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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION OFFICE OF INVESTIGATIONS

Investigative Interview of MILTON B. SHYMLOCK

NUCLEAR REGULATORY COMMISSION 101 MARIETTA STREET SUITE 2900 ATLANTA, GEORGIA 30323

Investigative Interview of Milton B. Shymlock 9:07 a.m., Wednesday, August 12, 1987

PRESENT:

Daniel D. Murphy, Investigator Larry Robinson, Investigator Mark Reinhart, Investigator

Office of Investigations Nuclear Regulatory Commission

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PROCEEDINGS

MR. MURPHY: Por the record, it's now 9:07, August 12, 1987. This is an interview of Milton B. Shymlock, who is employed by the U.S. Nuclear Regulatory Commission.

The location of this interview is the Office of Investigations, Region 2, Atlanta, Georgia. Present at this interview are Mark Reinhart, Larry Robinson, Dan Murphy.

As agreed, chis is being transcribed by a court reporter. The subject matter of this interview concerns TVA's March 20, 1986 response to the NRC regarding their compliance with 10CFR50, Appendix "B."

Mr. Shymlock, would you please stand
and raise your right hand?

Do you swear or affirm that the testimony you're about to give will be the truth, the whole truth and nothing but the truth, so help you God?

MR. SHYMLOCK: I do.

MR. MURPHY: Mr. Shymlock, would you give us a brief biographical sketch to include, you know, your educational background and employment with the Nuclear Regulatory Commission

prior to your coming aboard?

MR. SHYMLOCK: Okay. I graduated from high school in 1962, went in the Navy; I was in the submarines. I got out of the Navy in 1968 and worked for a year with the Tennessee Valley Authority at a fossil plant in Oakridge, Tennessee. I terminated and went to school at the University of Tennessee.

I got out of school in 1973 and went to work for ML Industries in New Jersey and then went to work for Savannah River, the Atomic Energy Commission in 1964. I then went to Hanford, Washington with the Atomic Energy Commission -- with ERDA at that time and then came to work with NRC early 1980.

I've been a senior resident inspector at North Anna and a senior resident inspector at Watts Bar and currently am an operations program section chief in Atlanta.

MR. MURPHY: Would you tell us what period of time you were the senior resident at Watts Bar?

MR. SHYMLOCK: I was transferred from North Anna to Watts Bar December the 13th, 1983 and left Watts Bar in November, 1987 --

MR. RUBINSON: '6?

MR. SHYMLOCK: -- '6.

MR. MURPHY: Is it fair to say that you're familiar with the construction processes that were going on at Watts Bar during that period?

MR. SHYMLOCK: My purpose to go to

Watts Bar was -- I am not a construction
resident; however, I ended up being more
construction than operations. I was sent to

Watts Bar to go through the pre-op program and
start-up. And when I went down there there were
construction residents there and basically I was
responsible for that inspection activity from the
time I got there.

MR. MURPHY: Okay.

MR. SHYMLOCK: And the answer to your question is yes.

MR. RUBINSON: Who were the other construction residents there at the time?

MR. SHYMLOCK: I relieved a gentleman named Ted Heatherly, who was the senior resident inspector. Also the senior construction resident inspector there was Wally Swann.

MR. MURPHY: Mark?

MR. REINHART: Okay.

MR. MURPHY: Well, we can just -- let me -- we can do it one of two ways. We can either ask you specific questions or ask you first maybe to give us your general impressions of how well TVA was meeting the Appendix "B" requirements during the period you were there.

MR. SHYMLOCK: Okay. I got there in December and my objective was to go through the pre-op and start-up phase at Watts Bar. When I got there there was another resident inspector there that had just reported on board maybe two or three months earlier and his name was Bill Holland.

And Bili and myself were tasked with trying to figure out exactly where we were at Watts Bar from a standpoint of start-up activity. In other words, had they finished the construction and were they ready to start the pre-op stage.

We started evaluating and reviewing the program, inspection program, NRC inspection program and recognized there were some areas in the construction area that hadn't been completed from the standpoint of inspection.

At that point in time I informed the Region that -- who my section chief at that time was Connell Julian. He and I discussed the activities and were aware that, hey, I was not a construction resident, I was an operations resident. And Wally Swann and the engineering group in Atlanta were tasked with the inspection program.

At that point in time there were a few problems from the standpoint of actually doing the inspection and at that point in time wally was put -- was directed to report to me from ne standpoint of the inspection program.

Like I said, I got there in December of '83. We reviewed and reevaluated the inspection program during that time frame and basically kind of readdressed our inspection activities in that area.

Wally was killed in early summer of the following year coming to work on Saturday morning —— Sunday morning, and from that time on there was no a construction resident assigned to Watts Bar. The inspection area and the construction area was performed by myself and Bill Holland and another resident that was assigned there, Chris

Caldwell.

We basically put the responsibility in the technical areas back to Atlanta in the engineering group. As everybody knows, at any given time you can go to almost any plant in the United States and find where there are examples that they're not meeting the specific requirements of Appendix "B."

It should be noted that we, NRC, approve their QA program, and they had a program. And I think in retrospect now, there were numerous examples where they had not met the particular implementation of Appendix "B."

I'm trying to remember the time frame. Maybe it was that year in '84 or maybe '85 that we had some problems. We had an allegation in reference to the welding program. I had asked Atlanta for support and they sent John York, who is a metallurgist, who is the senior construction resident at Bellefonte. He came over and we looked into the welding area and found some significant problems in that area.

At the point in time that -- let's see,

I guess it was nineteen -- let me get it straight

-- '84, '85 time frame, latter part of '84 is

when NRC was requested to grant a license to load fuel for Watts Bar. There was a lot of correspondence back and forth between headquarters and the Region in reference to their readiness for that license.

We had numerous open items from the standpoint of things that had to be accomplished. But from the construction aspect of it, there were a lot of open areas, but I wasn't really aware of, you know, those that were really significant from the construction standpoint. We knew he had a laundry list. Basically the Atlanta technical group was the one that was responsible for those particular areas.

So there were numerous times through that period of time that I was there that there were examples where TVA had failed to meet particular requirements of Appendix "B."

MR. MURPHY: When York came down was there a special report prepared?

MR. SHYMLUCK: John York and I wrote an inspection report and I'm thinking it's 1984 -- I can't remember the time. Let me think a minute. It must have been the '85 time frame, late '84, early '85, John York and myself wrote an

inspection report on the welding areas. At that point in time we had left it -- we did not cite but, I think, maybe one or two violations. We had indicated to them that the areas were being evaluated for escalated enforcement from the standpoint of falsification of records and inadequate training and qualification of the welders.

Now, the delay, at that point in time we had kind of an agreement that if there was an ongoing investigation by OI from the standpoint of falsification of records, we did not get involved in the escalated enforcement until after that report was written. And I'm thinking it took -- I can't remember, maybe it was six to eight months before we got that report out from OI.

And then after that report was written and it came out, I think -- let me back up just a second. I'm trying to think of the time frame. Sometime about '85 it was recognized that we needed a construction resident at watts Bar and that particular position was advertised and Glen Walton, who was currently the senior resident inspector, construction at Beaver Valley, was

selected for that position and he reported on board, I think, in April '85 -- let's see. I can't remember the time frame. This is '87. '86, must have been '85, late '85 sometime, I guess, when Glen reported to Watts Bar.

At that point in time we basically asked Glen to kind of reassess the overall construction program and pick up those areas that he felt, you know, we needed to do additional inspections in. We had met with the Atlanta management and everything to let them know, hey, this was our plans, and they were well aware of what we were trying to accomplish.

So that's about -- I'm trying to remember exactly when -- I can't remember. I think that's late '85 maybe early '86.

MR. MURPHY: I guess back to my question, was a report ever issued finally?

MR. SHYMLOCK: There was a report that was issued that had maybe two violations in it with a statement that the other areas of falsification of records and everything was being evaluated for escalated enforcement.

After the report from OI came out Glen Walton and myself wrote a notice of violation and

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he said something about it was a Severity Level 4, and why it was that, I don't know.

MR. MURPHY: Let me ask you a question.

If yourself and Mr. Walton wrote this report,

would you not have signed someone on the

inspection report?

MR. SHYMLOCK: Normally what we do on an inspection report or a notice of violation, we'll draft it up and send it to Atlanta and then it will go into the 5520, which is a computer and the administrative staff will type it all up and everything. And after it's finalized, if it's finalized, we may or may not sign the In fact, if you look at inspection report. reports for residents, if they're in the office or something they may sign them. Normally it's the project engineer that will sign for them and then the section chief will sign the report itself.

MR. MURPHY: What insurances do you have that your findings are incorporated into that report and how do you know that the report and you and Mr. Walton wrote is, in fact, the type of report that was issued?

MR. SHYMLOCK: I can't say that -- I

never saw that report before it was sent out.

MR. MURPHY: You never saw that?

I'm assuming that Glen Walton -- now, one other thing I need to add is that John York, because John and I were the ones that did the first part of the inspection report, we had John come up to Watts Bar and work with us. So there were three of us that worked on that notice of violation, and that was John York, myself and Glen Walton.

MR. REINHART: Was the information in that report from this '85 time period all the way through the end of '86? Was it a compilation?

MR. SHYMLOCK: The purchase of this violation and the folder together was based on our initial inspection report in the welding area that we had made a statement in the beginning that this violation was being considered as S-4 escalated enforcement and the time delay was due to waiting for the OI report to come out on the falsification.

MR. REINHART: That was late '85 when you and John York started your part?

MR. SHYMLOCK: I think it was summer. I'm trying to get the time frame. I think it's

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Watts Barr in the welding area. We wrote that report probably late summer of '85. Then it was like '86 time frame when the OI report finally came out in final. Glen and John York and myself wrote the violation up for that welding previous report in '85 and then probably spring, summer time frame of '86.

MR. REINHART: Did you have an earlier exit with TVA that let them know this was coming?

MR. SHYMLOCK: No. Normally what we do on escalated enforcement, we will put together inspection report and the notice of violation and we'll have a panel and at that point in time the panel will determine the severity level. In other words, that's normally how we do it. ₩e will go together with the facts, with the enforcement panel, present our findings and try to convince them, hey, this is what we think and then they'll ask questions and everything and the decision will be made at that point in time whether to go ahead with escalated enforcement and possible severity level. And also, they'll determine the fine and everything at that point in time.

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MR. REINHART: Was TVA aware of this at ali?

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SHYMLOCK: MR. TVA was since 1985 because we told them at the exit that evaluating that for possible escalated enforcement. They knew all along that the whole in welding -- now, the other thing that we really had a lot of problems with in that area is we had written that violation. them to respond to some areas in that. welding inspector that came from the Region that went up -- we were out of the office, we were on some kind of inspection at that time. it was a resident meeting. And we had sent another welding engineer out of Atlanta to Watts Bar to evaluate that program.

We had issued a confirmation of action letter when we wrote that inspection report. We had them stop all welding activities after we had written that report. I'm sorry. Before we wrote that report, based on our findings, we issued a confirmation of action letter and then after that confirmation of action letter was written, TVA at the same time when we talked to them, issued a stop work order.

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MR. REINHART: Do you know the date, approximately?

MR. SHYMLOCK: I'm thinking July of 1985.

MR. REINHART: Okay. So really that's what stimulated them to write their stop work order?

MR. SHYMLOCK: Yes. Based on our findings in that particular area we came to Atlanta and said, hey, we've got some real problems in that area. Management agreed with us and we called them in July -- I can't remember, maybe it was July the 11th. We called TVA and told them that we were issuing a confirmation of action letter and in lieu of that we had like three or four things that they had to accomplish prior to restarting the welding activities at Watts Bar.

Based on that conversation, and I think

Dave Verelly had talked with Chuck Mason -- I'm

sorry, it wasn't Chuck Mason, it was Gunter

Wadowitz, who was the construction superinten
dent. And based on that conversation between

Dave and Gunter, TVA issued a stop work, and that

was in the July of 1985 time frame, if I'm not

mistaken.

MR. REINHART: Ukay. And what were the you mentioned welding certification?

MR. SHYMLUCK: It was falsification of welding records, welding certification based on ASME, ASME welding codes and AWS, American Welding Society.

MR. REINHART: Okay. So falsification of welding records and certification of welders?

MR. SHYMLUCK: Yes.

Now, based on that confirmation of action letter I think there were three items that they had to accomplish prior to restart of welding activity at Watts Bar. They had to go back and recertify all their welders, and I can't remember all the particulars about it.

Prior to us basically saying they could go back and start welding activities there was a gentleman, Kleinsorge, who is a welding engineer upstairs, went up and looked at that program.

Based on his review we allowed them to go ahead and start work back.

Now, as we progressed from that time forward there was a lot of correspondence between us, NRC and TVA to try to get some questions

answered. There were numerous letters back and forth trying to get some questions answers. I know that we had headquarters involved in that. We never could get the answers we needed. And basically we were holding off on the significance of this violation for the escalated enforcement area to try to get some answers.

But Glen and I felt, hey, and so did

John, that it didn't make -- it made no

difference on some of those answers and TVA drug

their feet for more than a year trying to get the

questions answered. And I think when I left in

December they still hadn't answered the

questions.

We had sent several letters signed by Gary Zech and I think one even came out of headquarters, dadgummit, you've got to -- we need the answers, you know, what's the story. And we had a very difficult time trying to get the story out of them.

MR. REINHART: Now, how did that tie into Criterion 2?

MR. SHYMLUCK: We basically looked at the program and said that -- if you look at Criterion 2 -- Criterion 1 says that you have to

have a program, QA program. Criterion 2 says you have to implement the program, okay?

violation up is that we felt like that all the problems that were identified in the area of welding and recertification, their implementation of the QA program, by either QC inspectors or quality assurance audits should have evaluated that area and identified it themselves. And that was the reason for it being a Criterion 2.

MR. REINHART: And the QC inspection and the QA audits did not identify it?

MR. SHYMLOCK: Absolutely not. In fact, we had -- if you'll look back at it, if you look at the Q -- basically the welding inspection group was falsifying records also. This was the area of the welding, their own internal welding people that were actually certifying the welders in that weld group were basically falsifying the records.

Now, the thing about it, TVA -- I've heard people say well, they didn't falsify records but yet if you look at the response from the office of general counsel in TVA, they took disciplinary action against a lot of those people

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and basically relieved them or -- and everything.

So I mean we can't sit here and say that they didn't falsify when TVA turned right around and disciplined them and got rid of a lot of them.

MR. ROBINSON: After the OI report was published and you and York and Walton got together to write up the NLV and the later inspection report draft, did you three do any more inspection and obtain any more data or was your report written based on your earlier data plus the OI report?

MR. SHYMLOCK: Our notice of violation and a follow-up -- basically, what we were going to do is put that notice of violation in our monthly report. We had basically done all the ground work. The only -- we had done some additional inspection activity in the area of follow-up in the recertification program. Walton had looked at their program independently in Atlanta. He had looked at some coupons that were being actually used and welded on by welders, to independently assess, hey, is the program adequate.

John York had looked at that area and

the answer to the question is yes, there were additional inspection activities that were performed prior -- after we had issued that report in '85 and prior to us writing that draft notice of violation.

MR. ROBINSON: And were there additional violations as a result of the additional inspection efforts?

MR. SHYMLOCK: No. Basically the additional areas, all they did was to further support the initial findings.

MR. REINHART: For how long did this situation continue? Was it quickly corrected or go on?

MR. SHYMLOCK: Which problem?

MR. REINHART: The whole thing you described, the welding certification, the --

MR. SHYMLOCK: Well, if I'm not mistaken, there was a stop work order issued in July of 1985. At that same time we issued a confirmation of action letter that came out of Atlanta. I'm thinking there were three items on that that they had to perform and implement prior to restart of the welding activities at Watts

Bar.

Bill Kleinsorge, one of the welding inspectors out of the Region went up and evaluated that program and wrote an inspection report that basically said that it was adequate for them to start welding activities. Welding activities were begun.

John York, Glen Walton and myself looked at pieces of that program, had additional questions in that area. We had people from headquarters, and at that time I think we had the -- I think the B.D. Liau's group, the welding area, had some people that came down. I think George Eff came down.

About that same time is when Glen came across the issue on the AWS welding to where they weren't meeting some of the welding requirements of the AWS code.

MR. REINHART: What time period are we talking about?

MR. SHYMLOCK: It was -- it had to have been after the July '85 time frame and I'm trying to remember when Glen got there. John York and I came up with the welding problems in the July -- let's see, June, July -- I think in July of 1985 time frame. That was just John and myself. Glen

Walton was not present at that time. I don't remember when Glen got there. Maybe it was in the fall of '85 or maybe early '86.

Then he started looking at the same types of problems and came up with the area where they were not meeting Section 11 code of the AW -- ASME, plus some of the AWS code requirements.

At that point in time headquarters got involved and that was B.D. Liau got involved in it, George Eff got involved in it and also Lee Specer.

MR. REINHART: Okay. So essentially this July '85 welding issue is what -- it was the same issue that finally NRC wrote the letter declaring that was the breakdown. Is that all the same issue?

MR. SHYMLOCK: No. The notice of violation was based on the initial report that John York and I wrote in July of 1985. And those issues were dealing with the falsification of records, weld certification records, and welders certification to ASME code requirements. That notice of violation dealt only with those issues.

MR. REINHART: Okay.

MR. SHYMLOCK: Okay. What we were

trying to do was close the loop on that inspection report. In other words, when you write an inspection report and you have a violation and you say, hey, we're evaluating this for possible escalated enforcement, we need to close the loop. We need to go back and say we've evaluated and it's not escalated enforcement or it is escalated enforcement and here it is. And that was the purpose.

And the reason for some of the time delay was because we were waiting for the OI report and then trying to deal with some of the other welding issues. We tried to keep those separate because they were separate.

And then once you got the welding, you've got everybody involved in welding, you've got headquarters involved, you've got B.D. Liau's special task force on welding. We try to stay totally out of that. You know, they were going to determine the contract that they had with EGEG that TVA had contracted with EGEG to go back and independently assess were they or were they not meeting the code requirements in the welding area.

That was not the issue that we were

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dealing with. We were dealing with the issue of falsification of records and welder certification. A total separate issue.

MR. REINHART: Okay. All of those together, could you characterize for us, if possible, what that demonstrated about TVA's implementation of their 10CPR50 Appendix "B" requirements at that time?

MR. SHYMLOCK: I'm not familiar with I know when I left TVA up there in November of '86, there were a lot of problems that had been identified in the welding area, especially AWS structural welds. But the thing about it is they're not as stringent as ASME code requirements on welding. I know that there's been a lot of radiographs that were identified as being performed by one individual that appears that he may not have been qualified or certified to do those inspections. I think what that does is just supports more by saying, hey, these are additional examples.

I guess you have to come up with -well, you know, I know we've been flopping around
with this pervasive breakdown. I don't know what
pervasive breakdown is. You know, if you do

10,000 things and 100 are wrong, is that pervasive? Or if you do 10,000 things and 1,000 of them are wrong, is that pervasive? I don't know. I mean qualitatively, I can't identify what's pervasive.

Basically, what we have done is we looked at it and evaluated it independently of all this other stuff just in the areas that we were looking at. And we felt like based on the number of problems that were found and where they had to go back and totally recertify everybody, you know, that led us to believe, hey, that was a major breakdown in Appendix "B," Criterion 2.

You know, if a licensee says yes, they agree there's a problem and they maybe have to retrain or fix ten percent or maybe twenty percent, then, you know, that may be acceptable. But when you have to go back and retrain everybody, then I -- you know.

MR. REINHART: Okay. I understand what you're saying.

What about another area, corrective action? Did you have occasion to look at the corrective action system and form any opinions on that?

MR. SHYMLOCK: Well, I think if you look at the records Region 2 have -- we've basically said their corrective action program has been weak since the inception of Watts Bar. I think John McDonald and Ted Heatherly were there before me even had similar problems with their corrective action.

They've had problems all along. QA, I know before I went -- before I was assigned to Watts Bar in December of '83, I went on a team inspection on quality assurance to look at the overall program and that inspection report came up and identified weaknesses in their corrective action program.

MR. REINHART: You know, when we say weaknesses, are we talking just a little few things or major weaknesses or --

MR. SHYMLOCK: I think if you look over the records, as we've identified weakness in their corrective action all along, how big they are, you know. Fixing problems, if you don't ever screw up bad you don't really have a leg to stand on from the standpoint of really bad corrective action. You know, it's one of those things you've got to mess up.

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And if you look at TVA, they have fixed the same thing four or five times and still haven't really fixed it.

MR. REINHART: Okay.

MR. SHYMLOCK: So I think NRC recognized all along that there were weaknesses in their corrective action programs.

MR. REINHART: In the action to prevent recurrence in route cause identification?

MR. SHYMLOCK: Well, I think there were problems in route cause identification. I think there were problems in the area of prompt corrective action. You know, what's prompt to me may be different than what Morph thinks prompt is.

I think if you look back at the QA audit reports and everything, even several years back there were weaknesses in their corrective action from the standpoint of promptness. And the other thing is the escalation. In other words, if you have a problem do you get it up high enough to really get it fixed. And we know long back that Jim Green, the manager of nuclear up there, was basically against QA and they had a very poor escalating enforcement -- I

escalation process on corrective action.

In other words, if you'd go to the plant manager and say I'm not going to do it, you were kind of stuck. You couldn't get around him. You couldn't get it to corporate. Once you got it to corporate a lot of areas they addressed inadequately. But I think the records show that there was problems and concerns in their escalation of corrective action.

MR. REINHART: How long was this Jim Green there or is he still there?

MR. SHYMLOCK: No, he's not there. He was not there when I was there in '83. I know he -- '82 time frame? I don't remember when he left.

MR. REINHART: Was management -- say in the '85, '86 time frame that we're really trying to focus in on, how did management respond during that time frame?

MR. SHYMLOCK: If you could get it up high enough to the right person you could get it corrected. There was a certain amount of reluctance to get it up, though. There was a tendency to keep it in their own territory. And each site was different. Browns Perry did it

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different than Sequoyah and Sequoyah did than Watts Bar and Bellefonte did it different.

that's the thing that's amazing. And You look -- it's just like on the welding area. John York got up there and was appalled at how screwed up it

MR. REINHART: You're talking about at Watts Bar?

MR. SHYMLOCK: At Watts Bar, because the program in Bellefonte was entirely different, it couldn't possibly happen the way it did at Now, you've got the same utility, same program being implemented differently. So, you know, it depended on who was the plant manager and site manager at that time.

REINHART: MR. Well, how about can you characterize Watts Bar specifically?

> MR. SHYMLOCK: In reference to what?

REINHART: MR. Corrective action and

how easy it was to

MR. SHYMLOCK: I think they were getting better.

MR. REINHART: They were getting better?

MR. SHYMLOCK: They weren't there.

MR. REINHART: Okay.

MR. SHYMLOCK: If you look -- I guess there's two ways to look at it. If you look at it from the standpoint of CDR's, construction deficiency reports, TVA Watts Bar generated a lot of them. If you look at other utilities, they don't really turn out that many construction deficiency reports.

So from that standpoint, they tended to put a lot of things out in the public. You know, hey, we've got these problems.

Now, to get them fixed, that was a different story. You'd find Rev 6 and 7 to a CDR, you know, over several years and still hadn't gotten it fixed. The more they looked, the more they found problems.

I think they were getting better, but they weren't there.

MR. REINHART: Okay. Did you have an occasion to review their audit program at all?

MR. SHYMLOCK: Which audit program?

MR. REINHART: At Watts Bar, QA audit of activities at Watts Bar?

MR. SHYMLOCK: Oh, yeah, we reviewed

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those all the time. What we would do in that let's say we were going to do an inspection, pre-op or something, some area. In preparation for that inspection activity we would review our own program and identify what we wanted to look at. And then in the process of doing the inspection we would that lew audit reports that TVA had done in that particular to see what they were finding and to see the things that they'd found, had they corrected them.

Most of the areas that we looked at were pretty good. You know, they were fixing things. They were slow, but they were getting fixed.

MR. REINHART: So the audit program working pretty well, except for that one area you mentioned in --

> MR. SHYMLOCK: Welding.

MR. REINHART: -- in the welding?

SHYMLOCK: Yeah.

MR. ROBINSON: Didn't I hear you say that some of their own QA audit reports showed that their corrective action system was lacking?

> MR. SHYMLUCK: Yeah. When I say

corrective action, I'm looking at the program, the big picture. We looked at specific areas. Let's say we looked at pre-op and pre-op had identified certain deficiencies on functionally test or preoperational test of a specific system and they'd identified deficiencies. Their program for correcting those deficiencies is what we would look at in that area and they were pretty good.

Now, the big overall program, you know, when you look at the QA, you look at the welding, you look at the instrumentation, you know, you've got to look at it all. But the big program, the overall program, you know, I had difficulty.

MR. ROBINSON: I think I lost you.

You saw that from reviewing their QA audit reports, looking at the overall --

MR. SHYMLOCK: Even our own reports.

Even our own NRC reports identify weaknesses in the corrective action program, okay? But when you get down to the field area, okay, the corrective action program, where they have problems is -- let's say you had ten CAQ's, conditions adverse to quality, let's say you had ten out of a section. They could probably

resolve eight of them with no problem.

Two of them would go to their management and their management would say no, we're not going to do that. And this guy would say yeah, maybe we should do it. Well, he'd go to his manager or his supervisor. And then they'd flap around a while.

So to try to get it up to the level of individual that would make the decision to either fix it or don't fix it, that's where they had the problem. That's part of the escalation of it.

In other words, getting it up high enough to get somebody to make a decision to get it either fixed or we're not going to do anything about it. And if you're not going to do anything about, make sure everybody knows why we're not going to do anything about it.

Now, I think if you look at the program that's where we've had a lot of problems. But that's not to say that they don't fix things. Then again, that's not to say they don't fix things two or three times before they get it right, but that's not the point. The point is that there are items that they had problems trying to escalate.

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MR. REINHART: Did you have an occasion to look at their design control system? I mean could you characterize that for us?

MR. SHYMLUCK: Well, we wrote several inspection reports in that area. There lot of weaknesses. One of the major weaknesses we found in it is we -- you can't design a plant from Knoxville when the plant is in Spring City. We tried to get them to get more of their engineering people on site. I think it became very obvious in the instrumentation tubing problems, where you had people that hadn't even looked at the system and they were designing it from Knoxville. You know, they really hadn't gotten out there.

You look in the hanger areas. They want to put a hanger up and there was already a hanger there. Well, they'd move the hanger and put the other one up. Well, what happened to the one they took out, you know? We identified that to them on several occasions.

They took -- they started putting a lot more people on site. Coming from Knoxville, I know the dadgum roads would be full of cars from Knoxville. Now, what they'd do, I don't know,

but there were a lot of people. And then finally they moved an engineering section to watts Bar.

They didn't interface very good. The site didn't have a lot of confidence in engineering, either. I think what was happening was that the engineering staff from Knoxville was trying to develop some credibility. You know, they had kind of lost that credibility. And during the time I was there and maybe a year or so after that they were trying to do more in this area because they were going to this owner-operator concept.

MR. REINHART: Uh-huh.

MR. SHYMLOCK: And for them to get the business, they basically had to start performing and trying to develop more credibility with the plant so they could actually get the work. And I know a lot of times plant people said, hey, we're going to go outside because Knoxville is too expensive. And I think if you look at their track record they were contracting a lot of the engineering work out even at that point in time.

MR. REINHART: Were the results successful?

MR. SHYMLOCK: Uh-huh.

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MR. REINHART: You mentioned the interface problems. What -- could you go a little deeper on that?

SHYMLOCK: Well. I think we identified several cases where engineering people in Knoxville didn't really talk to the plant You know, we had a problem with the ERCW people. We had engineering going off in the pumps. direction to fix something and the plant didn't know about it. I guess we wrestled with the ERCW pump problem for probably two years, and it was trying to get the plant people to tell the people in engineering what the problems were and people in engineering trying to understand what the problems were. They would engineer it from Knoxville, never really looking at the pumps never really knowing what the problems were. They'd go off on a tangent to fix something which -- look at the route cause, which it really wasn't the route cause. They didn't have the right information.

And I know we had them supplement CDR's numerous times just on the ERCW pumps. You mean you go back to our inspection reports and you can see time after time where there are

examples identifying where engineering in Knoxville didn't really interface good with the plant people.

MR. REINHART: Okay. Were you aware of the December 19th, 1986 presentation by NSRS to Commissioner Asselstine?

MR. SHYMLOCK: I was aware it was going to happen. I wasn't there. In fact, I had met with Commissioner Asselstine and his staff the day before, I think we had eaten dinner or breakfast or something, and went on a tour of the site and everything. And I think the next day is when he went to -- I don't remember whether he went to the meeting before he came to the site or after. But I was aware of it because he was at the site either before or after that meeting.

MR. REINHART: Do you have a feel for the perceptions that were presented, the validity of those at all?

MR. SHYMLOCK: The only thing I know about that is I know that Bob Sauer was tasked by -- let me think -- let me get the guy's name. Who was the NSRS quy --

MR. ROBINSON: Kermit Witt.

MR. SHYMLOCK: Kermit Witt had tasked

Bob Sauer with making a presentation and I think
Bob and some of the staff on NSRS. And the
reason I know that is because at the time that
this was going on they also had on site this QTC,
quality, technology whatever it was, out of
Kansas doing this employee concern review.

And in that light they had tasked NSRS to manage that program. So there was a group of NSRS people on site to oversee and manage that program. And we had occasion to talk with them and they were in our place and we were over there and this, that and the other. And that's about all I know, is that he was tasked with making that presentation to Commissioner Asselstine.

MR. REINHART: Do you have a feel from your position as resident whether those -- are you aware of the perceptions he had?

MR. SHYMLUCK: I never saw, that I can remember, I never saw anything that documented what he presented to Asselstine. I'm not familiar with anything that even came out of Commissioner Asselstine's -- or was even shown to him. Hey, this is -- I thought it was just slides or something. I don't know. I never saw -- I don't remember seeing anything on it.

take a little break.

MR. REINHART: I think Larry's gone to get a copy.

MR. MURPHY:

(Whereupon, a brief recess was taken.)

MR. REINHART: You were saying just at

one point during the break that July was actually

August '85 for that confirmation letter and --

Let's

MR. SHYMLOCK: Yeah, Murph and I were looking at this list. And we issued the confirmation of action letter on August the 23rd, and TVA issued a stop work on August the 23rd.

Now, like I said, there were a lot of problems with that and we issued another clarification confirmation of action letter on welder recertification inaccuracies again. We reiterated that on September the 17th.

MR. REINHART: '85?

MR. SHYMLOCK: Yes. And then on
September the 25th at a Region 2 meeting with TVA
regarding the lifting of the stop work order on
welding. That's when we had a meeting here in
Atlanta where we had QTC -- see, at that point in
time QTC had gone up to Congress and they were
having some congressional hearings and QTC -I've forgot his name, the guy --

MR. REINHART: Thero?

MR. SHYMLOCK: Yeah. Owen Thero had made a statement to Congress or Udahl or somebody that he was appalled that NRC had lifting the stop work order on welding. Okay?

Based on that statement, it came down through the system and based on that statement we had a meeting and brought Owen Thero in with TVA and everything on September the 25th and had a Region 2 meeting with TVA regarding the lifting of the stop work order on welding. And that's when we had Owen Thero in here and everything else.

MR. REINHART: What were the results of that?

MR. SHYMLOCK: We were trying to find out exactly what information Owen Thero had to say that he was appalled at basically NRC lifting the stop work order and after that whole meeting we couldn't come up with anything additional that said maybe we should not have lift the stop work.

MR. REINHART: Okay.

MR. SHYMLOCK: You know, what we were -- my belief in the purpose of having that meeting was to find out if he knew something we

didn't. And we tried to make them understand that, hey, if he knew something you had the opportunity to come and tell us. I mean you either could have gone to the site people or called headquarters. And Owen's not bashful, I mean, you know, he's shown us in the past he can call anybody and that's fine, you know.

But we were basically trying to find out if there was anything that he knew that we didn't in reference to lifting the stop work.

MR. REINHART: Okay. You have the copy of the slide that has the perceptions presented to Mr. Asselstine?

MR. SHYMLOCK: Uh-huh.

MR. REINHART: Can you just give us your viewpoint of --

MR. SHYMLOCK: You want to go through line by line or what?

MR. REINHART: Sure, if you would, please.

MR. SHYMLOCK: Okay. I think I understand now, remember back, that NSRS was going to make the presentation to Asselstine on the QTC program, employ concern program, and this was a piece of it. And my thoughts, after

hearing this, because NSRS was imminently involved with the QTC effort, maybe they had a different perspective because when I looked at -- we basically tried to stay out of that QTC effort, but even though you tried to, you ended up getting involved in it. There were a lot of perceptions and statements made that really weren't factual.

And you have to be cautious on -- I mean like some of them were, there are too many stumps on a site. You know, when you put those in perspective with nobody out there certified the welds, you know, and it's a lot of hearsay, you know, we tried to fall into some of them.

But to make a rash statement based on those -- I think this time frame -- do you remember when this was done?

MR. ROBINSON: December of 1985.

MR. SHYMLOCK: Okay. We had come up with the findings in the welding issue in August of '85. And I'm thinking that the QTC effort was implemented June, early-late spring of 1985 is when QTC came on site. And I don't think they had interviewed everybody until like the end of '85. Wasn't it maybe the end or the first part

of '86 that they had actually interviewed -- completed their interviews?

So based on the interview input they got, maybe NSRS was using that to come up with the conclusions, which I don't think -- I don't think that's good, because some of those you need to go in and look at and everything. And they said the as-constructed welding program is indeterminate.

I'm not sure that at that point in time, based on what I understood about the welding program problems, that I could make a determination that the as-constructed welding was indeterminate. I think there were some problems in it, okay, especially in the welding certification area.

And electrical cable present qualification condition is indeterminate. The electrical cable, the bend radius and pulling of cables and everything, you know, that's above me. I'm not an electrical person. And we were flapping with that thing for months.

MR. MURPHY: Before you go beyond that, though, according to the records I have on 18

July, '85 TVA issued a stop work order, Class 1E,

pulling activities at Watts Bar. Are you familiar with that?

MR. SHYMLOCK: Yes. That was based on -- let me see. That was based on the issue of if you knew the type of cable, if you could go out there and look very specifically at the type of cable by number and manufacturer, then go back to the vendor, the particular manufacturer's recommended pull tension, okay, and then equate back to that, that was fine.

The problem they found is that they could go out and identify the piece of cable, in some cases; in some cases they couldn't, but they didn't have the vendor recommendations on how much they should pull on that.

So based on that, TVA Watts Bar stopped work of pulling all new cable. Now that was kind of a generic issue within TVA. At the same time they had stopped pulling all safety-related cable at Bellefonte. They were still pulling some non-safety-related. We had talked to Sequoyah and they had not pulled any additional safety-related cable.

Design engineering in Knoxville had come up with a computer code that allowed the

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craft people, engineering on site to, based on their circular mills and the type of insulation and everything, they were trying to train their people on a computer code that allowed them to determine the amount of pull tension they could put on the cables. But that's what originally, I think, stopped the -- the initially issued that stop work order on electrical cable.

So in this time frame, which is December, electrical cable present qualification condition is indeterminate, I don't know what qualification they're talking about. I there was a question about bend radius, if you bend the cable too much, and the other was pull tension or how much could you pull it with. know, we had heard that they were taking Jeeps and putting on it and pulling the cable with You know, I can't substantiate that nor Jeeps. can I refute it. I don't know. But I'm saying that's the type of things that QTC was identifying that we had to deal with.

So I don't know what kind of qualifications. Now, from the standpoint of environmental qualifications, I think there were some questions there. I don't know what

qualifications he's talking about. He says electrical cable present qualification condition is indeterminate. I'm not sure what that means. I don't know whether he's talking about installation of the cable, internal qualifications or what.

when TVA put those cables in, they had not met IEEE383 which is a fire-type protection covering on those cables. Rather than meeting IEEE383 they went back and put a Vermasko coating on it and there was a question that came out after they put that Vermasko coating on it that from an electrical standpoint there's a certain amount of heat because of the resistance of the cable. It may be that that cable because it's covered now, can't handle the 40 amps or the 100 amps it's rated for. It may have to be derated.

issues. So I don't really know which issues they're talking about, you know. And I know even know I'm not sure where we stand on electrical issues. So I don't know about that one.

Instrumentation line --

MR. ROBINSON: Excuse me. Let me just

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interrupt one minute. For the record, and the purposes of this discussion, when the specific dates of events such as confirmation of action or stop work orders, et cetera, are being expressed in this meeting it's being obtained from a booklet entitled NRC Regulation of TVA, Hearing Before the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, House of Representatives. identified as Serial No. 99-171. And in this book there are a number of pages at the beginning which indicate a chronology of events at TVA and that's where the dates are primarily coming from that we are quoting in this discussion.

Okay. Go ahead.

MR. SHYMLOCK: Instrument line inadequacies. They talk about slope, fitting, bending and due stresses on conduit and hydrostatic testing.

I'm trying to remember when the instrument line slope -- Bob Howchman and a group of individuals from headquarters came down to Watts Bar and looked at some areas. And I'm thinking those -- he had several people with him. There was no inspection report ever issued on

that inspection. I'm trying to get the time frame. I'm thinking that it was early '85, maybe late '84 time frame.

Now, the purpose of that inspection was evidently there was people calling headquarters or calling Harold Benton saying, hey, there's a lot of problems in these areas. The areas I remember were like instrument line slope, Q list, weld rod control, bolt material and ERCW pump station water. There was a stream or something. There was a question about there was a stream at the ERCW pump house.

Bob Hoschman came down with several people. I'm trying to remember all their names. There was a civil engineer from Region, Joe Lanahan. He looked at the ERCW pumping station. Bob Hoschman, Ken Hooks. Ken Hooks looked at Q list and I think he also looked at instrument line slope.

So they came down and looked at those areas. There were some questions raised about instrument line slope. We asked to see that inspection report. There was never an inspection report written on that inspection activity. I don't know what ever happened. I don't even

it. They were at the site, I think, for two weeks. They exited with the site people and that's all we ever heard on it.

Now, sometime later when Glen Walton was there he went out and started looking at the instrument lines. He came across problems with supporting of instrument lines, how they were mounted, instrument line slope.

Now, what had happened on the instrument line slope is that engineering said that you go out and you slope the line so that if there's any air in it it goes to the high point. And they had directed craft people to slope the line at plus zero minus a half inch per foot.

Well, rather than -- you go to an instrument tap point that may be 60 feet up in the air. Rather than going from 60 feet straight down, they went down, over, back and forth, and switched back and forth. It was just unbelievable. And it was another example where the engineers never went out and looked to see what they're doing, okay?

We had raised the question about -- I used to be in instrumentation, and normally if

you get a line like that, you normally just flush the line. Two or three volumes of the line, you know. If you think it's got maybe a gallon in it, you flush it two or three gallons and therefore you have some assurance that the air's out of the lines.

implemented a major program on instrument lines and -- I'm trying to remember the guy's name -- I can't remember. But anyway, they developed an instrument line slope that had to do with fittings, the tools that actually bent the tubing not being calibrated and all that. I think I remember seeing a draft final report on that. They were going to go back and just basically change out all the lines. I'm not sure I agree with some of the fixes but, you know, that's what they were going to do.

At this point in time, December time frame, I could have then told you that I agreed with that. Okay? At that time, I think there was a lot of information that still wasn't in place. Hydrostatic testing, I don't remember that as being a big issue because most of their lines were all higher strength than were required

anyway.

The disposition of it right now, I can't tell you. I don't know where we stand on that. But based on this information at this time I'm not sure I would have agreed with that

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MR. ROBINSON: How do those problems, if they relate at all, relate to quality assurance breakdowns in your mind? I don't even know whether they do or not.

MR. SHYMLOCK: I don't think they are.

MR. ROBINSON: Yeah. And when you go through that list, kind of keep in mind that we're interested in relating those problems to not meeting the requirements of Appendix "B" or quality assurance breakdowns.

MR. SHYMLOCK: Well, I know that in this particula area on instrumentation, Glen and myself had a lot of problems with what TVA was telling their inspectors to inspect. In other words, you want the specific inspection requirements to be very specific. I mean if you want the thing to be green, it should be painted green, not just say well, paint it.

And we looked at their inspection

requirements for doing these and they were very vague. So even the inspectors going out would not have identified a lot of these problems because the inspection or acceptance criteria wasn't specific enough to pick this up. And most all this stuff was bought off on.

Now, the other thing we found in a lot of cases, they would, like on the supports for instrument lines. You maybe had four or five lines coming to one support. And you'd have a group go out to fix one line coming from one instrument. Well, if it wasn't right, they'd fix it.

Then you have another group that came back and fixed the next line down. Well, if that clamp for the previous pipe was in the way, they'd remove it and leave it, but fix theirs. Well, they fixed it, then they fixed the one below it but they'd unfix the one above it. So it was a cascading effect. And that's what we found when we got into it. They'd go out and fix one but they'd screw up the one right beside it that had been fixed before.

Now, that, even in the quality assurance inspection side of it, it didn't say

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they stand now on it.

Who did you tell? MR. ROBINSON:

MR. SHYMLOCK: Construction.

MR. ROBINSON: Construction

supervision?

SHYMLOCK: Basically who we dealt with at that time was the QA manager on site. that time it was Dick Parker. We relayed our comments and talked with him probably weekly. We talked with the crafts -- I mean the supervisors of QC but then we also went directly to the head of the craft.

ROBINSON: Okay. Go ahead and go on down.

SHYMLOCK: MR. Construction processes in general --

> MR. MURPHY: Wait a minute. Wait

minute.

MR. MURPHY: First off, your last statement that, you know, they fixed one thing, screwed another one up. Doesn't this kind of overall address the effectiveness of the correct action program?

Oh, I'm sorry.

MR. SHYMLOCK: Yes.

RUBINSON:

MR. MURPHY: I mean, when we talk about whether it's good or bad, why don't we just say was it effective? Did it do the job that it was designed --

MR. SHYMLOCK: It was not effective.

MR. MURPHY: Okay. And on instrument line slopes, do you remember the case involving Doka, I think his first name is Steve Doka, who brought this to the attention and was ultimately fired and then was -- you know, through the process of OGC was determined to be correct. Do you remember that whole ordeal?

MR. SHYMLOCK: Uh-huh.

MR. MURPHY: Didn't that address the instrumentation line slope?

MR. SHYMLOCK: Yes. He had several things. I'm trying to remember what he had in

there. If I'm not mistaken, Murph, the question he came up with is that it was on primary system coolant flow instrumentation, and the issue was instrument line slope. That's what kind of started it, and I'm thinking the instrument that he had a concern with was on the primary system reactor flow instrumentation.

At that point in time, there was a question about instrument line slope. We went back and looked at that. Basically what they had done is they had taken all the instrument lines and run them 180 degrees on the other side of the containment and put the pressure transmitters opposite that side. So in other words, instead of having the pressure transmitters at the location where the sensing points were, they ran them several hundred feet on the other side of containment and rerouted them.

We talked to engineering about why they did that. And the question was if they -- because I was there for two hot functionals, I think. We did not have any indications of primary system flow instruments being inaccurate, okay? They were a little bit low on the high end, but there was no fuel in the core. So that

would tend to cause some perturbations in the system. There wasn't anything that would have indicated to us that there were problems in the system during two hot functionals.

we asked engineering why they made this major change. They went in and changed all the tubing and everything. We got two answers. One was because of radiation protection or ALARP, as low as reasonably practical, in reference to maintenance. And the other one was because of instrument line slope.

had not done this would the instruments be inaccurate. They said they could not tell me that. So engineering made those modifications on reactor coolant system pressure transmitters. For why, I don't know. They would not tell me, they would not say yes, if we hadn't changed them they would have been inaccurate. And through two hot functionals we had no indication that those instruments were inaccurate because of installation.

And that's kind of the proof. I mean, you know, if the thing wasn't put in right you would expect the instrumentation to read

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it did read a little bit low And was it low or high. I can't remember, but basically when we looked at it we felt it probably tied into the reactor core -- I mean no So I couldn't answer the question. there I was --I mean the question is did you change because it was done wrong. The answer they wouldn't tell me. They couldn't -wouldn't guarantee that it would not have performed correctly if not changed out.

MR. MURPHY: But certainly before your departure from there they were aware that there was a problem with the slope in the instrumentation lines you're talking about, at least? However the system was set up, they were aware of it?

MR. SHYMLOCK: But when I asked them if you changed it out because of instrument line slope, that it wouldn't work, they said they couldn't guarantee it. So what they did was they fixed something that they weren't sure needed to be fixed. And these were the engineers, the design engineers that made the change, because if I'm not mistaken, Glen and I went to them very specifically because we were trying to get the

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question answered. Did you change because there was a problem? Why did you change it?

I'll tell you what I found. It seemed like when you asked engineers with TVA a particular question -- you take you and I, if we did something five years ago, we did it a particular way; you ask us now how we would do it, we would probably do it different because in that time period we've learned more, standards and codes have changed and we may do it different. But that didn't necessarily mean that when we did it five years ago or the way we did it five years ago was necessarily wrong.

I've found with TVA engineers that every time you ask them a question, they say well, maybe we better look at that. And they would go back and reevaluate it seems like everything you ask them rather -- see, I don't know how you stop that.

Does that mean that when they did it in the past, that the way the system was fixed or installed, was it wrong? That's where we were out on a limb. It's just like in this area. Why did you fix it? Was it wrong? Don't know.

Construction processes in general are

loosely controlled.

I'm not sure that I agree with that generally. You know, I think there were some loosely controlled areas but I can't say that everything. So from a QA -- from an Appendix "B" standpoint, yes, there were probably areas that they violated in Appendix "B" but that -- I can't say it's a pervasive breakdown in that area.

Records are of poor quality. My opinion of poor is in the eye of the beholder. What I look at as being poor you may look at and say well, that's okay. It may be hard to read but, you know, you can read it.

And then, again, what kind of criteria do we have on quality? You know, we basically say that they need to be retrievable, you know in some timely -- does that mean six months or, you know.

MR. MURPHY: Well, let me ask something. But in your perspective, using your criteria for what is good and poor -- good or poor, were the records good or were they poor?

MR. SHYMLOCK: They weren't what I would have liked to have seen. But the other problem we ran into here is that when you look at

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the time frame that this plant started, I think it originally, construction CT was like '79 time are talking 1976, '77 time frame. records and things that I would have expected see were not necessarily available. And the way they actually performed the records is that when construction did the work, once the system turned over to operations, then the system was turned over plus all the records.

So the requirements to maybe have certain records even in 1984 may not have been the same requirement that they had on them or we had on them in 1975. So to try to put it in perspective, if I look at the requirements for records based on now or three years ago, the records are in pretty good shape.

We had talked to them in early '84 about records, you know, keeping things current and from the standpoint of maintenance. know, once it's turned over to the maintenance staff you have to maintain it. You need those records of how you installed it and everything. And they recognized that and they were working on it.

But here again, one of those

fingered processes. You had engineering that identified what manuals and records were required when they went out for purchase. That particular system or pump or something went to construction for installation and they kept the records. Then once it was finished and everything and turned over to operations, then whatever construction had they gave to operations.

But the problem arose when operations needed to maintain it. Engineering may not have asked for the right thing. So here they are trying to maintain it without having the proper information, but engineering never requested it.

So I mean it's a Catch-22 there. In other words, you've got systems that were probably ordered in early seventies with manuals and everything and installed in 1975, turned over to operations in 1984 and a lot of the stuff they really needed, they didn't have.

So that time frame was -- caused a lot of problems in the records area. So the bottom line is they weren't as good as I'd like to see. Some of them were good. There were areas that I felt that they needed to improve on. But then I also recognize how are you going to come up with

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the documentation when maybe the manufacturer is out of business.

Lack of independence of QA-QC personnel, construction. I don't know what he meant by that, lack of independence.

MR. REINHART: Did the individuals feel that they could inspect and report what they found freely without being curtailed?

MR. SHYMLOCK: We didn't have any indications that they couldn't freely identify anything. In fact, they would write an IRN, inspection rejection notice, on the construction Some of the problems we found, and we tried to deal with them early on, is that you take an electrical inspector that's inspecting conduit. He's be crawling through the pipe chasers or something tracing a conduit and there would be an instrument line that had -- somebody stepped in it and it had a big bow in it or they'd pulled them out of the support. Нe wouldn't write an IRN on that tubing connection. was tasked with looking at electrical conduit so he was narrow, very narrow focused. But that was a process that had been in place all along, you know, and how do you change that, you know,

the plant's just about built?

But I didn't see where they had, they were restricted from identifying any problems. We've had people come in and say, hey, many, I've put this 'RN in and my boss said it wasn't a problem. And I know in a couple of cases we went out and looked and we agreed with the boss in a couple of cases and I remember times when we agreed with the craftsman that yeah, there was a problem.

MR. MURPHY: Okay. Was there any indication that there was harassment or intimidation of QC inspectors at Watts Bar while you were there?

MR. SHYMLOCK: Yeah, there were a couple of examples.

MR. MURPHY: More than you'd seen at other stations you'd worked at?

MR. SHYMLOCK: No, not really. I guess one of the things I felt is that you had so dadgum many people there. You'd go out in the plant and you'd five 15 or 20 people standing around Coke-ing and smoking and, you know, I know a lot of times that there would be people trying to push their workers and then they'd turn around

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and say, he's harassing me and everything. So I mean -- I don't know. I didn't see any excessive amount.

MR. MURPHY: Let me ask you a couple of quick questions.

Were you familiar with a survey that TVA conducted in early 1985 to determine whether folks were willing to report?

MR. SHYMLOCK: I had talked with Gunter Wadowitz at the end of nineteen -- when I first got there. I think it was -- maybe it was January or February of 1984. And I had asked him about, you know, how your program for identifying problems within their employee ranks and everything.

They had -- and they implemented a construction survey. It was performed by the construction organization. And Gunter Wadowitz had identified how they were going to do it. And I had made two suggestions to him. suggested that whatever you do, however you do it, is to make sure that the people that identify problems, that they're protected somehow not everybody knows who the individual is. secondly, that you get back to a person. Unce he

said there's a problem, at least go back and say yeah, we're working on it or this is where we are, or we appreciate it and we'll get back with you. It may take six months, but we'll get back with you.

Well, they implemented this program and what they did is they handed out little blue cards and they gave it to everybody. And then when they left they had the foreman pick them up from each person. They gave them out with their checks and then they picked them all up. And I said -- you know, they did this survey at Bellefonte and also at Watts Bar.

Then they generated a kind of a statistical information based on this thing. And I got a copy of it and it wasn't -- it didn't appear to be too bad. And I asked Gunter what they had done from a corrective action standpoint.

And then about the time that they had finished this and were trying to get this thing kind of resolved is when the whole big thing blew up and they had QTC get involved in it. And I had asked QTC and the employee concern task group, were they going to fold back in this other

stuff, you know, were they aware.

asked the question and they weren't aware that that survey had ever been performed. And I'm thinking that Eleanor — there were several of us at this meeting, you know, trying to interface with them. I can't tell you that they went back and looked at that survey, too. And I know that I had given a copy of that survey to — Eleanor had it and the Region had it. So it was information that, yes, I was aware of. And this was early '84 time frame.

MR. MURPHY: Do you recall that in a couple of them questions there was a significant number of people who would not report it to their management.

MR. SHYMLOCK: Uh-huh.

MR. MURPHY: In one of the areas, one of the five questions, would you report this to your supervisor, and a significant number, I don't remember, but somewhere between 15 and 25 percent -- I can get the exact figures -- said they would not report to their supervisor, number one.

MR. SHYMLOCK: Right.

MR. MURPHY: And then the fifth question was do you know how to report -- MR. SHYMLOCK: And they didn't know.

MR. MURPHY: -- and they didn't know. I mean, did you not view that as a possible potential trouble area, the fact that, one, people were reluctant, would be reluctant to report to supervisor, and there's also a large percentage -- it might of course have been the same group of people -- that said they didn't know how to do it?

MR. SHYMLOCK: Yes, I agree with you.

And I had told Gunter at that point in time, what was your corrective action on it. And, in fact,
I had gone with him to a meeting with some craft people in hangers because the hanger group, the hanger QC inspection group was the group that had a lot of problems in it. And I had told them that, you know, what you need to do is you need to get out in the field and find out what's going on. You know, deal with the specific people.

And he stopped by one day and picked me up and he and he and I went to a meeting that he had with a group of hanger QC inspectors and he got up and told them -- and this was right after

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the survey, prior to QTC being involved -- and he told them again the importance of making sure that if you have a problem -- and he told them right there in that meeting if they had any problems or were afraid of anybody, to come to him.

So what I had seen was some action on their part to to try to fix that problem, and the only way you do it is you get your senior management out in the field and you tell those people. And I went with Gunter -- I don't remember the dates -- but I went with him to a meeting with hanger QC so I saw, yes, they were trying to deal with it. And then I don't know the time frame, Murph, when QTC came in, I don't remember exactly. I'm thinking it's -- I think QTC came in like spring of '84.

MR. MURPHY: I think the survey was conducted November, December.

MR. SHYMLOCK: Uh-huh.

MR. MURPHY: It was evaluated in January and then in April QTC came aboard.

MR. SHYMLOCK: Okay.

Q list is not in good shape and is inconsistent with CSSC list. If you'll go back

to several of our inspection reports we had identified this as a problem. TVA had issued a CDR in this area.

may have been a problem but it may not have been as bad as it may be conceived as being because once -- if it's functionally tested and it's built, the Q list and everything were identified from a maintenance standpoint, you know, once you've got it installed, how do you maintain it.

And that's our concern, is that the people in the plant knew what was safety related and was on the Q list and were they able to maintain it.

From an Appendix "B" standpoint, I'm not too sure about that area as being a problem.

Material traceability very poor, especially seismic category one piping, HVAC conduit trace instrumentation, et cetera.

I was not aware of any piping seismic concerns. Material traceability, that must be hangers, but hangers aren't, they're not required to be traceable, the hanger material. I don't know what traceability piping problems there were. I'm not -- I don't remember any of that.

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heating, ventilation and air conditioning, there were some HVAC problems. a civil penalty issued to -- I'm trying to remember if that -- I know there was a Severity Level 3 violation given to Watts Bar I don't remember if HVAC. there penalty, but it had to do with quality assurance, seismic supporting and everything. And that was issued '81, '2 time frame. But my understanding is that was fixed. You know, the violation was they went in and did a major modification to heating and ventilation, HVAC, and it's my understanding that at that point in time that item was closed out.

John McDonald is the one that addressed it and he closed that issue. So I'm not aware of any HVAC problems.

Conduit, yes, we had some problems with conduit supports. Trays, we had problems with loading of the trays because they added the Vermasko to instrumentation, basically the same thing with slope and fittings and everything.

So material traceability, I'd be vague on that. I'm not exactly sure what traceability of material they're talking about. Trays,

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there's not that much traceability.

I don't know what he meant by that.

Traceability of material to me means it's supposed to be a particular melt or heat and everything on steel and stuff, but I don't know.

Field configuration of cable supports have lost accumulated load control on imbedded plates.

That was an issue that came out of Bulletin 79-14. TVA had contracted with NUS no, wait a minute. Yeah, NUS here in Atlanta to all their calculations. They had performed the calculations and the contractor had asked TVA if they wanted their calcs and TVA said no, we don't need them, so they threw them away. those calculations were not available and when we went in and looked at it, they had a meeting in early '84 time frame with headquarters on 79-14 and the licensee was required to, prior to first refueling, to go back and redo those calculations.

The loading control on imbedded plates, that was the problem. In other words, if you exceeded loads on the concrete anchors you may pull them out of the wall.

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There was another issue in there that plates on a concrete surface, i f real good and smooth, it didn't touch the concrete and therefore you had maybe a bending moment on it. Their acceptance criteria was you could actually go to the bolt, there was certain feeler gauge size that you could run all around that base plate and if you didn't exceed that feeler gauge size it was acceptable. engineering group looked at that and felt that was adequate. Also included in this was some safety factors on the bed plate, on the imbedded plates.

Another issue that came out of this is that there were some allegations that they were just welding the nuts on the plates, that there really wasn't anything behind there. I don't know what we've done on -- I don't know where we stand on that one.

I felt that at that time we had a good understanding of load control on the imbedded plates. Yeah, that may have been a problem with Appendix "B" but I think we understood where we were going and what the problems were. So, yeah, it's a true statement it was an Appendix "B"

problem but I don't think that from a safety standpoint that we were totally in the dark on it.

MR. REINHART: When you say we --

MR. SHYMLOCK: NRC.

MR. REINHART: Okay. How about TVA?

MR. SHYMLOCK: Yeah, I'd say TVA was aware of our concerns. I mean there was numerous inspection reports. Like I said, there were several meetings in headquarters on this particular issue. I know that Steve Vihas wrote an inspection report. I'm thinking it's early '84 time frame based on that meeting where we said that we would allow them to have like to the first refueling outage to redo the calculations.

It seemed like every time you would go back with a support problem to engineering they'd basically have to redesign the whole thing. And, you know, I think a lot of that was because they got better at it. They got to the point where they had compute s that actually drew a three-dimensional drawing of the support and very vigorous calculations on it. And I think what happened is they just got better at it.

But I can't tell you -- I can't sit

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here and tell you that the ones that were out there, that they may have gone back and changed, weren't adequate in the beginning. I mean, you know, you have to look at those case by case. They tend to be very prone to update, you know, but when you get down and ask them a question well, was it wrong to start off with, I don't know.

I know there were some CDR's this area. know that in reference to -- well, Ι I know another thing. There was an issue that came out of -once you go out and look at these supports on the base plates to the concrete, they would put a little seal on it, and it was just a lock-type -- it was a lock indicator. words what that meant -- it was an orange-type glue -- that meant that they had gone out an torqued that base plate bolts to the required specifications and if they had done it they put that little glue type on it which indicated that yes, that had been accepted.

What we found in a couple of cases, like on, you've got QTC in there. They have an issue where the guy said that these bolts weren't adequately torqued or that these nuts were welded

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address corrective action aspects appropriately.

Well, there were a lot of -- see, an NCR, a nonconforming condition report be issued, corrective action, if it were written by the let's say a craft foreman or something identified a nonconforming, an NCR. He'd write an NCR on a piece of equipment or a piece of He would probably not be the one involved in the corrective action. It may go back to the site engineering. They may not be able to address the corrective action, it may have to go back to Knoxville. Knoxville may not be able to They may have had it done by a it. contractor and they had to go back to the contractor.

had to wait until you got back far enough to really get the root cause to identify it for the corrective action. And I think that was frustrating from the site standpoint. Yes, we had problems with it. But in the long run, it may take a long time, but eventually they would get the right corrective action. They might have to do it two or three times.

Now, whether that -- Appendix "B"

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doesn't say you can't do it two or three times until you get it fixed, it just says fix it. So if they want to take four or five times to fix it, I don't think there's any regulation that says they can't do it that way. Yeah, we had problems with it.

MR. ROBINSON: Do you remember Bill Cottle doing any kind of research into that particular question? Did he ever talk about you about that kind of a perception?

MR. SHYMLOCK: I know Bill and I several times about corrective action program. They set up some groups where they tried to evaluate NCR's. See, here again, you had two You had nuke power which was the programs. operating side writing NCR's and then you had the construction side also writing NRC's. So the nuke power side would write an NCR, they'd send it to construction or disposition and then they may send it to engineering and they may decide to correct it on site or identify the corrective action.

So it wasn't a very organized approach and that's what we were trying to get to them.

MR. ROBINSON: What I mean was do you

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ever remember him discussing with you having to respond to an NSRS perception that there was a problem as far as NCR's addressing corrective action?

MR. SHYMLOCK: I'm familiar with an NSRS report that was an open item. Because what we would do is like we would ask them where do you stand on closing and fixing these problems that were identified by the NSRS report. a lot of cases there were a lot of NSRS report open items that were still open. So they hadn't completed the corrective action where NSRS would buy off on it. And I remember on several occasions there where corrective action was one of the items. In fact, you can almost find in almost every one of them.

But yet we had inspection reports that identified corrective action as being a problem. So I think you can find that particular concern on both sides, NRC and NSRS.

Bottom line, design control is not initially specified up front nor is final configuration feedback given back to design, margin of safety are indeterminate. Margin of safety.

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My own, you know when I go out in a plant and I look at those supports that are just unbelievable in size when you compare to other plants, it's tough for me to say safety factors aren't there, design margins aren't there. like I said, I'm not a structure. And as of the time I left, I'm not aware of any structural welds that, due to the fact that they were improperly performed, that either the piece of equipment or structure would fail. Now, they may have identified some now, I don't know, but I'm saying as of the point in time when I left I wasn't aware of any. Yes, they found some welds that weren't proper, but right now I'm not aware of anything that would have said, hey, because that went missed, because that went as not being identified as being corrected, there was a structural problem and it would have failed.

not being met. That's a true statement. I think you can go anywhere in the United States at a power plant and make that statement at any given time. In fact, you can look at inspection reports right now at operating plants that will have violations in them against Appendix "B",

which is tech spec 681, failure to implement procedures, and that's an indication of not meeting Appendix "B." So I mean I think you can say that any time.

MR. MURPHY: Let me ask you one question here. Is not meeting the requirements of Appendix "B" and being in compliance with Appendix "B" two different issues?

MR. SHYMLOCK: What I'd like to say is say it a little bit different.

MR. MURPHY: Let me rephrase the question.

MR. SHYMLOCK: Okay.

MR. MURPHY: If I asked you are you meeting the requirements of Appendix "B," right, are you meeting the requirements, that's the question I asked you, and you say that we're overall in compliance with Appendix "B," have I answered the question -- have you answered the question that I asked?

MR. SHYMLOCK: Yes.

MR. MURPHY: When you say we're overall in compliance with Appendix "B" that's saying we're meeting the requirements in these areas?

MR. SHYMLOCK: Well, I don't think you

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-- I don't think anybody can say they're can full compliance with Appendix "B" at think that at any given time you're going to find areas where you're not meeting the specific requirements. But I think as a whole we're allowing these plants to operate, plants out there operating right now, and you can see monthly reports that will have violations that basically if you go back probably to the system it's failure to meet Appendix "B" requirements, yet they're still operating.

i f we say that that's indication of a breakdown of meeting Appendix then maybe we should shut them down, I don't agree with that. I think that there are times where we have approved their program to implement Appendix "B" and their program, like I said, we've approved it. And at any given time you're going to find where they're not meeting certain pieces of it. But that, I don't think, indicative of a total breakdown in the whole program.

MR. REINHART: When you were there was -- TVA wrote a letter to the NRC saying that Watts Bar was very low fuel. How do you feel

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about that? Was that correct, incorrect?

MR. SHYMLOCK: Well, I try to look back at that now. Based on what we knew at the resident site, our open items list, and not knowing what NRR was following, you know, from a licensing standpoint, I look at that as two basic entities that are kind of separate. We don't cover their stuff and they don't cover our stuff.

Based on what I knew, I didn't see major problems. Now, I need to narrow that because from a construction standpoint, I wasn't aware of all the construction activity problems. You know, there were pieces of it, you know, that I was aware of but the technical bottom line issues on it, like I said, I'm not a construction And yet you look at the open items, outstanding items list in the construction area and yeah, there were a lot of open items. There were a lot of construction deficiency reports. I think you'll find probably plants today that have been operating with construction deficiency reports that are still open.

You know, I think that those -- we have to make a decision that those are safety related, that are very important, have to be completed and

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corrective action accomplished prior to start-up or prior to loading fuel are addressed, and we did that. We went through those construction deficiency reports identified at that point in time and we made an assessment of those that had to be completed prior to either loading fuel or prior to criticality or prior to 100 percent power.

MR. MURPHY: Let me just -- I think the initial one is the welding at Watts Bar is indeterminate. After the stop work order issued at TVA for recertification of welders, they tried to recertify -- they had 570 welders at the time and they tried to recertify 534. Apparently the difference between them two figures had been recertified in the past several months so they didn't, you know, they didn't go through this drill, right? 0 f the 534 welders 120 failed the test, the initial test, riaht?

These welders were given five to ten

days to practice and 37 of the individuals after

five to ten days still couldn't pass the test.

What can you say about, first, the fact that

after they were given -- and I'm told this is not

one of the more difficult tests. I mean it's a

very basic recertification test and there are some very difficult tests, you know, that can be performed.

When 120 of 540 failed, do you consider that a significant number?

MR. SHYMLOCK: Oh, yeah. And that was one of the problems that Glen and I -- Glen Walton and John York and myself were trying to deal with. A lot of the things that came out, and again, I'm not the metallurgical welding expert, but one of the things that came out is that there were some questions about the coupon that they were using, that it had a backing plate. And most of the welders said that it's really hard to do a weld on that particular type of coupon with that backing plate, that normally you don't have a backing plate.

Now, like I said, I don't know whether a backing plate -- it was two pieces of metal with a backing plate on it and you had to have enough heat to get the backing plate and everything. Now, whether that was standard code coupon, I don't know. I know that Glen and John were trying to deal with that.

The other thing is that in that

confirmation of action letter we were saying okay, of those 120 welders that didn't pass the first time, and then that other population that never could, what does that say about their welds, all right? What are you, TVA, going to do about that?

And the line coming out of this, they were going to go back and reinspect all the welds that those people had actually performed and make a determination independent of the qualification of the welders. You know, first off you've got that caveat that the welder is not qualified. Then you have to go back and look at the work, of the work that he did, is it acceptable from a code standpoint?

Now, as of right now I don't know where they stand on that, but basically that was the commitment to go back and re-review that.

MR. MURPHY: You don't know if they had done 100 percent --

MR. SHYMLOCK: That's what we were basically saying, and that's what I'm saying, we had so much correspondence we never could get any answers on. You know, we kept saying what about those 32 or so that never could fail -- I mean

never could pass. And then there were some that terminated, I mean before this, that were long gone. What were you doing about that?

So I don't know what ever happened. I mean we raised those questions and I can't tell you right now what --

MR. MURPHY: If the welds by these 37 who couldn't, who absolutely couldn't pass the test at all, even after the second try, many of which were terminated, okay, short of going back and inspecting their welds, could you say that their welds are determinate?

MR. SHYMLOCK: No.

MR. MURPHY: I mean is it safe to say at least in respect to the 37 people who bungled it the second time that the condition of the welds that they performed at Watts Bar are indeterminate?

MR. SHYMLOCK: Correct, absolutely. I totally agree, and we raised that question. What are we going to -- how are we going to deal with that? You know, we were trying to figure out how we were going to deal with it. Not only how was the licensee, but how we were going to deal with it. And that was part of that correspondence

that come back and forth, you know.

The same thing with the radiographs. I mean you've got a guy that he inspected these and missed them. What do you do about all the other radiographs that he reviewed? I understand now that they're going back and doing a 100 percent re-review of all the radiographs.

MR. ROBINSON: I've got another question.

MR. MURPHY: I'm going to stay in this area.

MR. ROBINSON: Okay. I thought you were getting ready to close it.

MR. MURPHY: No.

This issue is also identified in the report that you wrote?

MR. SHYMLOCK: Which issue?

MR. MURPHY: The recertification issue.

MR. SHYMLOCK: In the confirmation of action letter we addressed what we wanted them to do with the certification. What are you going to do about those that don't pass, okay? Then there was more correspondence and meetings with them on, all right, what are you going to do with those that don't pass? What are you going to do

with these 32. Glen dealt with them, we had charts up there, we followed exactly how many did this and how many did this and who didn't pass and who failed, and we followed that all the way through to make sure exactly that we understood what they were going to do.

Now, where we are on that, I don't know, because when I left we were still trying to deal with it.

MR. MURPHY: This draft report that you submitted through channels you said was recently issued in the form of an inspection report?

MR. SHYMLOCK: I understand from Elrod that it was just recently issued.

MR. MURPHY: How recently?

MR. SHYMLOCK: I don't know. It had to have been after December of last year because I gave him a heads-up on it. I said Steve, you've got this draft notice of violation, you need to do something with it. I mean, you know, Glen and I put that thing together and we were tasked with it from Gary Zech and everything.

MR. MURPHY: But recently is not anywhere -- I mean recently is not in March of this year?

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4 MR. MURPHY: Do you have a copy of Phone (404) 525-0525 5 that? 6 MR. SHYMLOCK: I've never seen it. 7 MURPHY: No, a copy of your draft. 8 MR. SHYMLOCK: know Glen does. I 9 I kind of doubt it. 10 MR. MURPHY: Let me, for the record, 11 request that you furnish us a copy of your draft. 12 And if you would, obtain for us a copy of 13 whatever was issued. 14 MR. SHYMLOCK: Okay. 15 MR. REINHART: Along with that, is possible to get a package of, like that initial 16 17 '85 report, any exit meeting minutes, confirmation of action letter in that report? 18 MR. SHYMLOCK: 19 It's all listed right there in that thing. We can get it. 20 and everything are there. 21 MR. REINHART: Could we request that? 22 23 SHYMLOCK: You want me to do it? 24 MURPHY: We'd appreciate it. 25 SHYMLOCK:

MR. SHYMLOCK:

December of '86.

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it had to have been sometime after

don't know.

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Okay.

MR. REINHART: Of course, anything you could get that would help us put that piece together, any correspondence.

MR. ROBINSON: I have just sort of a bottom line question, see if you can answer it. Take you back to January, March time frame of 1986 when Admiral White first took over the nuclear program at TVA, okay?

You were still at Watts Bar at that time, right?

MR. SHYMLOCK: Yes.

MR. ROBINSON: In your opinion at that time, in that time frame, was the overall QA program in compliance with Appendix "B"?

MR. SHYMLOCK: Yes.

MR. ROBINSON: In the year 1985, we'll say from when the confirmation of action letter regarding the welding went out and they stopped work in the welding, from that point until December of 1985 was the overall QA program in compliance with Appendix "B"?

MR. SHYMLOCK: In the welding area or overall?

MR. ROBINSON: Overall.

MR. SHYMLOCK: I would say based on

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what I knew, yes, with the exception of the welding areas. And the reason I have to say we didn't have any answers to the questions in the welding area. We allowed them to go back and rewelding, but we're still stuck with this bag over here that's got all these welds that were performed by noncertified welders, were performed by people that possibly falsified records, we had an OI report that was ongoing trying to answer some questions. OGC that was trying to do some review. So saying emphatically yes or no in that area, because there was too many unknowns.

MR. RUBINSON: Not speaking specifically of TVA right now, but of any nuclear power plant, can you give me an example of a situation that would have to exist before their overall QA program was not in compliance with Appendix "B"?

MR. SHYMLOCK: Let me think about that a minute.

MR. ROBINSON: Well, let me ask it this way: Is it next to impossible in your mind for an overall QA program to not be in compliance with Appendix "B"?

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MR. SHYMLOCK: Overall, you know, that's real encompassing. That's the whole thing. And I'd say it would be awful hard. I had written violations against Criterion 2 in specific areas but that doesn't necessarily mean that there aren't other areas out there that are adequately being accomplished by Appendix "B." You'd have to have -- wow, that would be a tough one.

MR. ROBINSON: If there was a major breakdown in Criterion 2 would the overall program be in compliance with Appendix "B"?

MR. SHYMLOCK: That's another hard question because if Criterion 1 says -- see, we're involved in Criterion 1. We approved the program. And there's differing degrees of implementation, you know. Even you two gentlemen would probably implement a same requirement in different ways. That doesn't necessarily mean that Murph's way is totally wrong. You know, it's kind of like the intent of it, meeting the intent, and we use that, mesting the intent. the intent in a lot of cases is hard to really determine.

MR. ROBINSON: Well, let's say in your

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-- let's just say that we have a situation that in your judgment there is a major breakdown with respect to Criterion 2, okay? Would the overall program be in compliance with Appendix "B"?

MR. SHYMLOCK: In the welding area, we said it was a Criterion 2, which we basically felt the overall program was deficient in the I'm trying to be specific. welding area. Okay? I have to be specific. In other words, when Glen and John and myself worked on that report, based on the information we had in the welding area, we felt that there was a major QA breakdown in the welding area. So you go back and yes, Appendix ckay? But I can't say that the maintenance area at Watts Bar was not meeting Appendix "B." I can't say that design was not meeting Appendix "B."

I'd have to say that based on our review and concerns and issues in that welding area, yes, we had a major breakdown.

MR. ROBINSON: And even if you had that major breakdown in the welding area, could the overall QA program still be in compliance with Appendix "B"?

MR. SHYMLOCK: The way I look at it,

yes. Now, maybe management may redirect me but, you know, it's awful hard to say an overall total Appendix "B" program. Zimmer, you know, what did we do there?

MR. REINHART: Let me ask a similar question. If you were aware that you had this major breakdown in the welding area and if I could characterize what we've said, a fairly weak corrective action program, ineffective corrective action program, and you were asked are you meeting the requirements of Appendix "B" and you came back and said overall we're meeting -- we're in compliance with Appendix "B" and not specifically addressing those two; is that being responsive?

MR. SHYMLOCK: I think so.

MR. REINHART: You do?

MR. SHYMLOCK: I think so.

MR. REINHART: Okay.

MR. SHYMLOCK: I guess personally I was surprised that he made that he even made that statement because I didn't think he would know what Appendix "B" is because --

MR. REINHART: Who?

MR. SHYMLUCK: White. He was only

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short period of time. That would be really tough to get up and say emphatically I'm meeting Appendix "B" across the board. big thing. You know, I think from my experience I could never say emphatically I'm meeting it across the board. I can say that in general yes, I'm meeting it, but there are areas that I'm deficient I think that if you go to any in. president of any utility, I don't think any of them are going to say emphatically I'm meeting every line, dot and everything else of Appendix "B," because it comes to light that you have violations in those areas. So that right there shows you that there are areas that may be weak.

MR. MURPHY: Let me ask you that question that Mark just asked in another area. If I write a letter to you saying are you meeting the requirements of Appendix "B," in them eleven areas, right, okay, that are listed in NSRS' perception and you know that in the welding you're not doing very good in welding and your corrective action program is ineffective, right, but you're asked to respond to them eleven issues, right?

MR. SHYMLOCK: Uh-huh.

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Can we use that MURPHY: overall with complying we're requirements, in a ignore the fact that at areas we're not doing real well? I think so. SHYMLOCK:

You could still do that, MURPHY:

say that? you could still

I think MR. SHYMLOCK: time frame. remember I don letter went out? before that

happened in That ROBINSON:

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asking the question SHYMLUCK: of this presentation to that letter and the commission saying that he met this? 18

₽ 6 yeah, oh, ROBINSON:

responding to MURPHY: to our January 3 attachments NSRS gave him.

okay. 23 SHYMLOCK: Oh, back and MR. went information and he this Asselstine

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then we sent White a letter saying tell us that you are or are not meeting Appendix "B." Okay, that's right.

MR. RUBINSON: And those specific perceptions were given as the basis that NSRS made the conclusion that they were not meeting the requirements of Appendix "B." So those perceptions were the things that were being addressed as a basis for saying that you are or are not in overall compliance with Appendix "B."

Let me ask you one question. You used the terminology meeting the requirements across the board and you said that you couldn't see how any said that they were meeting Appendix "B" across the board.

MR. SHYMLOCK: At any given time, you know, there's going to be some area that --

MR. ROBINSON: How is meeting Appendix
"B" across the board different from overall
compliance with Appendix "B," because it seems to
me that you're indicating that it's fairly easy
to say you're in overall compliance with Appendix
"B" because it's difficult to be out of overall
compliance with Appendix "B"?

MR. SHYMLOCK: I think that you can be

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in compliance with Appendix "B" and still have areas that you're weak in. Because if I that then I'd have to say -- the logic using to make that statement is that we've got plants out here that are operating today that I can show you inspection reports that say they are not meeting requirements of Appendix "B" and yet they're still operating. Now, based on that logic I'd have to say well, we allow them to operate, even though they're not meeting Appendix "B," and therefore, they're still in compliance with Appendix "B."

If we had a violation issued by any resident that was against Section 6, say, 681, which is failure to follow procedures which is Criterion 5 of Appendix "B," and we shut them down, I'd have to tell you if they don't meet any part of Appendix "B" they're out of compliance and we'd shut them down.

So that's the logic I'm trying to tell you. Based on that, I'd have to say that you can be in compliance with Appendix be and still have areas that you're not in compliance with, specific areas.

MR. REINHART: Is there a difference

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between significance in a licensee not meeting a procedure under the tech specs, you know, procedures, versus one of these issues like this welding breakdown? Is there a difference in weight?

MR. SHYMLOCK: Oh, yeah. I can show you where you'll have violations in the design control area of operating plants. Okay. That would be Criterion 3. All right, that would be significant and yet they're still operating.

Now, I think there's a difference at Watts Bar because it's not operating. You know, when it comes down -- would I agree to let them start up with the welding problems like this, absolutely not. But they don't have fuel in the reactor so I'm going to -- well, we'll accept this but we'll continue to evaluate and we'll still come to some bottom line. It may not be today, it may be next year. And that's the position I think we're in right now. to answer some of these questions. We've got put the significance on it.

And there's an entirely different difference when they've got fuel in it and they're operating than one that's --

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MR. REINHART: If Watts Bar had been operating, licensed and operating, and this information came to light about falsification of records, improperly certified welders, the welders went out and they did the welds, we had problems where radiographs were accepted but, in fact, were unacceptable, would that affect the position to allow the plant --

MR. SHYMLOCK: Of course. I think that management at NRC would be very responsive to shut it down. And I think if you look at our track record, I mean, there are plants out there that, yes, they're not meeting it and there have been plants that have had problems and we shut them down. I think it's obvious at Sequoyah, you know, we're looking at it more and more. We haven't allowed them to start back up. They shut themselves down, we didn't shut them down.

MR. ROBINSON: So we're not saying here that a QA program that is in overall compliance with Appendix "B" is dependent on whether or not the plant is operating or not, are we?

MR. SHYMLOCK: No, he was talking about significance.

MR. REINHART: We're talking about

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significance of a problem.

MR. SHYMLOCK: He was asking about if this particular welding issue had come up at a plant that was operating. Well, I think emphatically, yes, we'd have to -- that is definitely more significant.

MR. ROBINSON: But we wouldn't accept someone saying that they're in overall compliance with significant problems in a non-operating plant any more than we would accept them saying they're in overall compliance --

MR. SHYMLOCK: Absolutely. Absolutely.

MR. ROBINSON: You would accept it?

MR. SHYMLOCK: No, no. I agree with what you're saying.

MR. ROBINSON: Okay.

MR. SHYMLOCK: The significance of the a plant that's shut down with no fuel in it, it's still significant, okay? We haven't bought off on it that I'm aware of, okay? think when we buy off on it and we allow them to load fuel, these issues will be resolved, they'll be fixed. I don't know what it's going to take fix them, but they'll be fixed or that plant won't operate. I mean we don't have a choice,

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because you get in a point and you compromise, and you can't do that.

MR. MURPHY: Let me ask you a hypothetical question and you may not be able to respond, give us a response because of data, but if all eleven of them perceptions are true, would they still be in overall compliance with Appendix "B"?

MR. SHYMLOCK: Some of those things there are Chevrolet, apple pie and motherhood. mean there's some in here that are really big, Using words of indeterminate -- as-constructed welding program is indeterminate? That's saying the whole program, okay? My own thoughts on this is that based on the timing of this and based on the input, because it came out of QTC, I think these are slanted -- at that time. Now, right now, I don't know. I'd have to go -- I haven't been involved in it, but I'm saying at this time frame which was in December of '85, QTC was there in the spring of that year and everything was coming out of the woodwork. And then you're coming up, you have to balance are these factual, And then it wasn't until sometime you know. during the latter part of '85 -- when did EG&G

come in '86?

MR. MURPHY: '85, late '85.

MR. SHYMLUCK: Late '85, okay. And they're tasked with trying to answer some of these questions, as-constructed welding program is indeterminate. Well, you know, that's one of the things that they're trying to answer. Is the program adequate. Well, they don't have an answer yet.

MR. MURPHY: If you don't have the answer, then how can you say we're in overall compliance?

MR. SHYMLOCK: Well, what I'm saying is at this point in time --

MR. MURPHY: Yeah, I'm saying March 20th when Mr. White sits down and writes this letter when we know you haven't resolve your issue with recertification, when EG&G hasn't resolved the issues that they're --

MR. SHYMLOCK: But I can't -- the only thing I'm saying, Murph, I'm not sure when EG&G came in. In other words, I don't remember time-wise if EG&G was tasked with doing this when this was coming out. I don't know.

MR. MURPHY: Let me guarantee that EG&G

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had not determined a final finding on March 20th. they had not given a response on March 20th of 1986, by that time they were still working on this issue, right?

If that's the case, you've got all these problems that you've identified, right?

EG&G is looking at the overall program and has not come up with a resolution as to whether the program is good or bad and welding, I think, is a fairly significant issue on the construction side -- I would hope so -- how at that point then can I say I'm in overall compliance? I mean, I guess I can put some caveat, you know, saying with some exceptions.

MR. SHYMLOCK: I don't know how he did it. All I'm -- you know, I mean if I were to make it I would make it with some caveats in it. That's just me, you know.

MR. MURPHY: Okay. I've got some tough questions.

Mr. Shymlock, have I or any other NRC representative threatened you in any manner or offered you any rewards in return for this statement?

MR. SHYMLOCK: No.

Have you given the

add to the record? would

SHYMLOCK: No.

MURPBY: on August 12, 1987. 11:19

(Proceedings concluded.)

CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING:

INVESTIGATIVE INTERVIEW OF

MILTON B. SHYMLOCK

DOCKET NO .:

PLACE:

Atlanta, Georgia

DATE:

Wednesday, August 12, 1987

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission.

TYPED! CARY I LONG

Official Reporter

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