COOK: There would be an SSER like it is in there with their signature at the bottom. It would be the identical one with their signature.

MR. ROISMAN: Did they actually author those sections or did they just concur in someone else's authoring them?

MR. MC CRACKEN: They authored them. The signature package you're looking for will list the author and myself and Vince Noonan.

MR. ROISMAN: In the paint coatings documents, when we finally see them, we will see these Brookhaven identifiable --

(Discussion off the record.)

MR. ROISMAN: Then, except to the extent that Brookhaven became part of a bigger evaluation, they completed the work that they originally agreed to do with region 4, and rather than having their work changed, either narrowed, broadened or in some other way altered; is that correct?

MR. MC CRACKEN: You said they completed the

work they were originally contracted for in region 4?

MR. ROISMAN: That's correct.

MR. MC CRACKEN: I don't think so. I think Tom said the scope of what they were going to do was altered so they did not complete what they originally contracted for from region 4. The contract scope was changed when they were secunded to the total technical review team effort.

MR. ROISMAN: Scope was narrowed or broadened?

MR. IPPOLITO: Broadened to include all of the allegations that we were able to identify in this coatings area, any new allegations that came along.

MR. ROISMAN: Did they become de facto the principal authors of appendix M in terms of the real input into appendix M?

MR. MC CRACKEN: No, they were contributors. They contributed to some of the categories of appendix M, but everybody was working as a team. There are seven categories, individuals were assigned as the lead on certain categories, but nobody was the principal author other than the individual assigned to the lead on that category.

MR. ROISMAN: Let's go to M-3. Under the category 2.2, review approach and methodology, at the bottom of the page, there's a discussion -- at the end of each two-week session you updated the concern allegation

tracking system to reflect the status, et cetera, of each concern or allegation as well as any new ones that had been added. What was your procedure with regard to new ones that were added while this investigation was still open? Did you add them to your then current investigation list?

MR. MC CRACKEN: New ones that were added through the time that the technical review team was on the site would be added to one of the seven categories that were originally established. If one came in on training, it would go into the training category and the individual doing training would then have that to do as part of his normal function.

MR. ROISMAN: What if the allegation were one that came to your attention subsequent to the time that you were on site during the on-site phase? How was that dealt with?

MR. MC CRACKEN: Subsequent to the on-site phase there was only one instance where someone came to me and discussed an additional potential allegation in the coatings area. I would guess that was sometime around February or so of this year. That particular allegation was very close to other allegations that we had looked at.

MR. ROISMAN: And --

MR. MC CRACKEN: And I didn't add it to the list.

MR. ROISMAN: On page M-4, you discuss daily

meetings during which progress was assessed and the like. I take it these are meetings among the people working on appendix M only?

MR. MC CRACKEN: Yes.

MR. ROISMAN: This was all at a time before you were personally involved, correct?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Your understanding is that everybody was sort of kept up to speed on what everybody else was finding or doing through this process each day?

MR. MC CRACKEN: Yes.

MR. ROISMAN: And the Brookhaven people were part of the group that was on the site during that investigation?

MR. MC CRACKEN: Yes.

MR. ROISMAN: As I'm sure you know, there were lots of allegations of improprieties in the paint coating area. It was very controversial among QC inspectors. A lot of people saying, he did this, and other people saying, he didn't do this. How did you -- how were you able to determine when you had people telling you diametrically opposed things which one was telling you the truth? What did you do to try to find that out?

MR. MC CRACKEN: When I picked up the technical review team function for coatings, I was receiving the

initial inputs for the various categories from each of the individual reviewers. Part of what they provided was a background package which has then gone into our document control room or whatever it is called, and that background package is something I would look through when I looked through their individual category inputs to see if I concurred with the conclusions that they were drawing.

MR. ROISMAN: What did you do when you had -- if an inspector who later became an alleger said that a certain thing had been said to him, and the person who it was alleged to have said it to him said, I didn't say it to him, did you have any process by which you could determine or try to determine who was right?

MR. MC CRACKEN: I think you need to look a little further back in appendix M to see how we handled the entire area of coatings. On page M-7, we discuss in the second paragraph that the technical review team protective coatings group conducted a generic review in each of the areas, the seven areas that we had defined as having allegations in. As part of that generic review, we looked at the specific allegations. We tried to determine in each case if a specific allegation was substantiated or not. In some cases like the one you were just, I think, hypothetically trying to come up with, the answer is if somebody says somebody did something wrong and that person

says, no, I didn't, and there are no other witnesses or documentation to support it, that would be indeterminate.

MS. VIETTI-COOK: I would like to supplement that. Primarily, OI had completed OI investigations on the "who shot John" for, you know, the protective coatings area, and what we did is we provided Brookhaven copies of those OI reports, and they pulled out what they thought were the technical allegations from OI reports, but OI did the groundwork or the, you know, this guy said something and this guy said something different and tried to sort those facts out before the technical review team got into it.

MR. IPPOLITO: That's right.

MR. ROISMAN: I don't know if you have read -- there's a harassment/intimidation panel report that's out that tries to look at allegations of harassment/intimidation, and one of them relates to some deal with allegations related to paint coatings. I want to make sure that I understand the implications of the statement on page M-8, the first paragraph beginning with the words: "The technical review team did not investigate allegations of concerns or issues of improper management pressure, intimidation, harassment or wrongdoing."

Am I correct that by saying that you did not investigate them that you also did not look for the implications for the paint coatings program if they were

true or if they were false?

MR. MC CRACKEN: No. You are making a broad statement without using specific examples of what you are discussing.

MR. ROISMAN: Okay, there was an allegation that a supervisor told the paint coatings inspectors following an inspection in one of the rooms that he thought was overly detailed that he would not put up with any nit-picking and that he would essentially nit-pick the person off the site, and some of those paint coatings inspectors who were at that meeting charged that that incident occurred and that it was an attempt to intimidate them from doing their job as they saw it.

Assuming for a moment that that is subsequently confirmed by the appropriate offices of the Nuclear Regulatory Commission, that the event took place, that it did have the effect of creating an intimidating atmosphere and that the inspectors who were there could have been affected by it, what, if any, consideration of that -- of the existence of that phenomenon is given in the evaluations of the paint coating program in appendix M?

MR. MC CRACKEN: In appendix M, and I forget right now the particular categories it is discussed in, that particular incident in that room, the technical review team went to the room that was discussed and looked at the

coatings in that area and tried to make an evaluation as to whether the coatings in that area were acceptable. As I recall, that particular room had been subsequent to the incident you are discussing, was scraped back down and started over and repainted.

MR. ROISMAN: That tells us that you looked to make sure that the paint coatings in that room were appropriate. And you found, I take it, from what your recollection is, that they were.

MR. MC CRACKEN: Yes.

MR. ROISMAN: But in terms of trying to identify the extent of failures in the paint coatings QC program, what, if any, consideration did you give to the facts that we have just discussed of the events that took place in that room as having implications for other paint coatings work that these inspectors were responsible for?

MR. MC CRACKEN: Because we did a generic review in each of the areas of coatings, and any influence or effect, whether it was due to somebody believing he had been intimidated or if it was due to poor training was picked up by the method we used in evaluating the overall coatings program as opposed to looking at specific individual allegations.

As we state, I believe in the end of category 1, that 61 of the 62 allegations really accounted for an

insignificant amount of the total coatings area because they were talking about small areas. They were specific examples of areas a couple of square feet instead of large areas of coated surfaces. If we had only looked at the individual allegations instead of doing a broad generic review of the coatings area, we would have come to a totally different conclusion, I suspect.

MR. ROISMAN: In doing a broad generic review, you did not go back and reinspect the entire paint coatings in the plant; is that correct?

MR. MC CRACKEN: No.

MR. ROISMAN: You made a judgment as to what you would look at to be able to say that you could make some generic conclusions about the paint coatings program?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Where in this document have you set out the criteria you use for deciding what that investigation should look like to know that it would be adequate to draw generic conclusions from it?

MR. MC CRACKEN: We did not set out those criteria in this document. Those determinations were made by the group of people who were assigned to the TRT who were put there because of their expertise in this area.

MR. ROISMAN: Did they document that? Will I have to go through the paint coatings documents, assuming

that the document was produced, to find a document or group of documents that will articulate their thinking process?

MR. MC CRACKEN: Not to my recollection. You will find the basic documents which support what is provided in appendix M.

MR. ROISMAN: But not that will support the nature and scope of the kind of investigation that was done to reach those conclusions?

MR. MC CRACKEN: No, that was based on the engineering judgment of the people doing the job.

MR. ROISMAN: Did you evaluate that engineering judgment before you signed off on appendix M?

MR. MC CRACKEN: I evaluated the input into each of the seven categories from the individuals involved. I looked back through a substantial amount of the background documentation and records that they provided and I concurred with what they had done.

MR. ROISMAN: You independently determined that you too thought that the scope of their investigation was adequate to be able to make the generic conclusions?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Can you tell me what your basis was for your engineering judgment in that regard? If it is easier, maybe we could go to one particular place where instead of reinspecting it all you looked at something less

than it all and why you felt that was adequate. I don't think it is necessary to go through every single piece, but why don't you give me an illustrative example in your mind?

MR. MC CRACKEN: Category 6, which is on page M 117, which discusses the coatings exempt log. If you go to page M 118 and 119, which discuss the conclusions in category 6, which is in the coatings exempt log, the quantity of coatings that appear in the coatings exempt log, or should be entered into the coatings exempt log as defined in here, are significantly higher than what we see reported from other power plants by a margin high enough, a factor of probably 20, that I considered that sufficient to substantiate the conclusions that were reached by the individuals in the other areas.

MR. ROISMAN: Now, this is an instance where by looking at a smaller set of all the possible data, you were able to reach a negative conclusion. You were able to say, I now have seen enough to know that there's a problem and I can now throw, in effect, throw the ball back to them to do more work rather than my people having to do it. How did you deal with it where you were reaching a positive conclusion, where whon you took a look based upon your engineering judgment of how far you had to look, you were not seeing anything that was negative? Did you automatically broaden your look further or did that also

define the scope of your look and you came to a conclusion that in this area, the program was okay?

MR. MC CRACKEN: In the majority of categories in coatings, we did find deficiencies. Therefore, the question you are coming up with really didn't come about very frequently.

MR. ROISMAN: Well, let's look at number 6. Your understanding of the output that you will get from TUEC, do you understand that they will reinspect all the paint coatings that are now in the CEL and give you back a report that indicates how many of them they think they can justify as properly being in that CEL?

MR. MC CRACKEN: We defined in the seven categories, areas where the applicant has to go back and review what they have done. We summarized that on M-13 and M-14, and it lists four specific actions that they have to take to go back and define the quality of coatings in some areas or the amount of coatings that should be in the coatings exempt log or various other things they have to do to establish what the status of the coatings are as of today or tomorrow, whenever they complete that particular effort.

The intent of that is that they have a clear understanding of which coatings are clearly in the coatings exempt log so that when they do the inspections that are

being required of them through appendix L that they will have the prime areas to look at.

MR. ROISMAN: So at least in this regard, the conclusi ns of appendix L regarding the classification of paint coatings as not Q do impact on the scope of what appendix M is recommending?

MR. MC CRACKEN: The findings in appendix L impact the actions required of the Applicant.

MR. ROISMAN: Right, okay, so to take an example, if the final conclusion had been that the paint coatings could not be exempted so that appendix L had come out the opposite way, would the scope of the action required in category 6 have had to require a reinspection of all of the paint coatings contained in the CEL because in your judgment the basis for putting paint coatings into the CEL was not sufficiently well defined that their presence in the exempt log could be used as a justification for not worrying about them?

MR. MC CRACKEN: The amount of coatings in the coating exempt log were higher, as I said earlier, than we typically see reported. The appendix L conclusion was that if all the coatings failed, they would not adversely impact emergency core cooling systems. If appendix L had not been able to conclude that all the coatings could have failed, I believe the next step probably would have been, how much

coatings can fail, which would then be, what is in the coatings exempt log and where is it in relation to sums and so on.

MR. ROISMAN: You might have had a conclusion in appendix L that enough of the coatings could fail without having an effect on the emergency core cooling system and the nature of where they were in the plant that what was on the coatings exempt log would be, admittedly after the fact, okay, even though the way it got on the exempt log was not okay?

MR. MC CRACKEN: I don't think I concluded in too many cases that the way it got on the coatings exempt log was okay. There were some cases that we felt things should be on the coatings exempt log that were not, but I don't think we concluded that anything put on the coatings exempt log was incorrectly put on there.

MR. ROISMAN: Then I need you to explain on M 119 you have a statement, and maybe it is the difference between calling something indeterminate and making a conclusion about it, but the next to last paragraph says "The implication of the 20 percent CEL value is that the remaining 80 percent of the coatings are of satisfactory quality. However, such an implication cannot be considered valid until the resolution of other technical review team concerns such as assurance of DBA qualifications of

coatings and their traceability is reached."

Is what you're saying is that the status of the coatings on the coatings exempt log, unless we get the DBA exemptions with respect to that is indeterminate and that there's a problem there? Am I just misreading what you said?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Why don't you explain it so I will understand.

MR. MC CRACKEN: What that says is that we are making a statement that we believe, based on the applicant doing a few more things, up to 20 percent should be in the coatings exempt log. That statement is then saying, the remaining 80 percent of the coatings is not necessarily qualified, just because it is not in the coatings exempt log. There are still issues of traceability and DBA qualification that have to be satisfied before you could conclude that the other 80 percent was in fact qualified. We were trying not to let somebody look at the 20 percent in the exempt log and automatically assume because that's all we talked about that the other 80 percent was in fact qualified.

MR. ROISMAN: Then maybe it is the preceding paragraph that concludes that technical review team finds that this value, meaning the amount of paint coatings in

the exempt log, is excessive when compared to other applicants. What did you mean by that? What are the implications of saying you think it is excessive?

MR. MC CRACKEN: The implication of that is with an amount of coatings this large in the coatings exempt log, we would have to assume that that coating would fail under DBA conditions. Otherwise, it wouldn't be in the exempt log. With that quantity of coating being assumed to fail, we would need to have assurances that that coating, if it failed, would not adversely impact ECCS systems.

MR. ROISMAN: In determining the safety significance of paint coatings, are there safety-related implications of paint coatings beyond their ability to remain on the wall in the event of a design basis accident? Are there other reasons for the coatings being on the pipes or wherever it might be?

MR. MC CRACKEN: There are reasons that you apply coatings. They are not necessarily safety significance. The safety significance of coatings is if you apply them, are they going to stay on and not interfere with the emergency core cooling systems.

MR. ROISMAN: What if they come off in the event of a design basis accident, and while they don't interfere with the emergency core cooling system, they do leave surfaces such that a subsequent clean-up of the plant by

employees would create as low as reasonably achievable problems for the employees cleaning it up? Is that a safety-related concern of the paint coatings failing?

MR. MC CRACKEN: There is not a requirement that you coat a containment or that you coat certain structures because of ALARA, A-L-A-R-A, all caps.

MR. ROISMAN: Is it specifically excluded or simply not mentioned?

MR. MC CRACKEN: It is mentioned in reg guide 8.8 as a potential benefit to be gained from coatings. To the best of my knowledge, there has never been a cost benefit analysis conducted which would show the net gain in coating versus the amount of additional exposure in going in and scabbling, s-c-a-b-b-l-i-n-g, concrete for removing any contamination that may be in there.

MR. ROISMAN: I take it one reason why that would not have been done at least before Comanche Peak was that before Comanche Peak, all plants for other reasons already had to have qualified paint coatings in them because of the design basis accident concern. Is that a fair assumption?

MR. MC CRACKEN: No, that's not a fair assumption.

MR. ROISMAN: Is it known whether or not there is a cost-benefit balance or analysis that is going to be

done on this plant before a final sign-off on paint coatings?

MR. CHANDLER: Are you continuing on L?

MR. ROISMAN: No, we're really on M; we're trying to understand if the items on the exempt logs, the way the number of those remains on the exempt looking --

MR. MC CRACKEN: I didn't understand the question.

MR. ROISMAN: Do you know whether there is a plan with regard to this plant to do an ALARA cost benefit balance to determine whether for reasons unrelated to the design basis accident you must have qualified paint coatings in the plant?

MR. MC CRACKEN: I don't know of any plans or requests to have such a plan.

MR. ROISMAN: What about with respect to protection from corrosion or rust, are any of those to your knowledge safety-related reasons for having paint coatings?

MR. MC CRACKEN: Not really.

MR. ROISMAN: Now on page M-4, at the bottom of the page, the statement is made, "Based on these reviews and interviews, the technical review team determined the validity of each technical concern or allegation and assessed its safety significance and its potential generic implications." Was it your intent to look for the generic

implications or potential generic implications of what you found in paint coatings beyond paint coatings?

MR. MC CRACKEN: No.

MR. ROISMAN: Did you expect that that generic implication, if any, would be looked at by some part of the technical review team?

MR. MC CRACKEN: When we completed the SSER 9 and with it appendix L and M, we had concluded that coatings did not have to be qualified. However, because the coatings were supposed to have been applied as qualified and that was the way the review was conducted, we felt that deficiencies that we pointed out in the seven categories we looked at should not be ignored but should be considered as a factor in what was done by overall QA/QC.: Therefore, I discussed those with Herb Livermore, and I told him that I felt we should transfer the results of our evaluation, not that he should relook at anything we already looked at but that he should look at the results, and if, for instance, in training he found nothing in any other areas he could say, it was isolated to training -- I mean the training problem was isolated to coatings. If he found that it was related to deficiencies in other areas, he could then use that information in any way that he needed.

MR. ROISMAN: Were you --

MR. NOONAN: Off the record.

(Discussion off the record.)

MR. ROISMAN: In looking for potential generic implications, were you looking for potential generic implications within the paint coatings area?

MR. MC CRACKEN: Yes.

MR. ROISMAN: In addition, you were transferring over to Mr. Livermore the task of seeing whether there were generic implications outside paint coatings?

MR. MC CRACKEN: Yes.

MR. ROISMAN: In looking for potential generic implications within paint coatings, did you attempt to answer the question: Why does this problem exist?

MR. MC CRACKEN: No.

MR. ROISMAN: Explain to me how you could look at or determine generic implications, if you didn't know the answer to the question, why did the problems exist.

MR. MC CRACKEN: If we found that procedures were inadequate, whether they were inadequate due to poor training, poor procedures, or intimidation, that really would not influence the fact that they were inadequate. What we had to determine was technically were they or were they not adequate.

MR. ROISMAN: Let's say that you, hypothetically you had an allegation that the procedures with respect to

the application of a particular type of coating were inadequate. You had an alleger who told you that and said which kind of procedures they were and said, these procedures are a mess and no one can work to them, and you found that the alleger was right, those procedures were deficient. Did you need at that point any additional data in order to determine whether there was a generic implication to that finding that that procedure was inadequate?

MR. MC CRACKEN: We would look at the specific procedure, the number of revisions that had gone to it, when they had been in place and try to make an assessment as to how much coating had been applied or when it was applied under that specific procedure.

MR. ROISMAN: After that, would the generic implication be totally related to whether one-tenth of 1 percent of the plant had been painted had that procedure been in effect; is that what you mean when you say "the generic implication" of it?

MR. MC CRACKEN: Yes.

MR. ROISMAN: Not the generic implication of whether or not this procedure was deficient, whether other procedures might also have been deficient with regard to paint coating?

MR. MC CRACKEN: The number of procedures

associated with pairts and coatings are not that many. There are a very specific list of what applies to the paints and coatings.

MR. ROISMAN: But you found that one was deficient. My question is: How would you know whether should you find a generic implication that they were all deficient by looking at only the one?

MR. MC CRACKEN: The basic procedures for applying the coatings, the ones that are used were referenced in either one or more allegations. So the coatings procedures that were used with their revisions were reviewed.

MR. ROISMAN: What you are saying, my example doesn't work because you looked at all the procedures anyway?

MR. MC CRACKEN: To the best of my knowledge, we looked at the procedures associated with applying coatings throughout the time they were applied.

MR. ROISMAN: Well, to save time, why don't you give me an instance in which you did not look at everything related to paint coatings but looked at a piece of it and found that piece deficient and then help me understand how, if you never got to the reason why the piece was deficient, you knew that you had found the breadth of the generic implications.

MR. MC CRACKEN: The sampling that we took

across the seven categories we considered sufficient to conclude that the paints and coatings area had difficulties in virtually all the seven categories; that the amount of coatings in the exempt log were excessive, so we had broadened the scope of our review to well beyond any specific allegation or procedure in making those conclusions.

MR. ROISMAN: Is there any -- if I had asked you divide the paint coatings area into categories, would there be any additional categories you would have to put in to cover all of it than the seven listed on pages 7 and 8 of the SSER?

MR. MC CRACKEN: No, that covers the total area or things you would consider in applying coatings.

MR. ROISMAN: Is it fair to say the total generic implication of the SSER conclusions is that the entire paint coatings area was deficient?

MR. MC CRACKEN: That the documentation and traceability that is inadequate to demonstrate that it is qualified.

MR. ROISMAN: So that the entire area is indeterminant because of traceability documentation deficiencies.

MR. MC CRACKEN: Large areas. We did not go to the point of trying to determine how much is qualified

because once we had concluded in appendix L that it no longer needed to be qualified, that wasn't a necessary step. But you could go through and try to determine how much is qualified.

MR. ROISMAN: Why don't we stop there for the night and start again in the morning. Thank you very much.

MR. NOONAN: I have a few things for the record. Tomorrow Mr. Keimig will be here in the morning.

MR. ROISMAN: We can take him after we finish here.

MR NOONAN: For the record, the applicant has indicated they do not wish to comment at this time. Finally, we're going to meet at the Holiday Inn in Bethesda at 9:00. One block away.

(Whereupon, at 5:10, the meeting was concluded, to reconvene at 9:00 a.m., Wednesday, November 20, 1985.)

CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING: MEETING OF NRC STAFF WITH CASE

DOCKET NO.:

PLACE: BETHESDA, MARYLAND

DATE: TUESDAY, NOVEMBER 19, 1985

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission.

(sign) Kathie S. Weller

(TYPED)

KATHIE S. WELLER
Official Reporter
ACE-FEDERAL REPORTERS, INC.
Reporter's Affiliation

Recorder

11-19-85

CASE / NRC MTG

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11/19/85

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of TEXAS UTILITIES ELECTRIC COMPANY, et al. (Comanche Peak Steam Electric Station, Units 1 and 2)	Docket Nos. 50-445 and 50-446 (Application for an Operating License)

CASE's (Docket 1) Comments
to Be Bound into Transcript of
NRC Staff/CASE Meeting in Bethesda
November 19 and 20, 1985

CASE (Docket 1) asks that this pleading and the attached 10/23/85 Joint Stipulation of Staff and CASE (Request for Subpoenas) be bound into the transcript of the November 19 and 20 meeting.

As noted in the attached Stipulation, this is to be a joint Docket 1 and 2 meeting and no other similar meeting will be sought by CASE, as to the issues discussed at the meeting, with these staff persons; and CASE's Washington representatives (Mr. Roisman and Ms. Garde) will be asking questions for both dockets. CASE in Docket 1 will rely upon our representatives in Docket 2 to assure themselves that the terms of the Stipulation have been fully met.

CASE also wants to remind the Staff that (as CASE's primary representative in Docket 1 stated during the discussions prior to the 10/23/85 Joint Stipulation), CASE in Docket 1 might want to ask a few additional questions either in writing or informally (although we will not seek any other similar meeting as to the issues discussed at the meeting,

with these staff persons) after we have received, and had time to review, the transcipt of the November 19-20 meeting.

Respectfully submitted,

Juanita Ellis

(Mrs.) Juanita Ellis, President
CASE (Citizens Association for Sound Energy)
1426 S. Polk
Dallas, Texas 75224
214/946-9446

Attachment

cc: Service List

October 23, 1985

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
TEXAS UTILITIES GENERATING COMPANY, et al.	)	Docket Nos. 50-445-1 & 2
	)	
	)	and 50-446-1 & 2
(Comanche Peak Steam Electric Station, Units 1 and 2)	)	
	)	

JOINT STIPULATION OF STAFF AND CASE
(Request for Subpoenas)

This stipulation is to confirm the agreement that we have reached in regards to CASE's Request for Subpoenas.

1. CASE agrees to withdraw the pending request for subpoenas.

2. The informal meeting with the staff which had been scheduled for October 21 and 22 will be held November 19 and 20, 1985. The meeting will be held at the NRC's Bethesda offices (time and place to be announced by the staff). The meetings will be open to the public, and will be transcribed.

3. The staff agrees to produce the documents requested in the subpoenas as soon as reasonably practicable. To the extent the documents requested are produced in response to the outstanding FOIA request, such production will fulfull this obligation by the staff.

4. The staff agrees that it will not issue any final approval of the Applicant's CPRT program plan until CASE has conducted the November 19, 20, 1985 meeting and had a reasonable opportunity to forward its comments on the Issue Specific Action Plans.

5. The meeting will be a joint Docket 1 and 2 meeting and no other similar meeting will be sought by CASE, as to the issues discussed at the meeting, with these staff persons. CASE's Washington representatives will be asking questions for both dockets.

6. The arrangements for this meeting do not in any way preclude either the Staff or CASE from asserting their separate positions about other issuss now pending before the Board, including the question of whether or not relevancy questions are to be determined by docket or the overall case.

Stuart Treby, Esq.
Nuclear Regulatory Commisison

Anthony Z. Roisman, Esq.
Citizens Association for
Sound Energy