



UNITED STATES
NUCLEAR REGULATORY COMMISSION
 OFFICE OF INVESTIGATIONS FIELD OFFICE, REGION IV
 611 RYAN PLAZA DRIVE, SUITE 1000
 ARLINGTON, TEXAS 76011

REPORT OF INQUIRY
 "SUPPLEMENTAL"

February 7, 1984

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION:
 RECEIPT OF INFORMATION CONCERNING DEFICIENCIES
 IN CPSES COATINGS PROGRAM

REPORT NUMBER: Q4-83-026

1. The Office of Investigations Field Office, Region IV, Report of Inquiry No. Q4-83-026, dated October 18, 1983, reported information documented in an August 8, 1983, memorandum prepared by Joseph J. LIPINSKY, Quality Assurance Director, Oliver B. Cannon & Son (O. B. Cannon). The LIPINSKY memorandum (an attachment to the OI Field Office Report of Inquiry, supra) describes problem areas with the protective coatings program at Comanche Peak Steam Electric Station (CPSES).
2. On January 16, 1984, David N. CHAPMAN, Quality Assurance Manager, Texas Utilities Generating Company (TUGCO), Dallas, Texas, provided a copy of the transcript of meetings held on November 10-11, 1983, which were attended by various CPSES Officials and O. E. Cannon management personnel (including LIPINSKY). The purpose of this meeting was to discuss and attempt to resolve the concerns expressed by LIPINSKY in his August 8, 1983, memorandum.
3. A copy of the transcript of the November 10-11, 1983, meeting is Exhibit (1).
4. This supplemental report is provided to the NRC Region IV management personnel for review, evaluation, and any action deemed appropriate.

EXHIBITS

- (1) LIPINSKY'S Memorandum Meeting on
 November 10, 1983 and November 11, 1983 Undated

REPORTED BY: *Donald D. Driskill*
 Donald D. Driskill, Investigator
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Original signed by:

APPROVED BY: *Richard K. Herr*
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J. T. Collins, RIV	w/exhibits
T. F. Westerman, RIV	w/o exhibits

Lipinsky Memo Meeting on November 10, 1983
and November 11, 1983

Members attending:

John T. Merritt	TUSI	Jack Norris	O. B. Cannon
Thomas F.W.P. Kelly	Ebasco	Lisa Bielfeldt	TUGCO
Ralph A. Trallo	O. B. Cannon	Jerome Firtel	Ebasco
Joseph J. Lipinsky	O. B. Cannon	R. G. Tolson	TUGCO
Keith Michels	O. B. Cannon		

Mr. Merritt officiated the meeting on November 10, 1983 concerning the "Lipinsky Memo" at his request.

Mr. Merritt: I officiated a meeting at my request in late July. O. B. Cannon was brought in on concerns with the quality of the work, concerns with production of the work we wanted complete review of the paint program because we were going very rapidly doing an awful lot of work in a short period of time. As a result of that, I worked closely with Jack and Jack then brought in several other people to help, one of which was Mr. Lipinsky. Lipinsky, as a result of his review down here, issued a memo back in August which I became aware of about the first or second week of October and then from that having then received that memo, raised some concerns. At the beginning let me say, we are very much concerned about the quality of Comanche Peak. For the last several months, we have had the NKC investigating concerns, we're an open book, we want anybody that's got any concerns to voice those concerns. We are going to sit down and deal with those concerns, and substantiate them and correct them if they are there, or dispose of them if they're not. The Dallas Corporate QA office has also been in here taking a look at concerns in the painting area. And when the "Lipinsky Memo" surfaced, we reviewed it with our Corporate officers because it does have some rather significant areas of concern that we had not looked at before from the standpoint that they were expressed or addressed. It is our policy the minute on anything, and it's

not just paint, but anything on Comanche Peak is surfaced that could affect the quality of Comanche Peak then we launch an investigation to determine the validity of anything that surfaced there. We also have a practice, depending upon the magnitude in anything this large, we also immediately notify Region 4, even if we have not drawn any conclusions, just to let them know that we too are aware of it and as such want to go thru and take a look many times in conjunction with the NRC. As we're all aware, the NRC is taking a look at this same memo with ourselves and what we're here to do is to go thru that memo on an item by item basis discussing what led to the concern and then from that concern I've got Engineering, I've got Corporate QA, I've got site QA, we will bring in the necessary records, we will bring in whatever individuals, if there is an individual, we will go to the field take a look at it. We need to find out what is behind or backing up a concern that's expressed in this memo so that we can ourselves satisfy that if we've got a concern we've addressed it in whatever manner we've got to go about doing that. So, that's where we're trying to start from. We want to go thru and address the quality of Comanche Peak and if there's any question along the way, wide open for discussion. Any other statement on that or question? Okay. That being the case, I'm going to kick the thing off with Ron who is much more familiar with some of these details. We'll kind of rock back and forth depending upon what item that we're into either QA, Engineering or Construction and let's kind of discuss the thing thru primarily from what Lipinsky your feeling was that led to the conclusions you're into on this thing.

R. Tolson: I want to touch briefly on some things that Ralph mentioned to John the other day that might be an appropriate check list of things to go thru. I think the first thing that needs to be touched is how we're structured or how we're organized, and that's one of the things Ralph mentioned. John reports to, and correct me if I'm wrong, Joe George for Engineering/Construction and Bob Gary for Startup. Mr. Gary is Executive Vice President and General Manager of TUGCO, which is the operating entity.

Reporting directly to Mr. Gary coming down the operations and QA side of the house is a Vice President by the name of Bill Clements. Reporting directly to Mr. Clements is Mr. Chapman who's the TUGCO Manager of Quality Assurance. I report directly to Mr. Chapman and my correct title is Construction QA Supervisor, not Manager. Okay, my boss gets upset when people think I'm the Manager. Ms. Bielfeldt who's title is, used to be Special Projects Engineer, I'm not sure what it is today.

L. Bielfeldt: Quality Engineering Supervisor.

R. Tolson: Okay. Quality Engineering Supervisor, reports directly to Mr. Chapman also. So, Lisa and I are on the same level. I feel very good about that because I hired Lisa several years ago. Reporting at a similar level, as far as this discussion is concerned, is a gentleman by the name of Tony Vega who's the QA Services Supervisor. Mr. Vega has responsibility for the independent audit function. Just to give you a feel for how I work, I have no responsibility for audits. I have a very small group of people that, we use the term surveillance because I like the informality of it, that report here on site thru another individual to me. I use that group to keep me abreast on what's going on so that I don't have a whole lot of written discussion with Mr. Vega. It's just the way I like to do business. And that's basically how we're structured as far as TUGCO's concerned. Now relative to the paint production that's under Mr. Merritt's organization. The paint inspection is directly in my organization. The best way for me to describe this and I think Joe, there's a little confusion about who worked for who and all this, that I sensed coming out of the memo and I'll take my share of the blame because you and I didn't spend enough time together obviously; but the easiest way to understand the Comanche Peak organization is to visualize a group of people working to a TUGCO QA program who may be employed by as many as four or five different companies. Okay.

And then you need to be careful with the Ebasco, Brown and Root because that's not the way it is. Okay. They're Comanche Peak Quality Control people, they happen to draw their paychecks from several different locations. That's the way we look at it, and that's the way it's structured.

R. Trallo: Do I understand that basically TUGCO has the quality responsibility from an operational point of view? Based on QA program, QA procedures, etc., your job shopping, for lack of a better term, the personnel may work under job shop conditions say for various organizations but they are part, they are assigned as being TUGCO or TUSI personnel?

R. Tolson: That is correct.

R. Trallo: Okay.

Mr. Merritt: TUGCO from the QA, TUSI from the standpoint of Engineering and Construction on this project. We are an active role management in Comanche Peak. In other words, the people work for TUSI individuals but there's not enough of us to cover all those bases. Brown and Root provides the primary labor function at Comanche Peak.

R. Trallo: I understand. Thank you.

R. Tolson: In the area of coatings, just in passing, there's at least three separate companies represented. The only reason I want to emphasize that, be careful with the Brown and Root/Ebasco thing because if I had to do it all over again when we made this type of a structure back in '78 - '79 I would have used the Comanche Peak logo as opposed to a TUGCO, Brown and Root, Ebasco. It would have made things a lot easier for people coming in and trying to understand what we are doing.

Let's take just a quick break.

Sorry for interruption but my friend in the corner office has got my attention real early this morning.

Joe, in passing, Miller is employed by Brown and Root and not Ebasco. Okay? It's a small point but we're going to be possibly discussing this at some point in the future and I think some of the inconsistencies need to be taken care of as we go. It's not a big deal to me. Alright.

The QA program is reflected in the FSAR and it clearly indicates what I have described verbally in terms of how we're structured. We tend to look at Brown and Root's corporate responsibilities as solely in piping and hangers. Okay? They're the certificate holder under the ASME code, they have their QA program that's controlled totally by them subject to, obviously, our review and audit. But the rest of the activities come under my direct control. I write the program, I provide the training and certification, the entire gamut of things. Let's move to the memo now, if we can. I would like to just go down a blow-by-blow thing. That's perhaps a bad term. (J. Merritt mentions on tape a problem with the heater in the office.) And Joe, I don't want you to feel defensive, we're strictly here, as John mentioned on a fact finding mission. Our concern is very strong that this be resolved as quickly as possible. And I hope it'll be an open type discussion. If I say something that you disagree with, that's the time, let's try to cover that as we go.

I have no comments on the July 26th, I think that's just kind of a list of what you were doing that day.

Mr. Merritt: Do we need to run down thru these things and clear the air on these you hit yourself? Of course ...

R. Tolson: I've covered myself and Miller, those are the only two.

Mr. Merritt: Okay. I am Assistant Project Manager.

R. Tolson: Miller is a Brown and Root employee. We've mentioned that.

Mr. Merritt: Right. Mark Wells, who is an engineer here at the site, is not Gibbs and Hill, he is, I believe, Brown and Root. Harry Williams correct.

R. Tolson: Now with those corrections then we go to the 27th. Joe, keep in mind, and I think Jack will probably attest to this, he was in my office yesterday, and has a pretty good feel for what my day normally is like, it's either constant phone interruptions or constant people interruptions and without the benefit of a court reporter that goes around with me, my recollection is sometimes pretty blank. I remember our meeting, and as I recall it was very, very short because of the schedule that I'm working under. I perceived that what you were doing, was to introduce yourself and try to explain what you were doing. I quite frankly don't remember any discussion on the 27th about material storage, workmanship, ANSI requirements or anything else. If it occurred, then it's a blank in my mind, I just flat don't remember it. We probably got into a discussion on licensing, I'm not sure it occurred at that time. I think we mentioned that in the Exit but I don't know, I don't remember discussing that in my office. If we did, then perhaps you could help me bring back some details. The statement that you have there in quotes, if it was in fact said, it was intended to explain to you that I am not involved in the licensing process. My concern is construction and construction quality and that's basically it. That's what my job function is. I had a very good reason and I know we talked about Miller. I had a good reason for doing that. For some time, I didn't know Tom at the time, but except by reputation and I have been receiving a

number of negative inputs on his performance largely from an attitude standpoint. And anytime I have that I'm obviously concerned as the guy that my company holds responsible for keeping this thing together. In trying to come to grips with how to help him settle himself down so he's a contributor as opposed to a negative aspect. And that's the reason I asked the question about Miller. Tom Brandt, who reports direct to me, was one of the sources of input and as I think you've reflected very adequately here, I think Mr. Brandt's statement reflects the frustration level that he's achieved because he's the guy that's directly in the firing line of trying to get the quality job done the way it needs to be done and settle the friction factors down which are obviously going to occur on a job of this magnitude between the people. And that's how we sense our management task, if you will, it is pure quality but you've got to keep the people aspects in mind. I can't tolerate friction between craft and QC. I think that will blow up in my face if I don't do something about it. So that was the thrust of my discussion. Tom's input, knowing him like I do, was strictly a frustration reaction and that's typical Tom Brandt, you can expect to get that at that particular point in time. He is an extremely competent individual, wired a little bit too tight perhaps, but that's my recollection. Now if my recollection is bad, then I need some help because I flat don't remember the details of what we talked about.

J. Lipinsky: We did mention licensing. This whole conversation was like you said exceptionally brief. In retrospect, even though your explanation fits, you could have picked up the word licensing but you tuned me out on the rest of it.

R. Tolson: I probably did because, perhaps Lisa will attest to this, I have tried real hard this year to clean this up. I have a tendency to be very short and brief sometimes particularly when I have something else I have to get to right then. Okay? And that's

probably what occurred. What I was trying to do was to get you and Brandt married up so that I could go on and do what else I need to get done. It's nothing personal I just didn't want to sit there and discuss QA philosophy because I was probably late for a meeting that he had called on something else. That's just the way the days go down here. Sundays are rather peaceful.

Mr. Merritt: Do we have any other comment on the licensing concern or the licensing that particular statement and what it relates to? Is there any other clarification we need to make on it?

J. Lipinsky: No, if that wasn't the intent.

Mr. Merritt: It wasn't the intent? Okay.

R. Tolson: I guess the next thing we get into is the ...

Mr. Merritt: Well, let me ask one other question. I want to make sure that we absolutely clear as we go thru these steps then. Is there anything else we need to say concerning the paragraph on Miller as far as making a clarification in what was intended there or not intended? It appears to me that it was probably some idle conversation, but I don't know, I wasn't even at the meeting on that one.

R. Trallo: It appears to me, as many times within organizations, or my organization, we discuss employee either performance functions, etc. Was it in that vane or did you perceive that it was more deep rooted than that?

J. Lipinsky: Well, essentially we were discussing former Cannon employees and I was going through a list of people who work here and I hit Miller and that's when I got that response.

R. Trallo: So basically you looked at point B just based on the attitude of an individual versus the attitude or philosophy of an organization?

J. Lipinsky: Yeah. I think that's in line with Mr. Tolson's explanation there.

R. Trallo: Well, was that how you perceived it? I'm asking.

J. Lipinsky: I didn't really care one way or the other about Mr. Miller to tell you the truth. I was just recording a conversation.

Mr. Merritt: Well, if it had some significance that's what I'm trying to understand. There's something significant there. To me it was some idle chatter, that's the way I read it and I just passed it off.

R. Trallo: Okay. That's all I needed to know.

R. Tolson: I guess we're down to the meeting, John, the best I can tell.

Mr. Merritt: Yeah.

R. Tolson: I've probably got a better recollection for that. Jack did start the meeting off. Item B I guess the next question I have. Joe, we keep coming back to the ANSI commitments. And there has to be some basis in what you observed over the day and a half or two days that caused you to feel like there may be some loop holes or weaknesses in our structured program relative to the ANSI requirements. I distinctly recall asking that question when we met as a group and I'm still having trouble coming to grips with at least a hint of what we're dealing with. Because we think the program the way it is structured and its been structured the way it is for lots of reasons does in fact comply with the ANSI requirements. So I'm having a little difficulty launching into any kind of reasonable discussion without some hint of what we're dealing with here.

J. Lipinsky: We keep coming back this thing again. I was on site three days, did not have time to go thru things in the specifics. And I couldn't tell you in black and white that I looked at ten items, five of those items were okay, in my opinion, five of them were not okay, in my opinion. What I did observe, material containers were not tagged with any type of status tag, and material that was mixed was set on pickup pallets outside containment with apparently no control on how long the mixed materials stayed on those pallets. From what I saw your report format, I do not know if it contains all the required information based on the sample forms in ANSI.

R. Tolson: Okay. I think, let me digress just a minute. Let me get into a little history of how we got to where we're at. I think that might help. Prior to me receiving the black bean for Comanche Peak, that was one day I'll never forget, February 15, 1977. My boss decided that my conduct was better suited to a construction environment than the ivory tower in Dallas, and I tried very hard for the two years I was up there. I wore white shoes and everything else just to demonstrate the fact that I was not cut out for nuclear power plants, I was not successful. And he asked me to come down here. Prior to that time I worked jack of all trades, quite a bit of auditing exposure and one of my proud assignments was because I'm a civil engineer and civils know everything there is to know about construction. Consequently, I drew the task of spending at least 50% or 60% of my time down here trying to help pull a QA program together. One of those assignments that I participated in was the initial development of the protective coating program. And gentlemen, back in those days it was a total Brown and Root QA program. Your talking about '75, '76 early in the construction period long before we ever got around to thinking about putting any paint on anything. It was to get the program set up and established. We hadn't committed to 101.4 incidentally at that time or ANSI N.45 ...

R. Trallo: You had not?

R. Tolson: We had not. Due to a slight communication problem in our licensing department, which I am not responsible for, and unbeknownst to me, we committed fully without exception to ANSI N45.2.6 and 101.4. And you can imagine the shock when the senior resident inspector came down with one of these grins on his face and informed me I was in trouble. There was a communication gap, I didn't know what was going on. I have always resisted commitment to 101.4 since the first time I read it.

J. Norris: Why is that?

R. Tolson: I've talked to a lot of other people in the industry and I think I've generally gotten a consensus. However, we've always been somewhat brilliant in recognizing early in the game that if there is a document on the streets you'd better tailor your program to address the pertinent parts of it or you're going to regret it some point down the future. So the protective coating program was tailored after the guidelines of 101.4. Up to and including, as I recall, a virtual one-on-one adoption of the forms. Okay? Now, the difficulty that I have since recognized with that approach is that 101.4 first of all was written, as I understand it, by a group of chemical engineers many of whom came out of the aircraft industry. It's very easy in an aircraft factory to develop a form that fits the coating of an aircraft body. It does not work on a nuclear power plant construction job when you've got a general contractor, and it didn't work on Comanche Peak. What happened to us is a result of being somewhat naive. And we didn't find this out until '81 unfortunately. But in 1979, when Merritt decided to get serious about construction of the plant, we went and were having some difficulty primarily in the area of hangers, everything that we bought came in painted once. It was primed in the shop. By the time we got through relubricating, if you will, the hangers primarily, the shop prime didn't mean much because there wasn't much left. Okay? And, so we got ourselves into a

pure fabrication facility without any walls. In other words we got bulk steel being coated up in the shop, brought down fabricated into a hanger with the idea that you fix the welded areas when you got to the field. You know, I'm not going to attest to the brilliance of that particular move. It obviously creates a very difficult task for documenting all those steps. What the people did, much to my chagrin when I found out about it in October 1981, was in 1979 they decided the QA program wasn't any good, it never got to my level, they started keeping an informal set of notes that would describe what they did, what they inspected. They did not complete the brilliant forms that were in the QA program. In many cases I have no records, or at best, incomplete records because there was another thing they thought of. They got frustrated by the repair cycle so they decided that they'd do a final inspection at some point down stream. So none of the forms that were opened ever got closed. Okay? And that was again something that I didn't fully comprehend or was it ever brought to my attention. The gentleman that was directly responsible for that (he'd been around nuclear plants a long time pre-Appendix B vintage and he was a good man) made one of those fatal judgment calls that he endorsed what they were doing did not bother to change the QA program. The first indication I had was a week long audit of concrete protective coatings. The audit findings reflected inconsistent or incomplete records, but since I had not seen any records, I did not think it was a big deal at the time. But some incomplete records on concrete coatings. A friendly gentleman, by the name of Claude Johnson came in two weeks later and zapped me for failure to follow procedures in the area of protective coating. He had looked at concrete and steel liners for the containment, and he never went any further than that, and he saw some incomplete records. He didn't like what he saw. Both the audit and the NRC inspection merely identified the tip of the iceberg. When we started looking, we woke up and said, hey we've got a problem. I've been here long

enough to have confidence at that time and I've seen nothing since then to change that, but what I was seeing was not necessarily a problem with the integrity of the coatings but I darn sure had a problem with a lack of records to support the integrity of the coatings. Following the analysis of everything we were looking at we bit the bullet and said we've got to reinspect the entire plant and that's what we ended up doing. We went ahead and developed a reinspection program based on destructive testing to evaluate total primer thicknesses cause one of the things they didn't bother to write down on the records or in their logs was the DFT measurements that they took. And in some cases, particularly in steel, we had some question as to whether or not there was a record trail back to the surface preparation or the sandblasting operation. So, we established adhesion testing as one means of evaluating whether or not the surface preparation was acceptable. That was our premise and our approach in terms of how we conduct the backfit. We recruited and established a team of people whose sole responsibility was to conduct the backfit. And on a priority that was established working with construction in terms of how we visualized the reactor to be completed at that time. Our backfit was solely in the reactor building because the program has never required much outside the reactor except a final check to see that it was painted basically. That function now is performed by Engineering as opposed to 1979. We launched into it. Lisa, correct me on the numbers, but as I recall we're essentially 99% complete with inspection efforts that were very detailed and consistent with the guidelines in ANSI N5.12 in terms of the number of tests and areas of what they mean and this type of stuff, 99% on the liner, roughly 85% to 90% miscellaneous steel which would include hangers. We have recently confirmed a statistical evaluation of the backfit results and that's Lisa's claim to fame. That's one reason we hired her because we kind of liked all those things that nobody understands. (Brief discussion between R. Tolson and L. Bielfeldt on statistics.) We analyzed the

results, based on a sample review as I recall, which is again statistically sound, what the results have shown is that what I believed to have been the problem to start with is in fact the problem. Coatings meet the requirements, the records don't. Okay? And we've since backed off in the Unit 1 containment and have deleted the destructive testing requirements on the basis of the results we have today, which is a large percentage of the work has been totally reinspected and the result of those inspections indicate that it was a paper problem as opposed to a product problem. That's basically the ground rules. That's what her study revealed and on the basis of that we backed off the destructive testing in Unit 1 we haven't come to grips yet with what we're going to do in Unit 2. In a parallel effort, having recognized the problem the people were having in completing the old forms, we completely revamped the protective coating program in the later part of '81 early part of '82. And that will include what you will see today is an inspection report format which to the best of our ability addresses the things that the old forms and ANSI needs to address. A birth-to-death type historical situation on what transpired on any given piece. Construction still insisted on using painted bulk steel to fabricate hangers so that created the need to establish a unique number scheme where we can trace back to the blasting. That's what we refer to as a QP number. Some of the craft and I guess it was electrical people, prefer to do it this way. Like to build the hanger, blast it and paint it which is the preferred way obviously. So, by considering all the ramifications that one can get into that's why the paper is set up the way it is. It's set up to fit what construction wanted to do, as opposed to what ANSI believed to be proper and necessary when you're dealing with an item that you can take birth-to-death in a small area. You can't do that on a construction job. Not when you're dealing with a general contractor. Not in our judgement. Any questions at that point?

J. Lipinský: No, the format of forms doesn't bother me. You can use the ANSI form, you can use any form you want as long as it contains the data.

R. Tolson: What you have to do though, Joe, is you have to go through the entire program in order to be able to come to grips with all of the ANSI requirements.

J. Lipinsky: I'm saying that after a thorough review ...

R. Tolson: So, what you're really saying in the memo then is that you did not do a thorough review and therefore you are not in a position to say one way or the other as to whether or not the program complies with the ANSI requirements.

J. Lipinsky: Indications, in my opinion, that there might have been some problem errors, however, I didn't do a thorough review and I couldn't tell you one way or the other.

R. Tolson: Well, I'm awfully confident and I'm awfully confident for a lot of different reasons. I brought in the early part of '82 a gentleman that I've worked with for 10 years. The people in the field refer to him as an efficiency expert that wasn't really his bag he's just a born QC man and he knew how to get the job done consistent with construction schedules. And he spent six weeks with me down here after we came out with the new program talked with the people and fine tuning so that it would work and that they understood it, because I couldn't afford to go back six months later to another disaster because we didn't communicate with the troops. We also brought in some outside experts who reviewed the program, at our request, and have stated that it meets the requirements. And that's historical. I've also been under a constant NRC inspection since January of this year and it's still ongoing. I've got another team down here today. And this guy is

brought in from Region 3 working with the Region 4 guy and they're going back birth-to-death. My friends in Dallas have also conducted on the order of six protective coating audits in the last year. Okay? And except for the occasional nits and lice that the audit thing gets you into then there's no problems that have been uncovered through all that. And I'd say the NRC's investigation has been very, very thorough. They have talked on at least three separate occasions to every QC inspector in the field and except for some people type things which I know are out there and we're trying to do something about there's no problems and no citations. So, subject to surprise, which I don't expect to get into, my confidence is very high that what we are doing is proper and totally consistent with the requirements. And we spend one heck of a lot of time working on it as you might imagine when you wake up one day and find out that the entire reactor building which you thought was close to being through is just getting started. And that's basically how we got to where we are at. John, I can't think of anything else to touch on, can you?

Mr. Merritt: Let me come back to one thing that Joe was very specific on. Is there some way that we can clarify or get into the concern of mixing, storage, sitting on pallets and a tracking?

R. Tolson: I want to touch on something briefly. You indicated materials status tags, something else you mentioned in that I didn't record. Do you recall what that is?

J. Lipinsky: I believe it was the mixing.

R. Tolson: Mixing? Alright.

Mr. Merritt: You have a question on the timing, the tagging, the storage and in the conversations over the last two or three weeks somebody was concerned about the lid being off one of the paint cans or something so we can go through all this thing. Anybody's got any comments or concerns on this now I want to address all of them.

R. Tolson: I want to touch on the tagging just a minute. It's down to ...

J. Norris: I walked by, pallet that, this was over by the reactor building and I looked at some mixed gray paint. The can was open. It obviously had been there for a few minutes or a half hour or something like that, and I think I made that comment based on your observations. I remember very vividly going into the material storage warehouse with Junior Haley and I was very impressed with it. A neat well-run organization they told me they mix the paint in there. Just one guy is checked out so there can be no snafu. I was impressed with the operation myself, I must say.

R. Trallo: I've got a question. What is the purpose for central mixing? What is the philosophy behind that?

R. Tolson: Now, I'm probably not in close to detail as I need to. It's my understanding that that's just the way that we decided to do business. All the mixing is done up there on the hill, the paint comes down complete with some form that they fill out that is presented to the QC people in the reactor building. I believe QC witnesses all the paint mixing operations for the Reactor.

Mr. Merritt: I think even beyond that point, of course, is as much paint as we have to go thru on Comanche Peak, it provides a central point where you can one control of the temperature, the ambient temperature which is very important. We couldn't establish control facilities throughout the job site, I think. So we came up with a central repository for all paint to maintain temperature, humidity and whatever up there in that one point. So they started off from there with a central mixing process. There are probably some additional underlying reasons for mixing it up there but I am not able to say.

R. Trallo: One of the questions you have raised is it mixed. Now how does that identify as to where it is going to go and then it is set out on pallets to be picked up say by one of the construction forces, how does that material, I think his question is basically how is it controlled from the time point of view that it goes to the right area?

R. Tolson: There are some form and I'm not close enough to that particular detail that is filled out up there and is presented to a QC in the reactor building. There's a check and balance there somewhere. But I'm not certain what the details are. Jerry, you might be able to help there.

J. Firtel: I've got a paint mix slip filled out, which on that form lists the batch number of each component, manufacturer, color, batch number component A, batch number component B, batch number of thinner used, witnessed by an inspector and attached to the bucket be it a five or one or whatever. It's brought down and dropped off outside in the area marked reactor for Q materials. At that time, somebody from inside the reactor will come down and pick it up and have a central point at each elevation where material is stored whatever it is and broken out of that container that information is transposed and put with any subcontainer it goes to so that wherever an inspector is working with a crew of people there is a finalized traceability to that batch.

R. Trallo: Then he documents on his inspection form the information that is on the mix ticket, the mix ticket is attached as supporting documentation to the inspection forms.

J. Firtel: Yes.

R. Tolson: And I'm not sure that that happens.

T. Kelly: I don't think that the mix ticket goes with each inspection form because you have a situation where you've got a hell of a lot of small component work being done and you supply the quart pressure guns. So you may have one 5 mixed that may be used by 10 different painters. But in each case, when that subcontainer is gone, the mix slip information is put on that container again witnessed by a QC man.

K. Michels: One of the questions that's raised here though is when that material leaves the mixing area and then is deposited in the reactor building area how do people that pick this up and put it into pots know that this is indeed class 1 material?

T. Kelly: There's no way. If you'll notice outside containment, or in the lay down yards out there, you've got Q areas and non-Q areas. Well Q areas are Q materials, you've got a batch mix ticket sticking on it, it's Q material. If it doesn't require a batch mix ticket, it's not Q material. In other words material is being used say transformer building, local outhouse, turbine building it's put in a non-Q area. A completely different area to drop off the material.

K. Michels: Well, okay. Then the identifying tag as it were, is the mix slip.

R. Tolson: In general, let me touch briefly on status tagging. Cause that's, I'll take full credit for it, that's my policy. I woke up down here in '76 one day or '77 and was walking around in the plant and then when we first started out we had the most sophisticated tagging system you've ever seen in the world. I mean it had tags hanging off everything and I asked somebody when are we going to take them off. Nobody had thought about that. It was ridiculous. We were getting NCR's because the tags weren't in place and all of this kind of stuff. So I just said do away with the tagging system and we have across the board. The only thing

that's tagged is the weld rod. Everything else is done through our interpretation of Appendix B, is either paper or status indicators. We tend to use the paper. Okay? And that's just basically the policy. So, you won't see any release for construction tags on paint containers I can assure you and the reason for it is because we decided that wasn't the way we wanted to do business early in the game.

R. Trallo: What we're revealing here basically is feedback on Joe's an early comment on how indications were, but without a thorough review there's no way we could tell to expand on this. Our indications were, mine own personally would be to go and just take a cursory walk through the facility and I saw material sitting mixed and out even though it was in an area marked Q storage, that I would have a problem with it. Because under most programs, again each program is taylored to suit an individual site and an individual requirement and still within the guidelines set forth by regulatory agencies. We could work under a program which is essentially 180° out of phase with your program and still both of us meet the intent of the regulatory requirements. But for the most part our exposure has been this with coating, this type of handling of material normally indicates there's a problem. Now if your program addresses it as it does here, fine you probably do not have a problem. But first indication is wait a minute, this stuff gets set outside there, how do you track it and how do you know where it is going? And that's what we were trying to do during our courtesy look. Just identifying areas which may be of concern.

J. Norris: Okay. The problem here, I think, is that as a group we're used to seeing tags, we didn't see tags, they're handling it a different way.

R. Trallo: That's again, what we were looking for is a broad review and we did not have the time here to go into all the detail. This is one of

the reasons why we are all here today is to further explore this to see, in our opinion if we think you are deficient in some way we will tell you. If we feel your system is fine, then we'll tell you it looks like it meets everything and you allayed our fear or our concern.

R. Tolson: Again, I'll reemphasize the fact that my confidence is very high because it's been looked at and put through a microscope particularly in the last year.

Mr. Merritt: Well, if that's not a problem let's step back to QA. Let's go to Dallas and get them back again.

R. Tolson: I don't have a problem. I don't want to get Dallas back here again this week they were just here last week.

Mr. Merritt: Oh, okay.

R. Trallo: In all honesty, any place where we've ever seen that type of handling with coating materials, it didn't work. Now if yours works, hey that's great.

R. Tolson: We think it does.

R. Trallo: Every place we've seen it never worked.

R. Tolson: I probably shouldn't say this but we have no great fondness for auditors and it should be made very clear that the auditors know that. We have a little saying that the definition of an auditor is a guy that comes in and bayonets the wounded after the war is lost. I can say that with some confidence as I used to be one.

Mr. Merritt: Well, I think we need to take an overview from the standpoint of how we're doing it today the record as it stands, and make a

determination on whether or not we need to go back in there and do another audit or not. Whether or not it is closed I think we do need to take another look.

R. Tolson: My mind says no. Okay? I've been talking to the inspectors I'm currently working on a concern that they have that is tied into this area a little bit. I'm also convinced that they're seeing stuff that they don't like and their motivation is not clear to me yet as to what they are trying to do. We'll look at everything that the people come up. I've got an ex-NRC man down here on my staff that has spent 10 years as regional director with the commission who is at my beck and call to investigate any and all allegations that come to our attention. So, if there is a problem we'll take care of it. Our review indicates that there is not a problem. I feel very confident about it. I think you'd be the first to admit my group is not prone to being bashful.

Mr. Merritt: Nope, I've got no problem there.

R. Tolson: Nor do the auditors. Touch briefly, Joe, on the morale problem. I'm well aware of that. It's kind of a cycle thing. I'm convinced at this point, we've just recently gone through an additional investigation with the NRC and we did an internal investigation. We have uncovered some things that from a management standpoint needed to be done and we've taken care of them. As to whether or not that's going to settle it down I won't know for some time. I've strengthened the supervision. We've recently moved to a different way of organizing the project, got the best people man that I have on my staff involved with the reactor building and I'm convinced that he's capable of managing people and getting their minds positive as opposed to being negative. As to whether or not I'm totally successful with that, I won't know for some time. We've done everything we can think of to take care of those human aspects which you get into on a job of this nature. The only thing

that makes sense to me from a motivation standpoint is some of them are scared about where they're going to be working next year. They seem to be spending one heck of a lot of time worrying about that as opposed to earning the pay check that we're providing to them to do the inspection work. It's not too surprising. The only surprising thing is that I'm surprised its taken this long. I predicted this would happen four years ago. It just surfaced in paint, there's some indication that perhaps it could spread and we're working feverishly to stop that.

R. Trallo: We have a theory on that, as you said it surfaced in paint. That's the only area we deal in and we can't understand why we possibly run into this more than a general contractor or an owner. However, as you're well aware as you get into it you know people always say, Oh my god, the welding documentation. Welding is one of the easiest things on a site to document. Paint is the most difficult to document. It is the most difficult to comply and document with. It can be done but it is much more difficult. Where the welding quality supervisor he thinks he has the world's worst problem, his is very simple, he takes a picture it's there. He looks, if you walk away from a weld, the welds are still there. Ten minutes later the coating is not -- it has changed. It has underwent a chemical anomaly. Coating inspection is a very, very demanding job.

Mr. Merritt: Subject to a lot of personal interpretation.

R. Trallo: Unfortunately, that is the business. I personally sit on D33 committee ASTM who has been given the job to maintain and rewrite the ANSI documents we're talking about today. We have some very heated discussion because now we have quality people, production people, engineering people, etc. all at the same table working on the same document. You'd be surprised what we end up getting into. What is very practical from an engineering point of view is totally

not practical from a quality point of view. They always hit me why do you keep bringing up, I'm not a quality engineer by any means, why do you keep bringing up you can't do that you can't document. It's fact, you're asking a man to perform a function in the field which is virtually impossible to document. Now I said what type of position do you put both the mechanic in and the inspector in. The industry has to develop and we're trying from that point of view develop more objective tests. They're not destructive tests but something that's more objective and unfortunately we're dealing with many phases of the inspection documentation an art versus a science. It's totally unfortunate.

J. Norris: The world is eagerly awaiting the results of your work.

R. Trallo: Some of the things that have come out of there very recently, are much, much better than they have been in the past. More defined anyway.

R. Tolson: Alright. Let me digress back up now to another point (personel certifications) that Ralph raised that I think we need to discuss just briefly. We have litigated this in the public arena and our objective was to get a legal interpretation of ANSI N45.2.6. We were blessed with being the second plant in the industry to have what is affectionately referred to as a CAT review. Followed that by a RAT review which spun off from the CAT. This is a team of about 11 seasoned NRC inspectors who tour the country bringing good news and great tidings to nuclear construction. Having been the second plant they did not have the experience of phrasing themselves in a way that it was not embarrassing to either the utility or the commission when you got into the public arena and were in front of the administrator law judge. Our report was, to say the least, a little upsetting, poorly written thrown together and not given a whole lot of thought.

Mr. Merritt: Including some very gross inaccuracies.

R. Tolson: Yeah, you might say.

Mr. Merritt: They had the wrong hangers in some cases. They learned because they got put in the public arena and they had to eat crow.

R. Tolson: Out of sixteen items that they were ready to hammer us on we admitted to probably four that there was a problem on, twelve of them were not problems. (Brief discussion on WPPSS and WPPSS CAT reports.) One of the NRC inspectors who was assigned to evaluating our compliance with N45.2.6 had gotten his tail feathers singed on another plant because he had been tempted to utilize the concepts that we use on training and certification. And it didn't work. One reason it didn't work cause they didn't manage it properly. So you have a different interpretation of what N45.2.6 requires. His interpretation in a nut shell is that you can't use Level I's. Everybody has to be Level II's walk on water type of inspector before you can utilize them. Obviously that's not very practical. I learned early in the game that you cannot go out in this industry and find Level II people that are capable of performing inspections. They don't exist. They may have been certified Level II. Okay? But they're not capable. Having recognized that, my friend over here in the corner made that very clear to me one morning after a tour of duty on night shift when one of my quote Level II electrical inspectors decided to give him a lecture on quality assurance. And he came in the next morning, and he's not always the most pleasant person in the world, the relationship degraded rather quickly, and I had what you call your basic problem. The problem, my friend Merritt here and my boss were real quick to decide that they didn't want to go to Washington, so guess who went, by himself. We had a minor communication problem at the time over some rebar and concrete. We didn't think rebar was all that important and so the company got called to Washington and I

got elected to go. The only plane trip I've ever made in my life without drinking was the return trip from Washington. They kind of zeroed in on me. It was very clear to me when I came back that I had to do something dramatic to get my inspection training/certification program in order very quickly. I abandoned the idea of being able to recruit Level II people and went to a very, very conservative training certification program. I don't care what a guy has done that's history, he's going to be indoctrinated in quality assurance, he's going to be exposed to the FSAR, he's going to be trained including observation by people that we have confidence in that they know what they are doing, in the rudimentary aspects of QC and he is certified to perform to the inspection instruction. I don't have, or didn't have in the early days, any across-the-board inspection personnel. They were trained to the specific inspection instruction. Complicated way to go about life but its a very conservative way to ensure yourself that your people know what's expected of them. Consequently, if you ask the question, what is the level of certification of the paint inspectors they're all Level I's at the present time. Because if you mind, I told you that unknown to me, we formally committed to ANSI N45.2.6 at the FSAR stage which was only a couple of years ago. When Reg. Guide 1.58 made 2.6 mandatory. The program was structured after ANSI N45.2.6 just like we structured the paint program after 101.4, but paper wise my people carry Level I certifications. And the CAT guy had trouble with that. Because he believes that 2.6 says that Level II has to sign reports. I don't agree. Not if its a data recording type operation and that's the way we structured the paint inspection program, as a data recorder. As I think I explained to the judge, much to the chagrin of the lawyer, I am the guy that does the reporting. I do that thru a trending program that I established that addresses negative aspects on inspection in the interest of letting Mr. Merritt know that he can do a much better job. When the inspectors leave Comanche Peak, they will be capable quality inspectors and card-carrying

Level II's. They are going to understand what QC is all about. My basis for that before I went to the Level II step is I wanted and I guess I forgot to mention that even Level I people get the training and a written examination. Because part of our testing is their comprehension. It's foolish to think that all of these procedures, and the coating book is about that thick, are physically carried to the field when the guy does an inspection. Doesn't work that way. We structured the inspection report to include pertinent aspects of major detail, very detailed inspection report. They do detailed reports, its a check list. Okay? Of things that they have to check. They're given reduced copies of the procedure which they have available in case of any (unclear). We try to make it as easy as we can on them. We have just recently developed a Level II exam which the more experienced people will be given an opportunity to take following some refresher. Our concept of a Level II is a guy that is capable of performing any and all inspections in a given discipline, as opposed for the inspection instruction concept. From an experience standpoint I could, and I told the judge I can do this, I can paper certify the experienced people in the paint group as Level II, I can do that tomorrow. But it's not consistent with the policy that we established when we came back from Washington. I've got this across the board, not just paint, the same concept. I've turned out some Level II electrical people, for example, that I'm quite proud of, and the reputation that we've gained in the industry speaks for itself. The Bechtel's, the Ebasco's, the UE&C's and whoever else. There's been an inordinate amount of contact in Grandbury trying to steal some of our people. (Brief discussion regarding personnel hiring.) Conceptionally that's what we've done. One of the problems that contributed to the morale situation, Jack made it very clear, it's nothing we didn't know, you don't work people seven days a week and expect their morale to be high, except those of us in supervisory positions we don't have that morale problem, we don't need any time off. We enjoy the work so much that we just keep going. One thing

we've done recently, and my experience is that the best inspectors that I can get are the ones that are already here working in the craft. A lot of people that don't agree with that, the majority of which are in my paint inspection group before I made the move. We recently selected about sixteen people out of the craft, hand picked, who we felt could help us from an inspection standpoint. The biggest bottleneck out there right now which is the in-process repairs, touch-ups, what-have-you on miscellaneous steel and we've developed the concept of limited certification. It's the only thing those people are certified to do is those in-process inspections. They don't do any final acceptance inspections or anything else they simply are there to verify that the preparation work is in accordance with Mr. Kelly's spec, that they've been done properly and is documented.

R. Trallo: That is verified by a quality control inspector?

R. Tolson: They are QC inspectors.

R. Trallo: They are inspectors?

R. Tolson: Yes sir. They work for me.

R. Trallo: You've found that this doesn't cause you problems?

R. Tolson: Oh yeah. It didn't take but about 10 minutes for Arlington to get called and ...

Mr. Merritt: They're investigating it.

R. Trallo: I'm not speaking of an administrating problem, I'm speaking of a factual problem.

R. Tolson: Ninety-five percent (95%) of my electrical inspection group, which is the best group I have on this site because it's the one I worked the hardest and longest with, came from the craft. They're a good group of people.

Mr. Merritt: Quite frankly, one of the things we've found on this job, and I don't think it should be any surprise to anybody, take people that have had hands on working experience and very good knowledge on putting together a craftsmanship aspects of a program make very good inspectors because they understand the techniques of what's involved, they know exactly where to go to look if you want to try to beat a system out there. They understand how to get in there and work with it. And we've had very good success here.

R. Trallo: Maybe the difference has been, because we've tried this route back a ways, and I think maybe the difference between our success and yours has been that you have taken people who have been exposed to a possibly stringent quality program for a severe period of time. Okay? What our experience had been is that all of a sudden you take a gentleman or a lady out of craft. Okay? Who've been doing this, I've been a painter 20 years, now who is this inspector telling me that I'm doing it wrong. And if you try to convert them over to inspector you never quite get up over that fine edge in the fence to the point where, well I know the paper says this but I know that this is technically sound. And it's very hard to get through their head, it may be technically sound but it is not documentable or it is not in accordance with the written word and you have to follow the written word.

Mr. Merritt: It's true on this one and not totally familiar with how you work, in an open shop environment, which this is down here, which gives us total flexibility, the people that we chose to go into this program were very selectively hand picked understanding their capabilities, their knowledge and the training program themselves

R. Tolson: That's not what I'm talking about, the kind of thing I'm talking about is the, what's happening, and typically happens is, there's an office down there somewhere who'll call people in out of the field and talk to them that's the kind of thing. Please don't. My concern is that I can't with, and god knows who else is going to come in but I'm having a terribly difficult time doing my job if every other minute they're being talked to. Now, I'll talk to them. I finally got around to meeting Mr. Miller subsequent to Joe and I's conversation, and I gave him a charter. One of the things that's clear is that some of the paint inspectors fancy themselves as engineers. And I think Miller is probably one of them. An extremely brilliant young man. Almost cagey, but brilliant. A good head on his shoulders. And I talked to him and directed him that we had a job to do, if he had genuine concerns or anybody else out there had genuine concerns relative to the program the only way I can help you relieve that concern is to inform me through some kind of ABC type list in terms of what the concerns are. Okay? And the gentleman to my right here, Mr. Firtel, one of his assignments has been and continues to be until he goes off to bigger and better things is to address each and every one of those concerns that has been brought forth. As I understand it, he's been working the last couple of weeks answering the concerns. It's also my understanding out of say, just for talking purposes, 300 things that have been identified there's probably one nit out there we're going to do something about. And, that's the type of situation I have. I've got people trying, what I call the inmates running the asylum and I'm not going to have it. I'm gonna manage the QC group, somehow.

R. Trallo: Our training with people, and we've been pretty much like you, we don't go out and hire inspectors, we go and hire a trainee. I guess everybody we have was a trainee at one time or another. Because we found all you're getting is you're getting a body that has preset in his mind what he wants to do and for the most part we

were more stringent than most other people these folks had ever worked for and they could not understand it. Also, part of the training program, is that your job is to inspect to the inspection procedure, you do what the procedure says. Fine, you're always open if you have a question come in and talk to your supervisor. But, you're not an engineer, you're not construction, you're an inspector. If the document says check surface preparation using this instrument, that's what you do. And I think after a rocky road several years back, the last three or four years we've pretty much got it on track. It's the toughest thing to do though. Everybody is a paint expert, everyone in this room has picked up a brush at one time, done either the bathroom or your living room ceiling or a picket fence and that makes everyone an expert. Believe me.

R. Tolson: (Brief comment on past painting experience by R. Tolson.) That's, I guess basically it on the general stuff. I'm not going to address the painter qualifications.

Mr. Merritt: That's what I wanted to touch base on. Give me some guidance on what you want to look at or where your concerns are and we'll get whatever is necessary in here as far as the painter qualifications. Do you want to say anything else about B?

R. Tolson: No. Not unless Joe has anything.

Mr. Merritt: Let me pick up two things that kind of tie the painter qualifications into the issue of Item C because they're familiar, may not be some tie between the two. At the time Jack was in here with us, and Jack and I communicated to some length on what we actually had out there in the field. The issuance or the concern over 452 versus the 34, now I won't say it was 34 but I won't disagree that you're within the ballgame, it may have been 40, I'm not even arguing that point from the standpoint of

qualified spray painters. We had lumped into one whole group of 452 people; scaffold builders, masking personnel, clean-up, "goffers" (go for this, go for that, go for whatever), helpers, whatever you wish to call it the so called paint department. Again, in an open shop that is not totally nice neat and clear break line, it gives flexibility in an open shop, not from the point of painters though and qualification of a person that is qualified to perform spray paint. There is a program for them. There is procedures that they go through and address. In and of itself it seems to fall out cold turkey. Okay, out of 452 only 34 are qualified to paint we're not even arguing that point. I think you and I numerous discussions on that even to the point that you had recommended that perhaps we bring in some additional people with the magnitude of the work that we were trying to cover with that group. And as a result of that, we did some additional recruiting. We brought in additional people of which the majority flunked. We had several levels of testing. One, was at the front gate before they ever were even allowed on the job site if they could just do and understand general painting. If they couldn't pass that, we never even got them through the front gate out there. So, that we do have a program. Now, as far as addressing specifics, I need some help from you all in, I'll bring in whoever we need there.

R. Trallo: I think, again, I'm doing more talking than either of these two because I'm probably more, have the most objective overview of this thing. I came into it a little later, I read the paper work in this report. Essentially, again in our business, we are a coating contractor and we would only draw something like a project of this nature, approximately a 50-50 spread. Between, if we had 100 painters we would probably be shooting for in the neighborhood of 50 people certified to perform Q type or quality coatings. One of the things we were looking at and one of the instructions that Joe had been given after discussing with Jack and

through guidelines of your organization, hey what can we do here to get this program on line? Observation by both of these gentlemen are, well if you want to move faster, okay, there's only one way to do it, you have to have more qualified people performing the function at the same time. If someone was to give me, a matter of fact the first time Jack mentioned to me verbally that out of so many hundred people they only had a relatively small amount that were qualified nuclear coating journeymen type. Right. And I said, they can't have. I says that's impossible. I said unless these people are sleeping or something. Now, it could be that under a guise of quote a painter or painter craft category within your organization you might even have the fellows that take care of bathrooms, sweep the floor, I don't know.

J. Norris: The real problem with the manpower, and its since been corrected, is that we have dug ourselves a hole in the specifications, you've got an object A up here that gets system X on it, you've got an object B that gets system Y on it and ...

R. Trallo: And an object C that ties into both of them with a third system.

J. Norris: And an object that you can't get a system, so the majority of these folks were involved in masking. I would like to have the duct tape concession here, I really would. It's incredible, it really is. But, I think that's been taken care of after the review.

Mr. Merritt: You made very specific observations in some of the rooms and we would be the first to admit we had some inefficiencies at the time you got in there. That was the reason for bringing you in here. We knew we had some problems and concerns and we wanted to look at the program and that's what we got into and tried to address.

R. Trallo: In a nutshell, if you only had one qualified certified painter on this job, as long as he was qualified to perform in accordance with an established program, that's totally satisfactory. Your manpower though, of course, is controlled strictly by construction people. And we're speaking mainly quality here. From a quality point of view, if you say I have one certified painter, right, and he is certified to an acceptable existing program, that's fine. If you say you've got ten, but only one is actually certified, then you're going to have a problem.

Mr. Merritt: Then we have a problem.

R. Trallo: As far as your question, John, what we would like to see. I think we would like to see your inspector program, certification program, right. (Mr. Merritt asked RAT inspector or painter.) Inspector qualification program you have a set of guidelines and the same thing for the for the painters and probably look at one or two or how many individuals just pull a file on these and I think that that would ally because everything that Mr. Tolson has presented here at face value seems to me where we had unwanted concern.

J. Norris: Say that again Ralph.

R. Trallo: Essentially, our concern on certification of inspection personnel and protective coating application personnel. Right? Yet we don't know if the program is working. Okay? If we could see the program and possibly take a couple of sample records, at random, Johnny Jones is a certified coating applicator of applied CZ11 by spray, fine. You take a look at that with definitive testing with Johnny Jones.

J. Norris: Okay, you get that sample on it with the painter qualification and that sample on the inspector qualification and that allies your fears, is that what you're saying to me, Ralph?

R. Trallo: I would think that that is up to these two gentlemen here, they're QA people.

J. Norris: Do you agree?

J. Lipinsky: I mean if you look at ten people. Five out of ten or something like that? Those five seem to be okay then ...

R. Trallo: Yeah, that's basically it. Just a representative sampling.

K. Michels: What you need is a representative sample.

R. Tolson: Let's save some of those type decisions for sum-up. Okay? On that, the confidence factor I have on what I'm doing is 125%. Okay?

R. Trallo: And we're sure of that. I think what we're looking at now is, as we discussed before this meeting, is the broad, broad range of this type of memo. Okay? I think it would behoove all of us to get something there that says, hey that's fine.

J. Norris: And put it to bed.

R. Trallo: And put it to bed.

R. Tolson: I don't have a big hang up with that.

R. Trallo: That's where I'm coming from.

R. Tolson: I don't want to wear those certification files out though. Okay? Joe, I mentioned that you'd have a little difficulty with retrievability. There's a good chance that the NRC is looking at them and that's why you can't get your hands on them.

Mr. Merritt: Okay? What do we need to do with the "No Win/Win-Win"? Would somebody clarify that for the record book? I think I understood from conversations I personally had with that Win-Win/No Win thing with Jack Norris the intent, but I'm not sure what it means in this report.

R. Tolson: Let me take an attempt. Okay? It's one of the things that I tend to agree from the Exit that boy it really would be nice if we had a barbeque off site and people got to know each other better.

Mr. Merritt: That's exactly where it went.

R. Tolson: So, we thought that was a brilliant idea. I'm particularly fond of beer, I don't particularly care for barbeque and we did it. None of the QC people showed up, with the exception of one guy who had already terminated and another guy that we're fighting a labor suit with right now. So, it was a bright idea. The craft, Junior and myself enjoyed the beer, but I'm not sure it helped. The other thing I recall coming out of there that, I know we discussed this because it's a pet theme of mine, that if Merritt did a better job of putting the paint on we wouldn't have so many complaints about nit-picking on the inspection.

Mr. Merritt: Right.

R. Tolson: And so, Gene Crane was charged with the responsibility of tracking and identifying who was doing a good job in craft and who wasn't. That has since been turned around into intimidation of the QC inspectors because now they're taking their counterparts, friends, you know they drink beer with each other off site they don't tend to like each other on site, and they take that now as intimidation because every time they write an unsat inspection report they're putting their friend's job in jeopardy.

Mr. Merritt: Because we took corrective action, which we perceived we needed to do. If the guy can't do the job, you remove him from the job. If we have no other place for him, then we don't need him on site. I can't just load up the project site. QC has now interpreted that, hey this old guy and I are good buddies from way back from WPPSS, and Timbucktoo and wherever and because you're keeping up score with how many deficiencies against him, QC is now intimidating the craft because are now ...

R. Tolson: Now it's the other way around.

Mr. Merritt: Ya, other way around.

R. Tolson: They're being intimidated by management because we're trying to take corrective action on what their complaint was in the first place because the painters didn't know how to paint.

Mr. Merritt: We'll have to change that program.

R. Trallo: You did hit on a very key point. We found within our organization several years back that to develop a very decent relationship between these two groups we had to not train the inspectors in a QC group, you had to train painters. I don't mean just give them formal training, just a guy. I mean we had to get these people thinking in a different point of view. One of the site supervisors we had really developed an informal inspection process. This thing is beautiful. Okay? It's a four phased on every piece of work. And he developed this by himself there's only one phase document and that's the official phase the inspection people do. But basically, I am Johnny Jones, I am preparing that wall, when I think that wall is ready I look at it and make any repairs it needs to it. Okay? Then, I get my foreman he thinks it's ready then he had to go get the general foreman. The general foreman we used in a holding establishment. Construction

establishes that I am ready. Okay? Actually the wall is inspected three times. And it doesn't take a bit more time. I will argue with anybody that it doesn't take one ioda more out of construction schedule. Right?

Mr. Merritt: Disagree. (Not clear on tape if Mr. Merritt said disagree.)

R. Trallo: Now by the time that inspector got there, we found that deficiencies were minimized. Therefore, the gentleman that performed the work he wasn't on his high-horse that everything I do, my god I'm persecuted, this inspector chops me down. What that also accomplishes, essentially, is your construction group realizes is that, hey, why is a second level of informal inspection always find tremendous deficiencies on this particular mechanics work. That mechanic was told, hey pal, either straighten up or bye. (Mr. Merritt said that's right.) But it was done essentially within a construction group. Because it was then rejected themselves.

R. Tolson: We're doing that right now.

Mr. Merritt: We have done that at the foreman level, the general foreman level and on a random basis. We did not involve the general foreman on each and every inspection or sign-off, if you would, but we have involved the foremen in that particular effort. Yes sir. Again that came back out of Jack's suggestion to us.

R. Trallo: That works. It works. It really does. But apparently you have a very unique situation now when you're taking essentially corrective action that someone has interpreting as being ...

Mr. Merritt: That's interpreted in how it's used. We went back through each and every one of the qualified spray painters, went back through a recertification of every one of them. We didn't discriminate

against anybody, we just took them all and just started putting them back down through there ourselves from the standpoint of testing to be sure that everybody was on the up-and-up. Right after, this was clear back the end of August, I guess Jack, in that we went through that particular effort. We had the brainstorming session up here about the same time we had the beer and barbeque session with the QC and engineering to try to answer any concerns and any questions. Some of that got turned around and we got beat over the head with it. It was intimidation because we were trying to explain where the engineering group was coming from. (Brief conversation between J. Norris and R. Trallo.) But again as far as picking up on exactly what you're talking about, this is what we've attempted to try to work with.

J. Norris: Joe, you haven't said anything that I can recollect about the Win-Win/No-Win situation.

J. Lipinsky: It's essentially what we talked about.

J. Norris: You agree.

J. Lipinsky: We were talking about having a get together ...

R. Tolson: We did.

R. Trallo: We've done it and it's been very successful.

R. Tolson: Well, I think if we did it again, there would probably be a little more participation coming out of QC. They were particularly bent out shape for some reason at that point in time. And one of the guys came, I think I finally surmized why, he was kind of sweet on one of the ladies working in the craft. At least based on observation of what happened at the barbeque. It was good. We enjoyed it, those of us in supervisory roles, it's always nice to get off site.

Mr. Merritt: Okay. Let me come back between Jack, Lipinsky and I coming down from the top of page 3. In the concluding paragraph from C, I don't take that as being either positive, negative, otherwise other than just a comment. Is there something we should make of this?

R. Tolson: I think we've already discussed this.

J. Lipinsky: Yeah, we have.

Mr. Merritt: Okay. Okay, on Item D.

R. Tolson: All that happened. I think we're using it.

Mr. Merritt: Now we have made some spot. Again going back to Jack, in his recommendations, we did not make a wholesale, blanket modification specification. We did identify, through Jack's efforts, some specific areas, primarily in the touch-up category of where we could give ourselves some help and we were overly penalizing ourselves, tried to do everything with a spray gun. Jack, you all were very instrumental in putting together the necessary procedural requirements in conjunction with Kelly here at the site to accomplish that. So, again we agree with D if there was anything other than that intended, I need some help.

J. Lipinsky: No.

Mr. Merritt: Okay on Item E concerning the air supply. We totally agree. Jack, you even called in after one discussion, specific make, model and serial number, who the local salesman was and how we could get ahold of him and we have done that. We purchased immediately the necessary, I don't recall the brand name you gave me on the thing, air supplier or air dryer and brought it in and implemented it.

Again, not being either positive or negative it was what I needed some help on. Okay, we're down to F. Availability and Qualification of Inspection Personnel.

R. Tolson: It should be obvious from our discussion to date how we approach that.

J. Lipinsky: It is to me too.

Mr. Merritt: Again, as we indicated for the record here in this thing with the BEI because there's been several questions from me coming back who in the world is BEI? Through that discussion we've made the decision we did not intend to introduce any new companies, any more companies, or any new companies other than what we presently had at Comanche Peak in the labor force and that we were primarily using Brown and Root and Ebasco to provide the qualified personnel. And if they so chose to go some other direction then it was totally up to them. They were responsible for obtaining for us individuals who could meet the qualification requirements.

J. Lipinsky: That was exactly what we talked about in our conversations.

Mr. Merritt: Okay. One comment that needs to be cleared up. I'm not sure who J. Church is other than we think that was Joe George.

J. Lipinsky: Yes, George. (Brief conversation -- no bearing.)

Mr. Merritt: Again Jack, on this item, I guess it's F and it's sub B on this thing so that there's no misunderstanding, again we had agreed that whatever you recommended I'd put you in direct contact with my people and organizations and when you had a valid concern we went to implementation. I didn't need a report, I didn't want a report, I didn't need any other follow through other than what

you recommended on a back and forth communicative basis on this thing. And so again from the standpoint of me doing anything other than just that that was, I don't know what that totally means there. But, you and I had jointly reached an understanding at that point in time, we'd gone through specification, painter and qualification, materials, inspection, whatever else including equipment, so we called it to a halt. And we thought it mutually beneficial to stop at that point.

J. Norris: Was that your understanding, Joe?

J. Lipinsky: (Brief discussion on what item was being discussed.) We're talking about item F, sub B? Yes, I agree.

Meeting took break.

Mr. Merritt: Okay. Item A, do you want to pick up the talk?

R. Tolson: Yeah, and this brief introduction, Joe. Comparing Comanche Peak to any plant is subjective in itself, because we think we're the best in the industry. So, I'd like to throw the burden to you and ask how in the world you can compare Comanche Peak with any other plant specifically Zimmer?

J. Lipinsky: Well, the answer was based on my earlier assumptions and opinions and indications. That's what I was doing a comparison. The thing that Zimmer essentially did was place more emphasis on the development aspects than on the quality aspects and the resulted in major rework situations opposed to coatings.

R. Tolson: Okay. So apparently you drew the conclusion then that from your discussions which I think we all agree were at best a snapshot of what transpires at Comanche Peak that we're totally production oriented as opposed to quality oriented.

J. Lipinsky: In a nutshell, yeah.

R. Tolson: Okay. Well, for the record, that's not the way we do business. We all have an obligation obviously. You can play the quality game two ways. You can become partner to accomplishing an end objective or you can be a hurdle that has to be crossed. I choose to be a partner. I don't see that as a conflict with the regulatory requirements at all. And I spend a considerable amount of my personal time discussing my philosophy and posture with my friend over here in the corner office, whose got about 35 years of QA background and experience and carries an awfully big club. So, we participate with people, I encourage it, but the record will speak for itself, if I need to tell Mr. Merritt to stop it, he will in turn stop.

R. Trallo: One thing, you can't inspect quality into any job.

R. Tolson: Never.

R. Trallo: That's a fact that most people don't understand.

Mr. Merritt: That's correct.

R. Trallo: They feel that because the inspection is severe it's quality. You can't inspect quality into it.

Mr. Merritt: Into nothing. Don't matter what it is and we've contended that all the way along. The first line is absolutely the craftsmen in the field and without that you haven't got anything.

R. Tolson: And I think we're doing a yeoman's job, if anything we're doing more of it than we ought to. Much more than we ought to. I don't think our discussions to date from what I've told you is what's occurred would support the second sentence. Were the second

sentence true, and I've been successful in some areas in different disciplines of doing this, I would have done no inspections. I would simply have written an NCR that said the records are fouled up use as is and put it to bed. So, I don't think that's a fair assessment on the second sentence. On the contrary, and we've done this consistently on anything we've ever done down here, if we had a concern, even if it was believed to be a non-problem which it was at the time, then we're going to develop the proof and spend the resources to accomplish that so that we are not just out there opinionated and winging it, we've got some hard fast facts to back up what we believe to be true. I think the backfit efforts we've gone through and people have been brought in to study that have consistently said you're doing too much. Okay? But we did it.

J. Norris: Incidentally Joe, that dovetails with my observations, at least in the containment on a casual basis. I was horrified after looking at the tapewidth scaffold underneath the polar crane and I don't know how many inspectors were up there with, seemingly everybody had an inspector gauge. You know every six square inches they're taking readings and I agree that the job is over inspected.

R. Tolson: I've had to discuss this in the hearings on several different occasions and we're in the process of preparing a formal report for the benefit of the judge and I have no doubt that when we are finished that he will concur that what we have done proves the integrity of the coating system.

R. Trallo: I've heard several comments as level of inspections. I went through an inspection procedure (back in the office, which we have copies), I don't know for sure which one, and your documentation checklist I went through that. I've heard stated several times, Jack mentioned right now, people were taking readings along the top of the other which is actually a degree of over-inspection. The

only thing I did notice in there is how are all these readings documented? The engineers had a statement well before dry film thicknesses (unclear) below. Okay? But now people were taking all these readings where they bringing them down?

R. Tolson: I don't think and again that's a detail that I'm not as close to as some other folks, but what I perceive that they're doing is and it seems to vary depending on the fullness of the moon and there is a direct correlation with that.

J. Norris: Can you substantiate that statement.

R. Tolson: Yes. I can prove it every time there's a full moon I spend the majority of my time discussing with Merritt and Frankum how come I'm killing them. There's got to be a direct correlator there. But what they're probably recording, in a recent example from my friend out there that's helping me so much, the latest complaint I have on a beam that was probably the length of this table, he took 20 DFT readings. Somebody stood there and counted them. Okay? I never bothered to pull the record because I've done it too many times and I always get the same answer and he probably only recorded the minimum number that the procedure required him to record. I think he's doing that just to stir up the pot.

R. Trallo: Does the procedure require a certain number of readings?

R. Tolson: We sensed when that came up, and this hurts, because he's one of the one's who's probably eligible for taking the Level II exam and for me to say yea verily he is a qualified inspector and he will be given the opportunity and I will not discriminate against negative people. We revised the procedure and we made it awfully clear for a certain size area how many DFT measurements to take. After that point, we unfortunately used the term minimum which didn't put an upper bound on what we consider to be appropriate for the size area

but we have since revised the procedure and put those guidelines in there. Now, this does provide a little corrective action, to some of us people charged in the supervisory responsibility we have encouraged them to follow the procedure.

R. Trallo: That's what I saw and I knew, of course, that I wasn't looking at full gamut. Basically, it's all having to weed detail out, if it's not addressed in technical strapping, we will address it. If the technical spec has a certain requirement, we want to make sure we meet that requirement. Basically, if they're going to take readings there are certain readings to take. Now if you come up with some reading that is a little outside of range, also jump right in there and take several more readings or whatever in the immediate area to see if you have an anomaly or a general bad area. But when I looked at the form, I says if they're using the basic inspection form and they're inspecting 2,000 square feet, my god, where do they record all this stuff. I thought maybe I was missing a page or something.

R. Tolson: I think that it's covered there. Like I said we've put a upper bound on it to avoid those that choose to go on a witch hunt if you will. We tend and I guess that I'm a little nieve I like to believe that most people are honest. I know in the training sessions we explain all this stuff to them and it hurts a little bit to take a guy and be forced to put upper limits on an inspection instruction in order to accomplish the inspection effort as the specs require. I have a hard time personally with that because I think people ought to be capable of using their noggins. But when we discover that they don't, then we, consistent with the requirements we're committed to we'll direct them in writing in terms of what we want.

R. Tolson: Obviously we need to discuss the NCR situation. I'm not sure exactly what's going on in the minds of the people. We're

currently litigating two labor cases. The first one was a personal shock to me, cause I never believed that the intent of 210 was to put the mere act of filing NCR's a protected activity. But the Administrative Law Judge and the Secretary of Labor have interpreted the law to say that. I genuinely believe, of course this is all that we have is a very active intervenor around Comanche Peak and she's very cute she sees that the press is kept up to speed on virtually everything we do including what Merritt and I had for lunch today. And of course the minute that came out she got it in the press, takes the press clipping and sends it to the judge, then says see there I told you it was bad. The only thing that I can conclude based on pretty close knowledge of the people and motivations as I perceive them that when you talk to inspectors they're going to complain about the NCR's because if they don't get the NCR they're not smart enough to realize that maybe they're not protected employees. And I sense them all chopping at the bit just to get their name on an NCR. It's been a particularly active discussion ever since the initial labor decision. Again, we've litigated this in the public arena. I think all of us would agree that Appendix B does not define the type of paper the discrepancies are to be recorded on. It simply says you are to record them. My program is structured to identify the discrepancies in the most efficient manner and our experience has been that the inspection report is the vehicle that we choose to use. The procedures had a glitch in them at one time which we've since corrected, had a little confusion from a semantic standpoint never had doubt about the intent but from a semantic standpoint. In essence the inspection results, positive or negative, are recorded on an inspection report. The use of an NCR is limited to those things that for one reason or another we think higher levels of management involvement is in order. In the paint area, about the only thing that we feel fits that is the occasional case where you might have some peeling of paint off the wall where logic is that we want engineering people to help us evaluate the cause. And

because of the way our system works, the NCR is a convenient vehicle for doing that as opposed to getting buried down in larger volume of documents which the inspection reports are. I have talked to the people, in fact, to give you an example of one, there was some kind of a spec requirement on rebar chairs relative to flaking of paint. Okay? And there's a standard repair procedure as part of the construction procedure. And yet I have one inspector out there who's walking all over the containment building looking for paint flecks on rebar chairs. And every time he found one he issued an NCR. And it was about to drive my supervisor nuts, because the supervisor didn't understand it and I had to explain that there is a standard repair procedure to take care of it and it's no big deal to start with. We're talking about a drop in the bucket. But after that I brought a selected sample of the people in and that included a few of the ones that appear positive and all of the negative ones and pleaded with them, please fellas use the unsat inspection report because that's what I want you to do. I didn't direct them, I pleaded with them.

R. Trallo: I think we were doing a little bit different interpretation of what an NCR is basically. If you apply, I'll give you a hypothetical situation, let's coat this wall right here, and we go through a final inspection on the wall, it's got a deficiency on it. We don't, under our program, consider that an NCR condition.

R. Tolson: We don't either.

R. Trallo: Okay. That's just normal. You have mechanisms built within procedures. It's not a critical condition so it has to be repaired, reworked, whatever. Now, what you're saying here is that what I think is that some of the complaint that Joe might have possibly picked upon is that these fellas, personnel on site are saying will see he should have wrote an NCR for that. Is that what I'm hearing?

R. Tolson: That's what you're doing.

R. Trallo: We wouldn't write an NCR under our program. There's mechanisms to... Basically what is the guideline? If there is no mechanism existing to correct the deficiency, alright, then you go to an NR. But there's a built-in mechanism then it's not an NR condition.

R. Tolson: The best example I can give you is the rebar chair and I can show you about 15 NCR's on rebar chairs by the same inspector.

J. Norris: The price of poker just went up. Didn't it?

R. Tolson: Yeah. Well, like I said I pleaded with them and since I have removed the semantic problems with the procedure, it's a dead issue. They're using unsat inspection reports and that's what the program is structured to do. We probably have a little more liberal approach there because we're really in a completion/fix it mode as opposed to all this fancy corrective action this kind of stuff, we want a list of work items remaining consistent with the requirements. If I had to do it all over again, probably wouldn't have an NCR form cause I can't think of any reason for having one. I can do everything I need to do with an inspection report. It's just a piece of paper that records a discrepancy. It can be fixed. The engineering program, which is not something I authored, but I participated in the development of it, virtually anything that they do that deviates from the original spec requires a piece of change paper and we have the regulatory loop closed. I guess that's one of the advantages of being an integrated organization is that we can do that whereas maybe under a subcontract you could not. Because your communication and interface is too difficult. But ours is not.

R. Trallo: We have used at times NR's to basically buy off work that there is an established repair procedure. Say if you have a film thickness

of a wide range which is heavy, now there is a procedure, of course, that's very easy to rework it. There are times when you might find that you're better off and you would like to leave it. So, many times that would be an NR condition because it does not meet all the paper it had to meet. We would NR the thing with the disposition possibly would take, and we did this at the one of the Hanford sites we'd run a DBA test on the additional millage on the heavier thickness.

J. Norris: Which is what they're doing here.

R. Trallo: So you NR, run a DBA test and your DBA test comes out, you close the NR, then you've got a clean piece of paper. Being an outside organization, most of the time we have to keep a status of everything. Because we never know, the great auditors in the sky, and believe me they come out of the sky. Every time you turn around there would be somebody from a different organization. So, fine, we might run DBA to clear that, but we can't sit there without having some type of acceptable status on it. That item we would NR with the proposed disposition, that final disposition, with the results from it.

R. Tolson: We've found that most of the time when there is a full moon, we use an NCR, when it's not full we use an IR.

Mr. Merritt: And there is plenty of paper to back up what he is saying too.

R. Tolson: Well, the thing is getting ridiculous. The way we structured the program an IR is closed only two ways, it is either fixed or it's converted to an NCR. Okay?

J. Norris: Does that satisfy your concerns, Joe?

J. Lipinsky: Yes.

R. Tolson: But, if you stop and think about how we're structured and consider the procedures they work to is integrated QA program, which it really is, even though I don't author it, it's still integrated with what we do because we structured it that way. I could, again, never write an NCR because I don't have to because we use the change paper and I've closed the loop, the design review concept and all that stuff through the review of the change paper as opposed to reviewing inspection records. For you as a subcontractor, someone with an A type set up that you normally run into, can't do that. You've got to convert it to an NCR.

R. Trallo: We have to document actual status at a given time, until such time that we do get the paper. We get the clarifying paper, hunky dorrie, you close it out and then bye-bye.

R. Tolson: On the subject of QC reporting to production, I think as I understand, Joe, that was the painter qualification situation. In fact there's a missing link there that's easy to tie together because I know what happened. After we met, we went through the requalification and my people did, in fact, do the inspection effort associated with the recertification and are currently doing it on the new hires coming in that they're evaluating capability. One of the first things, as I understand it, that's done with the new hire is that he's given a spray gun to see just what he can do.

Mr. Merritt: At the front gate, before we even get him to that stage, before he even comes in.

R. Tolson: You know if he picks up the hose, we say well you're probably a good dirt man but you don't appear to quite understand which end of the gun to grab. Okay? But to the best of my knowledge, we do participate in that. Okay? And I would presume and hope that my QE's have figured out a way to document it. Okay? So, I think that's covered very adequately and I think your perception was based on the snapshot as opposed to what really happened.

J. Norris: Does that satisfy your concerns about QC reporting to production, Joe?

J. Lipinsky: Yes.

R. Tolson: Well, if you went out and talked to five of my people you might get one of them that thinks that construction's running the game. But that's people.

R. Trallo: Construction is running the game as far as putting the work in place.

R. Tolson: That's true.

R. Trallo: They put the work in place.

R. Tolson: That's true.

Mr. Merritt: And it always will be that way. If they don't get it up, there's nothing to inspect. That's always the way it will be.

R. Tolson: I think Joe will agree with me, there's going to come a point in time when QA's going to rule the world but I don't think we're ready for it yet.

R. Trallo: They're getting close.

R. Tolson: Relative to the delusion, I guess I probably deluded myself to think that someday we might finish, Merritt doesn't necessarily agree with me.

Mr. Merritt: Unh-unh.

R. Tolson: Okay? But I don't think it's quite as loose as what the words might tend you to believe. I've spent a lot of agonizing nights trying to figure out how to improve the effectiveness of the QC effort so that we can support construction. Okay? That everything is done kosher, if it wasn't I'd been run off a long time ago. I see no point in going further on this, unless someone has some questions.

Mr. Merritt: No, if there's something we need to get into specifically, we need to be sure we understand that, because this is something I fear we're going to get a chance to chew on later. So, we need to all be together, where are we or what we're all talking about.

J. Lipinsky: Well, so far from everything Mr. Tolson's explained, we probably should have had this meeting from the get go, I guess, in retrospect.

R. Tolson: Well, quite honestly, I never thought that this would become a public topic. Okay?

J. Norris: I don't think we did either.

J. Lipinsky: Based on what you've explained, everything seems to be hunky-dorrie.

R. Tolson: I think it is.

J. Lipinsky: I can't make a definite statement one way or the other based on what you've told me, on the face of it. So far...

J. Norris: You know, with six audits in the last several months and the on-going thing with the NRC on the coating situation it's almost, you know, it'd have to be a total breakdown of system for there to be a problem.

L. Bielfeldt: He's really not taking credit either for all the looks he's had. I happen to know he's had plenty more of other looks within selected areas within the protective coatings within Dallas also.

R. Tolson: Well, I have a hard time recognizing the difference between an entrance and an exit.

Mr. Merritt: Alright, moving on to B, if there's no other positive comments here.

R. Tolson: I think I'd have to disagree with almost every one on the inspection staff is beginning to back out at Comanche Peak. There's probably a few out there that feel strongly about that. There's also probably a few that if there was some way that I could assist them I'd probably encourage them to go find some work elsewhere. But by-in-large, I think the majority of the people enjoy working here. Okay? Except when the moon's full. And it's like any other group of people that you bring together and I tried to explain this to the judge three years ago, that one of the disadvantages of construction is that you're forced to bring a whole pile of strangers together and make friends out of them overnight. And that calls for a rather significant undertaking. I guess my friend at Brown and Root has put it as well as I could, that there's been, as there is in all construction jobs, a pretty heavy turnover, many of whom I cried the day they left because I felt like I was losing my left arm. But out of some, let's just for talking purposes say in the last couple of years, 200 people that have come in and gone out of the QC department we've had complaints by four or five and we've got a little sticky legal issue with couple of them. So, the track record certainly doesn't support the fact that everybodys upset and ready to leave. It's just not in the cards. And we've been forced to confess to provide names, addresses, etc. in the public arena. Had there been anything there I can assure our intervenor would already have them

on the witness stand. Okay? She is scrambling, I think you've seen her letter, the judge has charged her to, in essence, do it or get off the pot. She had to write a letter last week that said, well I can't get there this week, which means that she's having a terribly difficult time following through on what she's alleging that she's got this unknown volume of witnesses out there that are condemning Comanche Peak. They don't exist.

J. Norris: She is a busy lady.

R. Tolson: She is.

Mr. Merritt: She is. Super hyperactive. On unlimited (not really clear). Doesn't know the meaning of time.

R. Trallo: Is she essentially a spokesperson for an organization that's funded?

Mr. Merritt: CASE.

R. Tolson: She's been with CASE for years.

J. Norris: She's just not an anti-nuke?

Mr. Merritt: Started with regulatory from the standpoint of rate increases back many years ago. And that's how the group was formed and in place when they announced Comanche Peak. And she launched out onto that effort also. In fact, we just have gone through an encounter with her two months ago down at Austin over a rate increase issue and what she is doing is taking information in one hearing and pounding us over the head with it in another. We're just bouncing back and forth between the ASLB and the PUC because the intervenor is the same in both cases. And they are fairly well funded. Especially with the anti-nuke issue afoot. One other comment in that

particular area, very frankly. And Jack you and I have discussed the hours on the extended work effort we had in the painting program. When you came in here in August, at that point in time, we had just finished up with hot functional in June, up until that point in time we could do nothing in the containment, we recognized we had a lot of work we had to do in there quite frankly and we were attempting to staff to run a 20 hour shift seven days a week. From the standpoint of things that you looked at and got into we attempted to try to do some additional staffing there so that we didn't get ourselves into an over-burden type situation. But I guess it was about the end of September, first part of October, when we recognized that the market is extremely tight out there, both on the qualified painting personnel as well as the inspectors. So we backed off of the seven day a week effort and backed her back into a five day a week effort. And only a casual spot overtime, and I do mean casual spot. Which is back out of this 60-70 hour, nobody can continue that and we recognize that. Again, with any program, you sit and sample it and watch it and then make a determination on it, if it's cost effective, if it's the correct thing to do. And we did that. And determined that that was not the cost effective way we were going. So, we have backed off of that. Now, has the morale improved any off that? I don't know.

R. Tolson: It has.

Mr. Merritt: I'm sure that any one day in time you can talk with one individual and they would have a complaint about something from the water to the latrine facilities to whatever. These are moods, with anybody in the business. But we have backed down the hours. We concur from your standpoint that it's too many hours. We agree with that. Have no problem there.

R. Trallo: Joe, would you care to comment on apparently your statements you make to file were based on essentially information gathered through conversations?

J. Lipinsky: Mainly what is on page 4 was based on conversations with personnel.

R. Tolson: Joe, the only question I have, your phrase other disciplines included, the majority of the people you talked to were paint inspectors.

J. Lipinsky: The majority were paint inspectors. During the course of the walkdown of the building or something like that, I was introduced to somebody.

R. Tolson: That would be casual as opposed to any kind of detailed discussion?

J. Lipinsky: That is correct.

R. Tolson: Okay. I learned a long time ago never to use the word all in this business. I don't think all have a low opinion of quality work, if they do, they haven't been doing their job. Because there's vehicles available to them to express that. Okay?

J. Lipinsky: Okay.

R. Tolson: Like any time I see the word I just strike it out. Because it always gets you in trouble. I would agree with you and I think I can explain what's going on. What I've seen happen here over the last three, four years as people read more and recognize that for the most part the nuclear industry is dead in the water for lots of reasons. They are so accustomed to the \$40,000, \$50,000 a year income that they begin to get panicky. The majority of the people are thinking this is only going to last a few years and I will get the cream while I can and they're going shopping. And when you talk to them, I think if you really sat and visited with them for any length of time you would find out that they're strictly buck motivated.

J. Norris: I agree with that assessment.

R. Tolson: And they're jumping to shops thinking that they're going to get rich overnight and put it all away and all of us know they're spending it as fast as they're making it and all they're doing is, as far as I'm concerned, they have just told me that they have no interest working at Comanche Peak because I will not use body shops.

R. Trallo: We, just like you have, identify extended hours are very detrimental. You can do it for a short period of time but not over a long haul. And we've had within our own quality group. We have to give these people some time off and they are fed up with us they can't work all these hours, they have no time, their wives are bitching at them, or whatever, whatever. That's all fine. So then you chop them to a basic 40 hour and then everybody's screaming, right, I can't stay here, I'm not making any money. Now, there goes that "no win" situation.

Mr. Merritt: That's right.

R. Trallo: Joe is personally agonizing over this because they're his people.

R. Tolson: We're going through the same thing. We're already at the 40 hour stage on the piping and hangers and you wouldn't believe some of the manipulation that's going on.

J. Norris: Can't make the payments on the Corvette any more.

R. Tolson: That's right.

Mr. Merritt: That's it. But that's one of the things you have to put up with.

R. Tolson: (Brief statement by R. Tolson on expenses.) In my opinion, that's what's going on. I've tried everything I know how to do. I obviously can't promise them a job for life. I don't want to be

here for the rest of my life. I want to go do something else. I want to go build a dam. That's what I got brought up on and that's a heck of a lot easier, drive around in a pickup and watch the scrappers. (Brief discussion on other lines of work.) We've done something about the hourly thing, but I've already explained what happens when you do that now they're upset because now there's sixteen more people out there and they're even more concerned about loosing their jobs now then they were before. So, I don't know what to do with them. Except to continue to manage it and try to help them.

Mr. Merritt: Do I need any other clarification or concerns out of B then?

J. Lipinsky: No.

Mr. Merritt: What do we need to say on C?

R. Tolson: I think that's internal between Mr. Norris and Mr. Lipinsky. And I'm sure you're going to be asked that.

J. Lipinsky: That's correct.

J. Norris: Okay, Joe.

J. Lipinsky: It's an internal disagreement that Jack and I have had with regards to ANSI standards and costs factors.

J. Norris: Joe is certainly quality oriented and I'd like to think that I am. I think, my personal opinion is that ANSI 101.4 is the worst document that has ever been presented to the nuclear industry.

R. Tolson: I'll agree. There's only one worse and fortunately that didn't get issued.

J. Norris: I know a lot of the people that were involved in writing the document, or at least I know of them, I think that at the time it was written it was a very self-serving document for the inspection agencies, the better heal contractors and paint suppliers. As the NRC has ratcheted on these requirements, the cost of the painting effort has gotten so large, I know for example Black and Veatch at Blackfox decided to put it in a stainless steel containment and wet-well. And that's where I'm coming from on 101.4. As Ralph said he's on the committee, and they're trying to get the thing cleaned up so that the industry can work with it. But the damage has been done.

R. Tolson: I think a real good analogy to that is what's happened with the ANSI N45.2 and all the daughter standards over the years. There's a few of those daughter standards that have come close to being as bad as 101.4 in my judgement. The entire industry has rethought what they're doing and most of that stuff that was hard to comply with or impossible to comply with they've made non-mandatory guidelines type stuff which is what the thing was intended for in the first place. Okay? They've backed off significantly and have gone more to apple pie which is the way it should be anyway. I don't need to structure an acceptable QA/QC program from all of the standards that the writers have proliferated upon the industry. Because if you just use your head you can take Appendix B and make a case.

J. Norris: That's right.

R. Tolson: That's all you need.

R. Trallo: You have to put yourself say, in our position. Okay? We deal with many organizations, both utilities, AE's, some outside consulting firms. And we were always of the opinion that a corporate quality assurance program is basically a corporate quality assurance

program. You write a program in conformance with 10CFR50 Appendix B. What we found that we were working with seven quality assurance programs. Seven sites, seven programs. And every little dude that walked through the door, and remember he is the owner or the owners agent. It's not acceptable you have to incorporate this or you have to delete this. Now come to where we have to change a format. We went back to a quality assurance program, which is what, 20 pages, essentially. What we should really do is put our logo on 10CFR50, Appendix B. Except we have a statement which says, then we turn around and have seventeen quality assurance procedures which expand on this which details site specifics. That's the only way we can get around this and maintain one quality assurance program within the firm. I have to agree with Jack to the extent that, yes, maybe the intent when that standard 101.4, N45.2.6, all those damn daughter standards when they were written was to establish guidelines. The standard even says that they are guidelines. Okay? Unfortunately now you're getting back to pure QA. Okay? The great auditor coming out of the sky and they're interpretation is not, we meet the intent in the guidelines, you do not meet what it says. We have been forced and have, believe it or not, complied with every damn line in those standards.

J. Norris: Ralph, I think you said something you didn't mean to say. Back up just a little bit. I think I heard a statement, you do not comply, and I think somebody reading that might misunderstand.

R. Trallo: Just now?

J. Norris: That Comanche Peak does not comply.

R. Tolson: We weren't talking Comanche Peak, we're talking general terms here.

R. Trallo: I think the point here, even though it's internal, is philosophically disposing in that Jack like he says practicality

complies within the letter of the law with the standards written, even though we all know the intent was not being interpreted today. In practicality? No, we can't comply with them. But, you can actually comply with them. It can be done. I think that's where Joe's coming from. Joe and I agonized over several problems. I'm talking about not anything affecting essentially the quality of work. The areas that we have the most problems with and we might get written up for a deficiency note in an audit is something of an administrative area. Most of the time, it is totally removed from the actual work. The same comment for deficiency could apply to any discipline on a construction site. That's where the most problem come in with the standards. It's strictly an administrative point of view. Unfortunately, I tell Jack, he says well being a practical person, I say you're not a practical person the minute you put your name or walk near anything dealing with the nuclear industry. If you are a practical person, unfortunately you're in the wrong industry. You have to become very structured, must achieve tunnel vision to an extent, that's the industry we're dealing with right now.

R. Tolson: I could not agree more. Do you have any disagreement Joe?

J. Lipinsky: Everyone has their opinion. As I said, an internal disagreement.

R. Tolson: You're paid to maintain your opinion. I guess nine years ago I decided that this might be a good place to work. I used to read words literally. Fortunately, we were a small enough group where we could communicate with each other and I think over the years have become a lot more practical. And not necessarily liberal. But we attempt to be practical, and we attempt to structure the program accordingly. And I think we do that.

R. Trallo: Well, you're very fortunate that you have basically one organization with total responsibility. With the hands-on

documentation is such with management and supervision, which does tend to short circuit some of the problems you have when you have a multi-organizational company.

Mr. Merritt: We were in the other case early on, and we learned we're going to do be here. Anything else we need to do with C?

R. Tolson: No.

Mr. Merritt: Anybody else want to make an issue here? Okay. Down to D.

R. Tolson: I think I've already explained Joe, I think you're referring to Brown and Root in there but you're obviously talking about me and I'm not Brown and Root. I have a very sound reason for not encouraging any more audits in protective coatings and I think I've covered that the rational for that up to now. The records have become illegible just by the number of people pulling them in and out of the file. It's just unbelievable. You'd have to sit here to fully appreciate it. And all I'm getting is nits that don't contribute to the safety or reliability of the power plant which the introduction to Appendix B seems to suggest what it is all about. So, ya, I'm not going to support an audit personally. We would like to not leave any loose ends in anybody's mind. Okay? Relative to things we've discussed here today. But, you know we just had a protective coating audit last week, have the NRC in here this week, they're going to be here for three weeks. Everybody's covering the same ground over and over and over. And you've got to reach a point where you say that's enough and I've reached that point. Okay? It's no longer an audit. It's 100% critique of what's going on. So, I personally can't support it, you're correct in interpreting my actions that way. But I think there's sound reason for it.

J. Lipinsky: I don't have a problem with that explanation.

Mr. Merritt: Any other question on that?

R. Tolson: The other thing I'll mention is that I would not survive this job if I didn't take problems and concerns seriously. I would have been gone years ago. And, so that part of the statements certainly not justified.

R. Trallo: One question, Joe. How much contact did you and Mr. Tolson during inspection?

J. Lipinsky: We had a brief meeting (not clear on tape) on day one and during the Exit meeting.

R. Trallo: What I'm trying to get to, you definitely developed an opinion and I know you just didn't get this opinion by walking through the gate. Okay? You must have developed this opinion by contact of some kind.

J. Lipinsky: Well I think, to be honest, was a result of the Exit meeting. He made it very clear at this meeting that Mr. Tolson wasn't interested, as he just stated, in an audit.

J. Norris: Of course, Ron, was armed with the fact that he's been through six audits and an on-going investigation and all the other stuff, why does he need an audit? Another audit?

(R. Trallo asked a question but unclear on tape.)

J. Lipinsky: I based that on just on the concerns that I had.

R. Trallo: The concerns that brought Mr. Tolson (remainder unclear)

L. Bielfeldt: So, when you said just then not interested in having an audit that's the same thing as hostile to you?

J. Lipi' sky: Yeah, maybe I wasn't familiar with Mr. Tolson's approach or demeanor.

R. Tolson: I never encourage an audit on QA/QC. But, always on the other guy, though. The only thing that I can contribute to the industry would be to delete Criterion 18 in Appendix B and I don't think I have enough stroke to pull that off. It's part of the game, it's something you learn to live with and try to communicate. As far as coatings is concerned, and I've got to keep the mentality of my key people in mind. Okay? It seems like every time an audit team comes in we spend a good 75% of our time educating in a program as opposed to them doing an audit. That really detracts from the job that we're trying to do from a people standpoint. So, they get all bent out of shape and they're coming in slamming doors and raise the rafters and everything else because they're getting wore out on all this stuff. And that's where I'm coming from.

J. Lipinsky: That's fair in my estimation.

R. Tolson: Okay. In here for technical issues ...

Mr. Merritt: Strictly for technical and I think as you and I have talked, we've got some written communication correspondence between Carboline and ourselves that I communicated with Kissinger and Company at this point in time on both of those issues.

J. Norris: That's strictly Carboline's problem.

Mr. Merritt: We're into it with Carboline on both of those particular issues from a technical standpoint. Anything that needs to be commented, communicated, you want to see communication or correspondence, that's fine. I don't mind one bit. You want to say anything, Ron? Now I haven't been communicating directly with you but I've been communicating with Dick. He has provided me with a write up a week, ten days ago.

T. Kelly: Out of the ten that you handed him when we walked out of a meeting on another subject?

Mr. Merritt: Yes.

T. Kelly: Yes sir, I'm familiar with those two.

Mr. Merritt: Okay.

T. Kelly: Yes sir, the paperwork was in file and I think attached to the reply to you.

J. Lipinsky: You guys have contact with Carboline on these issues?

(Somebody says something but not clear what was said.)

Mr. Merritt: Yes sir. Do you remember who we were communicating with?

T. Kelly: Steve Harrison. A lot of the stuff you have referenced in there was previously in the file some of it going back as far as 1977, '78 and was a matter of just pulling it out and attaching copies of correspondence from Carboline.

J. Lipinsky: Your dealing through St. Louis?

T. Kelly: Yes. What we have came from St. Louis.

J. Lipinsky: Well, the only thing is and I don't have any official replies or anything but based on verbal conversations as late as last last week or early this week, the thing about the Phenloine 305, being Carboline they indicated they recommended, they being Carboline, that surface prep number 1 should be used between coats.

T. Kelly: Well, my first choice is to sweep-blasting, but unfortunately I can't get a sandblaster in the containment building. I also have a copy of a letter from Carboline that a solvent wipe is adequate. The other thing is that I think the statement was originally taken out of context, because we don't have any place on this site where an appreciable area 305 overcoated with 305 itself, that hasn't had sandpaper on it and solvent wipe. So it becomes, as far as I'm concerned, a nonconcern. I've watched too much what craft's doing, I've watched QC lean on them to the point of, pardon me Mr. Tolson, ridiculousness. A lot of that is subjected to this backfit program that was instituted through the loss of documents and on the statistical study that she pulled out the number of failed, well going off memory and I hate to do this, but there was something over 500 pull tests on your samples. Out of that, two of them did not meet the minimum requirements. Case closed. You didn't even look at that part. We went and looked at them separately.

J. Norris: Carboline and some of the large organizations have pretty large technical services staffs, branches, whatever you want to call it and depending upon who you're talking to on any given day you're going to get different answers and it's a little bit disquieting at times but even the formulators of these materials they'll change their mind from time to time.

J. Firtel: I couldn't agree with you more. We've had some recent, on other jobs that I'm on, similar situations and again it depends on who you're talking to.

Mr. Merritt: I think in both of these cases here we got some written communication, if necessary we can go back and relook at to make sure we're still on track.

R. Tolson: John, you and I both know, that this company don't make a move without having a manufacturer or vendor right in your back pocket.

R. Trallo: What we would do in a case like this ...

Mr. Merritt: It's not just a personal communication somebody when I called Joe Blow over there last week, he unraveled it.

R. Trallo: It's the coating manufacturer's responsibility to tell you how to apply it. To give you enough detail work on it not just a standard sales type data sheet.

T. Kelly: That is correct.

R. Trallo: Decent detail and material must be applied within the guidelines of the instructions. That's what quality documentation confirms it does. Basically, what we would do in this type situation, like the concern there, we've raised them amongst ourselves all the time we go to the manufactures. I definitely have to agree that at times you get some conflicting information.

Mr. Merritt: Yes sir.

R. Trallo: About six months ago we were doing a dome. And we asked a coating manufacturer for clarification of his instructions in writing. He gave it to us. At the same time the AE firm team we were dealing with asked him for the same clarification he gave to them in writing, and guess what guys. We were going out that way and they were going out this way. We were 180° out of phase and it caused a severe problem because all of a sudden someone comes in, hey the great inspector in the sky says you guys you did it again, you coated 34,000 square feet you didn't prepare it properly. We said yes we did. This was a problem. Unfortunately, that's where Tolson comes from. He has a piece of paper and this was two different organizations. Our guys bought it off because our documentation and supporting data from the manufacturer said hey,

the secondary surveillance was reading B unfortunately. Both pieces of correspondence were dated within three days of each other. And the same gentleman's signature on the bottom of it.

Mr. Merritt: Again, we keep coming back to the bottom line of what physical testing was done regardless of how we got into it at this point in time. Physical testing was done on it, some credibility coming out of physical testing out there. Also, from the standpoint of what Kelly has also indicated out here in the majority of the cases we wound up with the sandpaper to it also before it all gets finished and done with. My engineering department appears to be well satisfied with the recommendation I've got backed up with some additional information too.

R. Trallo: That's exactly what we did. We turned around and said where is your recommendation. Whatever you come up with that is the response.

Mr. Merritt: If we need to do anything with that over the next day or so, Kelly's . . .

R. Tolson: Joe and I didn't spend enough time together. As I have explained, I did not want to go into another in-depth audit at this point in time. It was not personal, it was not intended to be personal.

R. Trallo: If someone asks you to please look into this and the person on the other side of the table says no, your first reaction would be, wait a minute here maybe they don't like it and the impression left with the individuals involved is they are not hearing the answers I came up with and my whole understanding of the whole effort.

R. Tolson: I felt that we didn't have a QC problem but that Merritt had a construction problem. I basically outlined my problems. We will and are taking whatever steps are necessary.

Mr. Merritt: We could improve our situation at Comanche Peak and we adopted each and everyone as quickly as possible.

R. Tolson: Again, we always asked for specifics. We admit we have some people problems.

R. Trallo: We are here at your request to help you. It was not our intent to have the memo get out of house, you would have received a formal report. You have identified these problems and are taking steps to correct them. What I would suggest is that we write a follow-up based on what we have done today. We should have hands-on all situations so that we could be confident that any concerns that have been brought up here today have had. We would like to take time to meet among ourselves.

Mr. Merritt: I have no problem with that. We will meet again tomorrow morning at 8:00, everyone in this room. Thank you.

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R. Trallo: We left it yesterday, we closed, we had asked that we have some time to discuss the situation amongst ourselves and of course you folks needed some time also. Essentially what we came up with concerns that Joe Lipinsky had were addressed by Mr. Tolson yesterday. It is our aggregate opinion basically, you know if you folks are addressing and performing in the methods that you described yesterday, and the manner you described yesterday, and we have no reason to believe that you are or you aren't. We feel that really it wouldn't be productive to go any further on our part as far as looking into records, etc. Reason being, essentially what we wind up with you can't take a cursory review at one or two isolated items. If you're going to do, for lack of a better term, some type of informal audit, you have to take it right through the entire cycle. You have to follow the trails completely back to commencement of a particular activity. Based on the information put out yesterday, we don't feel that this would be totally productive at this point in time. It would be very time consuming for our organization. Of course, it would be tremendously time consuming for your organization. I asked Keith Michels, whose our corporate auditor, basically for a time frame on preparation of an audit checklist. When he prepares a checklist for an internal audit for us with a program he's thoroughly familiar with, it takes him approximately one week. He felt that the minimum it would take to prepare a respectable checklist for a program that he wasn't familiar with would be at least three weeks. Of which two weeks would be having to work hand-in-hand with someone in Mr. Tolson's organization to learn the program. Basically, we don't feel at this point in time that that is warranted. So, myself, Mr. Norris, Mr. Michels and Mr. Lipinsky are of the opinion that we had some concerns, however, you have addressed them basically satisfactory. Now if you would like us to go further, we will make arrangements,

we will sit here, we will go through it, we will take whatever time you like. We don't see any reason to do that on our own at this point in time.

Mr. Tolson: We concur.

R. Trallo: Alright.

Mr. Merritt: There is two or three items you identified. We're going to have our corporate auditors take a look at them, satisfy themselves if there's anything to which you indicated on a couple of items in there and we'll pick up from here and carry on just like we would have with any of the other suggestions that you all have provided us in the original agreement when we started contract.

R. Trallo: Fine. Would you like us to turn around and write you confirming what I just told you, in a letter?

Mr. Merritt: I would appreciate it, certainly. That way the loop is now closed out.

R. Trallo: We will hold off responding until we are able to review the transcript of the meeting and at time we will respond in time. If there's anything else you need, you know, please get ahold of us.

J. Norris: We would like to review the transcript before it becomes an official document.

Mr. Merritt: Surely. Should have that out the first part of the week. I'll express it up to you. Is that alright, Ralph?

R. Trallo: Yes.