

1 I guess it's a judgment as to, you know, how  
2 much you would put in a response and how much you would  
3 make available for NRC to view, <sup>or</sup> how much you would give  
4 credit for NRC already <sup>knowing</sup> being available and having  
5 available to them. There's nothing that's denied them.

6 Q You keep referring to this being available  
7 to NRC. Did anybody -- I know it's not in the letter,  
8 your response, the fact that these things are available  
9 here. I think, as a matter of fact, we didn't know there  
10 was any actual backup documentation until November of  
11 last year. Did anyone make any calls to say we've got  
12 all the substantiating documentation we need?

13 A I think it's possible they did, Mr. Murphy.  
14 I don't know for sure.

15 Q You keep saying it's all available to NRC.  
16 And I realize that if the NRC came looking for it, it  
17 would probably all be available, but did anybody notify  
18 the NRC of the documents, some 25 odd-booklets that had  
19 been quoted here?

20 A I don't know. That may have taken place  
21 between our licensing people and the NRC's licensing  
22 people. I would think it's just a prudent, common way of  
23 doing business. Maybe it's an assumption that was made  
24 that they would be available to them.

25 I think they very often come in, if you tell

1 them something -- well, they have to come in. They have  
2 an inspection finding, just like if I have an audit  
3 finding, I've have to go out, and before I can close that  
4 item, I have to go out and do some verification. So I  
5 would think that before they would close this item in  
6 their letter, they would come out and verify the  
7 responses we were giving them.

8 That's why we had this Stone & Webster team  
9 go down and say, you know, hey, I'm getting this stuff  
10 from construction and engineering people that I'm trying  
11 to coordinate and pull together, I don't have direct  
12 control over this thing, I need an independent judgment  
13 as to, you know, have we got our bases covered, is there  
14 anything we have forgotten, is there anything that we are  
15 saying that's not correct and not truthful and so forth.  
16 That was the purpose of the Stone & Webster team, ~~if you~~  
17 going there.

18 Q Is that Craig Lundin's team?

19 A Yes.

20 Q Do you know if they had --

21 A I don't know specifically. I wasn't down  
22 there with them all the time. I did go down one Saturday  
23 basically to make sure they were getting access to the  
24 information and to the people that <sup>they</sup> needed ~~it~~.

25 But what they did was they took, you know,

1 and an early response. You said this hasn't changed very  
 2 much. But in an early executive summary, the response  
 3 that we had prepared on each of the NSRS bullet items,  
 4 and their charge, as I recall, was to play devil's  
 5 advocate with that response. Is that response accurate,  
 6 you know, do the things we're doing at the site, do the  
 7 records at the site actually substantiate that response,  
 8 or is there a problem.

9 And as I recall, that was their charge. I'm  
 10 trying to think whether Mr. Kelly <sup>as Director</sup> was on board at that  
 11 time or not. Irrespective, the decision was made to send  
 12 a team out there for that independent review.

13 They pulled in people with some degree of  
 14 experience ~~in~~ various sites around the country and asked  
 15 them to do that, and they gave us some feedback, I think  
 16 it was Craig.

17 My role in that was mostly to make sure that  
 18 they got access to the people and material at Watts Bar  
 19 to make an independent judgment and that they also got  
 20 access to the employee concerns files at Watts Bar.

21 Q They had access to all the employee concerns  
 22 files?

23 A To my knowledge they did. I had asked  
 24 NSRS -- what happened at that time also is that NSRS had  
 25 shifted those files to the Watts Bar people. I remember

1 one day calling the Watts Bar people, and they said that  
2 they really hadn't really gotten familiar enough with the  
3 files yet.

4 So I called, I believe Mike Harrison, with  
5 NSRS, and I asked him to send some NSRS people to Watts  
6 Bar to walk, if you will, walk the Stone & Webster people  
7 through the files, tell them what kind of system they  
8 had. So the Stone & Webster people <sup>C</sup>would access those  
9 files.

10 And in fact, <sup>I</sup> got into a little trouble <sup>with NSRS sta</sup> about  
11 doing that. Because I think there was a little concern  
12 on NSRS's part that they were a little uneasy about going  
13 ~~to~~ <sup>to meet with Stone and Webster people,</sup> I tried to reassure them that they, they're just  
14 there for the facts, they have no axe to grind, but I  
15 really needed someone to make sure they get the facts.

16 So the NSRS supervisor did send two people  
17 <sup>to Watts Bar about</sup> ~~down on Sunday afternoon~~ to the Stone & Webster people.  
18 That's my understanding of that, to make sure they had  
19 access to the employee concerns file.

20 That was an important element of I think  
21 what fed, you know, what fed the initial Asselstine,  
22 Commissioner Asselstine list that was continuing, because  
23 the perceptions were not coming from Bob Sauer but from  
24 people he had at Watts Bar that were working in this  
25 area.

*[Handwritten signature]*

1                   So it was important I think to not only  
2 verify our response, but to look at the basis for the  
3 concern, which was in the employee concern files. That's  
4 why we did it with our team.

5   EXAMINATION

6 BY MR. REINHART:

7 Q                   Mr. Mullin, did you ever see the results of  
8 that Craig Lundin review?

9 A                   I think he wrote a -- I'm not sure exactly  
10 what the results were. Craig may have written a memo to  
11 Mr. Mason describing the results. He may have also  
12 provided some commentary on the summaries or concerns  
13 themselves. I don't remember specifically. If he did,  
14 those are probably in the files that Tom and Ray and I  
15 were keeping.

16                   I think he at least wrote a memo. I'm sure  
17 that's in the file. I think he may have also, as a  
18 result of that, provided some commentary on this. I'm  
19 less sure of that. If he did, it will probably be in  
20 some file.

21 Q                   Did you ever review that memo?

22 A                   Review the memo?

23 Q                   Look at it, read it, review it?

24 A                   Since I remember there was a memo, I  
25 probably did read it, yes.

1 Q What did you think of it?

2 A I don't remember exactly what it said, to be  
3 honest.

4 Q Was there ever a formal review of his  
5 answer, that you know of, a group got together and  
6 talked, reviewed the memo, went over it?

5

7 A I think he got together with his people.  
8 Again, it was supposed to be an independent review by  
9 somebody that wouldn't have any preconceived position on  
10 it.

11 I think Craig, I know Craig met with his  
12 people. I don't know, I think he was down there with  
13 them part of the time when they were doing this. I think  
14 he met with the people and went over each of these  
15 points. I'm almost positive he met with his team.  
16 Obviously, he had to. I think I remember him telling me  
17 he was going to <sup>by</sup> meet with the team and see what their  
18 comments were.

19 Q After they were through, did anybody else  
20 take his results of the review, form some kind of  
21 independent review on his response?

22 A I don't think so. I don't know. We had  
23 done something and he was reviewing it. And I don't know  
24 whether we reviewed the review. I really don't know. I  
25 don't recall doing that or having -- I don't recall

1 anyone doing that.

2 Q Do you know what the qualifications of his  
3 team members were?

4 A Generally, when I went down to meet them, I  
5 think, you know, a few were available at the time, were  
6 in the office there working. I think Craig had told me  
7 that they were basically people who had a significant  
8 amount of quality control or quality assurance  
9 responsibility at sites around the country, is my  
10 recollection. Some of them were still at sites but had  
11 pulled out to help with this.

12 I think they were people that were real long  
13 on practical implementation type experience, as I recall.  
14 They were, you know, sleeves-rolled-up type of guys that  
15 had been at the sites. They were not necessarily central  
16 office type personnel. They were onsite people.

17 Q Were they like management people,  
18 supervisory people, technical people?

19 A Gosh, I think they were probably, you know,  
20 people that supervised teams, quality control, quality  
21 assurance teams at sites as opposed to central office  
22 managers.

23 They obviously had, in my impression, had  
24 some technical quality assurance or quality control type  
25 of technical expertise.

1 Q Were they certified in any way, NCN 45, 223  
2 and 2.6, SMT, TCLA?

3 A This particular job?

4 Q Anything, anywhere. Were they that type of  
5 people that would were certified?

6 A I think they were people who in their career  
7 had been certified in some <sup>of</sup> these areas. There's one  
8 fellow I remember talking to the most about the concrete  
9 work. They were people who probably had been certified  
10 in their career. I don't know whether they were  
11 certified at the time they came to do this review or not.  
12 I think I got the impression they were people who had  
13 been moved up through the ranks and had been successful,  
14 good quality managers, if you will, had technical  
15 experience.

16 Q You got this, how, just by talking to them?

17 A Talking to them and things that I guess  
18 Craig told me. There would be no reason to bring in  
19 someone who wasn't qualified.

20 The whole thrust of this thing, as I said  
21 earlier, I had nothing to lose or gain with regard to how  
22 the question was answered. Because I didn't have  
23 responsibility for the construction, design area. The  
24 Stone & Webster people had nothing to gain or lose  
25 because they were just coming onboard, and neither did

1 Admiral White.

2 So it was basically a question of, hey,  
3 let's get the right answer, let's make sure the answers  
4 given <sup>are</sup> right. There was very little work going on at  
5 Watts Bar. So if someone was worried about a stop work  
6 at Watts Bar as the result of a ~~Now~~ answer to this  
7 letter, there would have been very little loss as a  
8 result of that, because there was very little work going  
9 on anyway.

10 I guess what I'm saying is that there was  
11 not a whole lot of reason to doubt, if you will, no one  
12 had anything to gain by sending in unqualified people ~~on~~  
13 ~~My~~ My impression from talking to them, impressions from  
14 what Craig told me about them was that they were  
15 qualified and were coming in at some, you know, not  
16 penalty, but at some expense to a project they were  
17 working on back home or to some inconvenience to  
18 themselves.

19 Q Was there ever a package of resumes or  
20 certifications or anything put together in that team?

21 A There might have been. I don't remember.  
22 But there might have been.

23 Q Do you know who would have that?

24 A Mr. Kelley and Mr. Houston and Lundin knew  
25 these people personally, I'm sure. They had worked with

1 them and for them in various capacity<sup>10.</sup> So I said they  
2 were -- in fact I think they may have come up with the  
3 list of folks they were bringing in.

4 Whether they had a list of resumes or not or  
5 whether I've seen a list, I don't know. I was very  
6 comfortable that they would be bringing in qualified  
7 people.

8 Q Okay. Under responses themselves, again,  
9 the responses to the individual perceptions, earlier when  
10 we talked about, at least from your opinion, what you  
11 thought that question meant and the program  
12 implementation, when we look at the responses, they're  
13 heavily programatic and program history.

14 A Individual responses? Before you were  
15 talking about the letter, I guess.

16 Q I'm talking about the attachment to the  
17 letter, each of the 11 perceptions.

18 A In your earlier comments I thought you were  
19 talking just about the cover letter. That's what I was  
20 responding to earlier

21 Q I see. Would the program be different, a  
22 response be different now? We're talking about the 11  
23 perceptions.

24 A In there you could address both program and  
25 implementation. I guess you had more room. I thought

1 before you were focusing on why didn't we address the  
2 program in the cover letter.

3 Q I wasn't saying why didn't you, I was saying  
4 would you.

5 A You could or you didn't necessarily have to.

6 Q Well, when we get to the 11 perceptions, it  
7 is noticeable that the responses go into the history or  
8 the development of TVA's program and some descriptions of  
9 the program. There's very, very little description of  
10 implementation. When it's there, it's vague. We're  
11 wondering why? Particularly with a lot of the things Dan  
12 was bringing up, there were, along the way, some very,  
13 very specific implementation questions.

14 We agreed that to talk about Appendix B we  
15 have to some how talk about implementation.

16 A That's not correct. Along the way there  
17 were not some very, very specific implementation  
18 questions. As this thing was being developed, the  
19 information we were responding to on NSRS's part was very  
20 fuzzy and very vague. It was always coming in. But the  
21 initial thing we started out with was bullet items, you  
22 know.

23 "Instructor welding program was  
24 indeterminate and records are of poor quality." That's  
25 what we were trying to answer with the first draft.

1 Information was coming in<sup>IN</sup> parallel, and we were trying to  
 2 look at it as it was coming in<sup>IN</sup> parallel. But a lot of it  
 3 was very vague initially. It was very vague to Mr. Whitt  
 4 also.

5 Q When I say "along the way," as Dan talked  
 6 earlier, somebody provided you with these employee  
 7 concerns that had some specifics where there were  
 8 implementation type problems.

9 To answer the question, I think we agree we  
 10 have to talk about implementation. We see very little  
 11 discussion of implementation either in the cover letter  
 12 or in the individual write-ups on the concerns. And my  
 13 question is, why not discuss implementation?

14 A There's no particular reason why not. As I  
 15 said, the answer evolved from a very fuzzy beginning with  
 16 respect to, fuzziness with respect to what the concern  
 17 was. And that's how the answer evolved. And as other  
 18 things came up, more specifics on implementation which  
 19 came up a month and a half after the presentation was  
 20 made to Mr. Asselstine, as those things came up, we tried  
 21 to take a look at them.

22 And in some areas like batch concreting and  
 23 some other areas that we did try to look at, when we got  
 24 a specific concern that NSRS identified with respect to  
 25 implementation, I think we did try to look right at that.

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In areas like the welding program, I think we talked more generally, because we had very a detailed program laid out and documented and submitted in other forms.

In other words, the answers we were getting very often refer to nonconformance reports and other things that were previous documentation of implementation problems that NRC had copies of, that NRC themselves had identified.

A lot of it wasn't repeated in here. But I don't think any of it was new or unknown, if you will. But what I'm saying is that some of the specifics, like these employee concerns, were coming in at the tail end of our process of trying to develop a response, trying to look at them to make sure that was no surprises, if you will, nothing that hadn't been, that would change our response or make our response inaccurate. That was the context.

Q I guess where I'm having the confusion, people like yourself, like Mr. Kelley, that should know that implementation is a major part of meeting the requirements of Appendix B, why that, even up front, wasn't a consideration, that even as things evolved, there wouldn't be some section that would say, yeah, we checked the implementation and it's okay, it's not okay,

1 we have such and such.

2 I'm questioning the absence of  
3 implementation discussion evaluation. You mentioned  
4 earlier --

5 A That's kind of a very general statement.  
6 And I haven't gone back and reviewed these individual  
7 things, but I would think there's probably some  
8 implementation discussions. Just looking at them,  
9 records I think talked a little bit about the concrete  
10 record question that was raised. That was a specific  
11 question that NSRS gave us, and that's the specific  
12 implementation question we tried to address even in the  
13 summary response.

14 But I guess my point is that we were trying  
15 to address their, initially their rather general concern,  
16 and we didn't have a lot of specifics to address it on.  
17 And in most cases, what we talked about was that we have  
18 a program, and some discrepancies have been identified,  
19 instrument line sensing, we've got programs underway to  
20 address those. And in most cases, those programs had  
21 been discussed in detail with NRC. They were not unknown  
22 type of things to them.

23 Q I agree that --

24 A Let's look at the records.

25 Q You mentioned concrete. I'm looking in here

1 for somewhere where --

2 A Let's go back to <sup>the</sup> record on page ten  
3 there. I think I noticed, just as an example, "Records  
4 are of poor quality." You talk about supports, these  
5 are -- look at the third paragraph, "Specific concerns  
6 have been identified regarding records for instrument  
7 seismic supports and concrete repair."

8 That paragraph and the following two  
9 paragraphs identify, in a fair degree of detail, those  
10 specific implementation type concerns.

11 We didn't, you know, we didn't have all of  
12 them at the time we were writing this, trying to get a  
13 response together. We did have those two, and we did try  
14 to speak to those where we had some specifics.

15 The time frame I guess on when, you know,  
16 the employee concerns matrix came in in early February,  
17 basically, Mr. Reinhart, the job of responding was kind  
18 of done and the response had been developed. And we were  
19 just, as I said before, I recall thinking that we're  
20 looking to make sure there was nothing in our summary  
21 that was inconsistent with those details.

22 Q Let me ask you about one that confuses me.  
23 It's "Nonconformance reporting does not address  
24 corrective action aspects of program."

25 A Where are you at?

1 Q Pages 19 and 20, 21.

2 A Okay.

3 Q We start off talking to people. Their  
4 concerns here are really, in an implementation way, we  
5 have a nonconformance report. And we get to the  
6 corrective action. And many think, many from our  
7 investigation that we've talked to, many think that  
8 really what was being missed were root cause and action  
9 to prevent recurrence.

10 We start off, we've talked about the nuclear  
11 quality assurance manual, we've talked about what  
12 happened in the early '70s, we've talked about kinds of  
13 different forms used to document things that are wrong,  
14 deviations, if you will, we've talked about some  
15 bi-weekly meetings, we've talked about some monthly  
16 meetings.

17 Then we end up, it says, "In conclusion, TVA  
18 has a documented program which complies with the  
19 requirements of Criterion 16 <sup>of</sup> 10 CFR 50 Appendix B."  
20 But nowhere do we get into the details of, hey, here we  
21 have several problems with root cause identification and  
22 several problems with action to prevent recurrence.  
23 Maybe if you look at the bottom of page 20, you kind of  
24 get close there.

25 A "Prior to December these NCRs were designed

1 construction deficiencies; therefore, the adequacy of  
2 generic corrective action taken for the NCRs is similar  
3 to that taken, but all those initiated..."

4 Q What does that mean, do you know? It says  
5 adequacy of generic corrective action would be similar to  
6 that. I don't see where whatever that was similar to was  
7 discussed here.

8 A In the early part of that paragraph they  
9 talk about reviews for root cause evaluations, generic  
10 implications, procedures required. "Significant CAQs can  
11 be reviewed with respect to root cause evaluations,  
12 generic implications, corrective action..."

13 Q So you see, procedure required, yes, we  
14 agree that's part of the program.

15 A "Plant staff identified nonconforming  
16 conditions discovered on tentative transferred features by  
17 initiating an OC nonconforming condition report. They  
18 were then transmitted to the office of construction for  
19 processing in accordance with office of construction  
20 procedures."

21 I pointed out there that prior to December,  
22 1985, the plant had initiated NCRs. "These NCRs  
23 predominately identified design..."

24 "The adequacy of generic corrective action  
25 is similiar..."

1 I guess we're putting in there just a little  
2 bit about what the plant did, the operations part, which  
3 I had knowledge of. But they were based on problems they  
4 had discovered with design and construction, and were  
5 saying that the other work done by design and  
6 construction, the generic corrective action taken for  
7 those would be similar to what OE and OC were doing for  
8 their own.

9 Q What was the adequacy of the corrective  
10 action? You say this is similar to that. I'm looking  
11 for what was the adequacy of the others so that I can  
12 make a correlation.

13 We're saying that apples are similar to  
14 oranges. We need to see something on the oranges to find  
15 out about the apples now.

16 A Well, I think we can go back to the bottom  
17 of page 19. They talk a little bit there about training,  
18 preliminary review by NRC in December of '85.

19 "OEC's revised program in this area was  
20 generally favorable. Further revisions to the Office of  
21 Engineering procedures are being developed to require  
22 potential generic implication reviews by OE of conditions  
23 adverse to quality prepared by Construction and Power  
24 that are submitted to OE for dispositioning.

25 These actions will serve to improve OE's

1 performance in the area of potential generic implications  
2 of reviews."

3 I think we're saying there that performance  
4 improvement was needed with respect to generic reviews,  
5 and these are the steps that were being taken to improve  
6 that.

7 Q To me, you're talking about improving the  
8 program. You're really not discussing the adequacy of  
9 what's really there. There no statement, hey, are you --

10 A The very last sentence I think gives our  
11 conclusion at the time.

12 Q That talks about the program.

13 A "There's a documented program which  
14 complies."

15 Q Right. But what about the implementation of  
16 that documented program which complies?

17 A Well, I think that answer is in the whole  
18 response, you know.

19 Q I don't see it. That's what we're looking  
20 for, and I don't see it. And if we go through a lot of  
21 these, we come to the same vague loss of implementation  
22 discussion.

23 A Well, how about your own inspection report  
24 of December of '85? That's a fairly specific thing. At  
25 the bottom of page 18.

1 Q "A preliminary review by NRC December of  
2 1985 --"

3 A Statement of fact.

4 Q -- of OE's revised program," not  
5 implementation, "in this area was generally favorable.  
6 Again, the question never was program, it was  
7 implementation. So we're looking for some discussion of  
8 implementation, which we still don't see.

9 In fact, we get close here this one sentence  
10 you were reading at the bottom of page 20. In fact,  
11 talking with Mr. McDonald who ~~at~~ told us he provided that  
12 statement, he says that generic corrective action was in  
13 very poor shape, root cause identification was in very  
14 poor shape, he wanted that put in here, and was told that  
15 we were not addressing implementation.

16 A Who told him that.

17 Q He said Mr. Kelley did.

18 A Okay, I have no knowledge of that.

19 Q So I guess that's one example we've come  
20 across. We're looking for somewhere where implementation  
21 is discussed.

22 A This didn't come across to me as being shy  
23 on implementation, I guess. In the context of developing  
24 these responses, keeping in mind that NRC has access to  
25 inspection reports, they have access to the significant

1 conditions reports and nonconformance reports, problem  
2 identification reports. Anything significant we have to  
3 document to them, i.e., implementation problems, we have  
4 to send them a report on.

5 This seems to be focusing on, it  
6 acknowledges that those things are written and it  
7 acknowledges the corrective action being taken.  
8 Corrective action is a programatic thing.

9 Q No, sir, it's an implementation thing.

10 A Yes, but you have a program that you  
11 implement. But in terms of the details, you know, you  
12 have corrective action for welding deficiencies,  
13 corrective action for records deficiencies, corrective  
14 action for all kinds of areas.

15 So what I'm saying is it's a programatic  
16 type -- you have to have a program in place that does all  
17 of these things.

18 I think that's what we were trying to  
19 stress, that there were weaknesses, they had been looked  
20 at, corrections had been taken.

21 But implementation issues, that information  
22 is available. A lot of it, NRC already has.

23 Q We were asking you the question to answer,  
24 not to have you come back and say you guys can look at  
25 all your past records.

1 We were looking for TVA to say, not that  
2 we've had a program of evolving since the 1970s. Earlier  
3 you said that's a matter of record. That's okay. but  
4 we're looking for some meat.

5 The questions raised were corrective action  
6 aspects are not appropriate with respect to  
7 nonconformance reporting. We're not seeing generic  
8 corrective action and we're not seeing identification of  
9 root causes.

10 A If the responses fall short on the  
11 implementation area. Okay. It's a judgement matter. If  
12 in NRC's judgment that we need to talk more about  
13 implementation before they'll have a comfortable feeling  
14 on this, why don't they ask or why didn't they ask then?  
15 Be specific about. Do you want to see some things, do  
16 you want more information. Ask about specific areas, and  
17 TVA will comply.

18 Q We did.

19 A That's a very common way licensing questions  
20 are answered. Hey, you didn't give us all we needed, how  
21 about implementation problems in this area, this specific  
22 area. Or why didn't you include discussion of welding  
23 records in the welding response. Ask some things that,  
24 even general questions, and come back and address those.  
25 Very often you have several iterations in response.

1 We apparently thought this was an adequate  
2 response.

3 Q Earlier you mentioned that an adequate  
4 response would then address program, possibly, but least  
5 implementation. And so we're asking you why not address  
6 implementation?

7 A I think it does to some extent, in of some  
8 areas, address implementation. I pointed out one a few  
9 minutes ago that did, you're pointing out one that in  
10 your judgment does not.

11 Q When you did, it was very, very vague.

12 A I don't think the one I pointed out a few  
13 minutes ago was very, very vague, the two specifics that  
14 we had. The perception we had was nonconformance  
15 reporting does not address corrective action aspects  
16 appropriately. That's the thing we were trying to  
17 address.

18 Q Say that again?

19 A I just read the NSRS perception,  
20 "nonconformance reporting does not address corrective  
21 action aspects appropriately."

22 Q That's what we're talking about that's  
23 programatic.

24 A That's what we're trying to address in this  
25 corporate position.

1 Q It's programatic. Remember, we just  
2 discussed it and we didn't see any implementation in  
3 there.

4 A Okay. What I'm saying is, in our judgment,  
5 <sup>the</sup> pages here ~~perspectively~~ <sup>?</sup> properly address that  
6 perception based on the information we had of that  
7 perception, based on the degree of detail we had when  
8 this was being developed.

9 What I pointed out earlier was where we had  
10 some specifics in the records area from NSRS, two  
11 specifics on supports and concrete or whatever. We did,  
12 in the executive summary, write two and three paragraphs  
13 on those specific implementation type things.

14 To characterize this as being devoid of  
15 implementation information, I don't agree with it. I  
16 think it does have some implementation. It's a matter of  
17 judgment of how much. But you have an option of asking  
18 for more.

19 Q I guessing, here's the specific and overall  
20 the comments that Dan was bringing up, we just went  
21 through these employee concerns that we related, and I  
22 think we came up with something like 77 percent of all of  
23 them that were referenced across the board were listed as  
24 being substantiated. But yet, we didn't see anything  
25 coming back in the report saying yes, have 77 percent of

1 these things substantiated. All we see are generalities.

2 A Didn't someone comment about the employee  
3 concerns program either in the initial letter or a  
4 follow-up letter up that Mr. White sent? <sup>WAS</sup> Not NRC  
5 thoroughly briefed on our employee concerns program. And  
6 not only that, but do they not actually get copies of the  
7 employee concerns?

8 Q The question we're asking you is, in regard  
9 to the NSRS perceptions, the employee concerns that your  
10 people compiled to substantiate the NSRS perceptions, the  
11 review showed about 77 percent of those as being  
12 substantiated. But yet, that fact never came out in the  
13 response from TVA, either initially or subsequently in  
14 relation to the March 20th letter.

15 A I haven't reread the letter or subsequent  
16 letter. But again, let me go back and say a couple of  
17 things. One is, NRC has been thoroughly briefed in the  
18 employee concerns program all along, okay, knew what was  
19 coming out, how many and so forth.

20 Number two is, ~~my~~ people did substantiate  
21 them. People that were responsible for the corrective  
22 action program) that were established to correct  
23 substantiated employee concerns are the ones that  
24 substantiated those concerns. My people simply took a  
25 tally.

11

1                   The last thing I want to say again is,  
 2 consider the time frame, okay? Mr. Denton wrote a letter  
 3 on the 3rd, wanted an answer on the 9th. We got an  
 4 extension, but we were still hustling to answer that  
 5 thing in a relatively short time.

6                   NSRS, between the 19th of December and early  
 7 to mid-February, was still sending in information, as  
 8 early as mid-February.

9                   We kind of had our response developed on the  
 10 initial perceptions and the initial, admittedly meager,  
 11 amount of detail they sent us. And we kind of stayed  
 12 with that.

13                   We kind of looked, again, to see if there  
 14 was anything that hadn't already been addressed in, say,  
 15 a welding corrective action program we described or  
 16 instrument sloping, anything new in the employee concerns  
 17 that were substantiated that hadn't been addressed in  
 18 those programs we had described in here.

19                   Now granted, describing a program to correct  
 20 something is programatic. But, you know, there are other  
 21 reports that describe all that's being done in that  
 22 program and all the things it's correcting, all the  
 23 implementation it's correcting. Now, whether or not you  
 24 put all that in here is kind of a judgement matter.

25                   The thing I think you keep coming back to,

1 or X the thing I keep reading into your comments is, is  
 2 there an attempt to hide that by not putting  
 3 implementation in to clog the issue. That's completely  
 4 absurd. There's nothing to hide.

5                   These things are always, very frequently  
 6 iterated on. And I think in some respects, there is  
 7 implementation, Mark. In some respects they may be more  
 8 programatic. But that's because early on we didn't have  
 9 any specifics to grab onto and to address. We would have  
 10 liked to have been more specific.

11                   They came very late in the game. You had to  
 12 have been there at the time to be aware of it.

13 Q                So when they did come, why didn't  
 14 you use them?

15 A                I said earlier that we did, the responses  
 16 had been basically developed. We did not go back and  
 17 revise the responses but we did look at what came, we  
 18 sent a team out to look for connections and highlights,  
 19 and then looked at those to see if they voided any of our  
 20 responses.

21                   We did not change the responses to  
 22 incorporate them, but we looked to see if there was  
 23 anything in our response that was erroneous as a result  
 24 of something new being discovered or something that  
 25 wasn't already known and being acted on. We were

1 comfortable, I guess, that there wasn't.

2 Q What time frame did your response address?

3 A What time frame did it address?

4 Q You mentioned time frame.

5 A You have the chronology. I haven't looked  
6 at it recently.

7 Q I'm asking you.

8 A I'm saying you have it. I haven't looked at  
9 it recently. You'll have to make your own conclusions.  
10 We started working on this thing on the 7th of January,  
11 like I said, and developed an initial, <sup>response on the bullet items</sup> I guess, on the  
12 16th or 17th.

13 And that was the kind of response that was  
14 verified and double checked by Stone & Webster's people  
15 to try to look at the employee concerns when they were  
16 sent in in early February.

17 The letter went out in March, but there was  
18 still a lot of looking going on while it was being  
19 reviewed. It was not substantially changed, as you  
20 pointed out. I guess we felt that there was no reason <sup>for</sup> ~~to~~  
21 substantiate ~~the~~ change. And that's a judgment thing.

22 Q I guess what I'm trying to ask then is, are  
23 you telling us that your response really was saying as-of  
24 late January?

25 A No, I don't think so. I think the responses

1 were considered adequate and acceptable up to the date  
2 that Mr. White signed the letter.

3 Q I see. What about other activities that  
4 were going on that really drew attention to problems?  
5 You had, I think, five thousand-plus employee concerns.  
6 Over 2,000 of those were acknowledged as safety-related.

7 Up around this ~~the~~ time frame, you had  
8 evaluated some and said yes, they're substantiated. The  
9 rate was about 50 percent. You had other activities  
10 going on. You saw a need to do a full-blown welding  
11 evaluation program because you saw some serious problems  
12 there.

13 How do you put all this stuff on the table,  
14 going in? How do you come to the conclusion that you  
15 were meeting the requirements with all this unanswered  
16 stuff out there?

17 A One of the supports for that conclusion was  
18 that we were, we had found problems, we were taking  
19 corrective action to fix those problems.

20 Q How did you do that when you had these  
21 programs ongoing that are still evaluating things that  
22 you don't know if you've have found or not?

23 A I don't understand. Are you suggesting --  
24 what are you suggesting?

25 Q You had a lot of information to show that

1 there's a high potential for problems out there that had  
2 not been identified. That's why you had this ongoing  
3 activity.

4 A I think we've stated that we expected to  
5 find more deficiencies. Right.

6 Q So how can you say that you're in compliance  
7 when you don't know about what you're going to find? But  
8 yet you have a high probability of expectation of finding  
9 something?

10 I guess what I'm saying, you have all these  
11 employee concerns undergoing evaluations, saying, hey,  
12 we're missing something here. You have a very expensive  
13 major welding evaluation going on, saying, hey, we have a  
14 high potential for problems. In fact, you found you had  
15 some very serious problems.

16 A Yes.

17 Q How did you say, with all that going on, how  
18 did you come to the conclusion that you were really  
19 meeting those requirements when you don't have the  
20 results yet?

21 A I guess it's -- well, we had the mechanisms  
22 in place to identify, evaluate and fix anything we found  
23 before that plant would be licensed or submitted for  
24 licensing.

25 And to me, that's part and parcel of what

1 compliance with Appendix B is. It's making sure you have  
2 a program that you investigate and evaluate and correct.  
3 And we were doing that, and we said all that in this  
4 response.

5 If NRC has a different judgment based on the  
6 response or a difference<sup>t</sup> conclusion, you know, we can  
7 talk about it and show you the information and so forth.  
8 That's how business is done. But that was our belief  
9 when this thing was written.

10 Q Let me ask you a question on your view of  
11 meeting the requirements of the corrective action  
12 program. Let's say you're going along looking for  
13 problems, and you find some problems and you put them in  
14 your corrective action program.

15 Somebody else comes along, like the NRC, and  
16 finds a problem that wasn't in your corrective action  
17 system. And it's a major problem.

18 Would that be a breakdown in your system?  
19 Did your system allow that to go on undetected until  
20 somebody else found it?

21 A I think the NRC always finds things we  
22 haven't found. The line organization will find and  
23 identify things, QA auditors will find and identify  
24 things, NSRS identifies and finds things, NRC inspectors  
25 identify~~s~~ and find~~s~~ things.

1                   The fact someone finds something that  
 2 someone else didn't find, you know, even if it's  
 3 significant, doesn't mean the program has broken down.  
 4 That's why you go looking to see if you can find  
 5 something to try and support the program.

6   Q               Well, by what you're saying there -- my  
 7 question to you is, do you think that whatever comes up,  
 8 whatever the magnitude, if it's gone on for a period of  
 9 time undetected, even though you had an system that  
 10 should have detected it, and some agency outside that  
 11 system finds it and brings it to your attention through  
 12 some extraordinary measures, would you say that your  
 13 system's working properly?

14   A               It could or couldn't be. Okay. It depends  
 15 on the magnitude of the item found, how widespread it is,  
 16 how important it is. The system could be working  
 17 properly and something like that be found. It also could  
 18 be an indication that the system is not working properly.

19   Q               Let me take your welding situation, for  
 20 example. I believe you documented, it has been  
 21 documented that there was a breakdown in the QA system  
 22 with respect to welding; are you aware of that?

23   A               I think you've just made that statement.

24   Q               No. Were you aware of it before I made that  
 25 statement?

1 A I was aware we had a welding program being  
2 formulated and implemented, yes, I believe it was at the  
3 time.

4 Q Are you aware today that between NRC and TVA  
5 that there's an acknowledgment that there was a major  
6 breakdown in the QA program in the welding area, welding  
7 certification?

8 A Are those the words that have been used?

9 Q The radiograph inspection?

10 A I haven't been in that close contact in it.  
11 If you're stating that as a fact, I'll accept that.

12 Q Okay. That's a fact.

13 A Is this since the letter was written?

14 Q I believe so. Does that not indicate that  
15 the QA program, corrective action system, that was in  
16 place during that time, but yet let all that go through,  
17 really had broken down?

18 A I'd have to know more of the details before  
19 I could really answer that question.

20 Q Let's say you have a system going along and  
21 you have welds being made that are improper. People are  
22 going out and inspecting those welds, improper welds,  
23 untrained inspectors go out and sign off on those  
24 welds --

25 A It may not be a corrective action program.

1 That may be just an inspection problem. Corrective  
2 action I think occurs after you identify the problem. If  
3 they weren't identifying the problem, we'd have an  
4 inspection problem.

5 Q You have a training problem, inspection  
6 problem. People are looking at the radiographs and they  
7 don't pick it up. You have a radiograph problem. All  
8 those things, right? Those are all problems. Somewhere  
9 your system has broken down; do you agree to that?

13

10 A Well, you're making the statement, so I  
11 guess -- are you asking questions or making statements?

12 Q Does that sound to you like that's a  
13 problem?

14 A It sounds like we have problems. I think  
15 you're conjecturing whether -- using the word breakdown,  
16 it depends on the seriousness of the problem and how  
17 widespread it is. I'd have to look at a very specific  
18 situation.

19 Q I've giving you your situation. This is not  
20 a hypothetical. This is TVA's situation. Improper  
21 welds, improper inspections, improper reading of  
22 radiographs.

23 A Sounds like the welding program has a  
24 problem, yes.

25 Q So, the fact that all those things were not

1 identified, what does that say about your program?

2 A The fact that they weren't identified?

3 Q They weren't identified, weren't corrected  
4 along the way.

5 A I just said it indicates the welding program  
6 has some problems.

7 Q Okay. With something like that coming out  
8 of the woodwork, if you will, later --

9 A Later.

10 Q Later. But yet you had some high level of  
11 indication that there was something like that out there,  
12 that's why you're spending all this ~~all~~ money to have  
13 this re-evaluation, how can you come out and say, oh,  
14 everything's in compliance, when we're doing a major --

15 A We ~~said~~ <sup>didn't say</sup> everything was in compliance.

16 Q How do you say you meet the requirements of  
17 Appendix B?

18 A I think we've gone over that earlier in this  
19 discussion in terms of whether we're talking about  
20 specific deficiencies, talking about overall judgement or  
21 overall compliance. I don't see much sense in beating  
22 that one again.

23 Q I don't think we're beating it again. I  
24 guess what I'm asking you, you have a major evaluation of  
25 a major area ongoing.

1 A We described that.

2 Q The results of which are not in yet. I'm  
3 wondering, when you have a choice of saying, hey, we  
4 don't know because the results aren't in, or we're  
5 in compliance, I don't see what the basis is for saying  
6 you're in compliance.

7 A I think in one of the letters, again, I  
8 haven't reviewed them, but I think Mr. White very clearly  
9 said that he was going to keep looking, and if he found  
10 something, you'd know, and the responses described the  
11 programs we had ongoing, and I think he very clearly told  
12 you that, maybe in either the initial letter or a  
13 clarification letter, that we were still looking and he  
14 was going to continue to look. And if he found  
15 significant, to use your words, breakdowns, he'd tell  
16 you. I think he was very, very clear on that.

17 MR. MURPHY: Just one thing.

18 EXAMINATION

19 BY MR. MURPHY:

20 Q To arrive at your final decision on the  
21 summary and your input to the letter, did you look at  
22 things that occurred prior to Mr. White's arrival on the  
23 scene?

24 A Prior to his arrival?

25 Q Yes.

1 A That's most of what we looked at, I believe.

2 Q Okay. I think that's probably the proper  
3 response. I think that's what you did, you looked at  
4 things that historically had happened, right? I mean you  
5 weren't looking at anything that happened after Mr.  
6 White's arrival?

7 A I tried to set the time frame in which the  
8 response was developed.

9 Q I understand that. But I mean the whole  
10 issue of perceptions. Did that not occur before White  
11 took over?

12 A Yes. You mean in terms of presentation to  
13 Commissioner Asselstine?

14 Q Sure.

15 A Yeah. That was made on the 19th of  
16 December, and Mr. White arrived on the 13th of January.

17 Q The information that you looked at to  
18 support your final decision on your corporate summaries  
19 here, that was information before Mr. White got here?

20 A I think in a large respect it was. There  
21 may have been some things that came after he got here  
22 that we looked at too. ~~But~~ I wouldn't say that there was  
23 nothing that occurred after he got here.

24 Q Let's say a vast majority; is that a pretty  
25 good assumption, that occurred before he got here?

1 A I think that's true.

2 Q When you were doing this evaluation, looking  
3 at this, did you-all generate any nonconformance reports  
4 on items that you came up with, say, an employee concern  
5 was brought to your attention and you looked at it and  
6 said, well, that sounds like it needs some looking into.  
7 Did you generate any nonconformance reports?

8 A No, the employee concerns program was  
9 supposed to do that, not us. Employee concern program  
10 has those mechanisms in it to take those concerns,  
11 evaluate them, and if they needed a nonconformance report  
12 or something, perform that documentation. That was not  
13 our job to do it.

14 Q Nobody in QA did that?

15 A No. They had an employee concern program  
16 set up to do that. I had people on loan to that program,  
17 as I recall. That was a separate program.

18 Q Did the group of people that were assigned  
19 to do these tasks, did they write up any nonconformance  
20 reports about any issues that they might have come up  
21 with during their review of these issues?

22 A I don't believe so. As I said before, they  
23 were looking at what had been done, what had been  
24 documented, what had been by others, what the connections  
25 were between that and what NSRS identified as a bullet

1 perception. I don't recall that any of them wrote an NCR  
2 or anything. I wouldn't have expected them to write an  
3 NCR.

4 There was nothing to prevent them from doing  
5 it if they thought they should have. But I wouldn't have  
6 expected them to come back with a handful of NCRs as a  
7 result. That was not what they were sent out to do.  
8 They were sent out to try and say, well, hey, given that  
9 new information and given the previous explanation NSRS  
10 has given us about their concern, is there anything new  
11 or is it just additional substantiation of their concern.

12 Q I guess I'm talking that group of people who  
13 have eventually signed off as saying that this  
14 information is correct and valid as of the 26th of  
15 February.

16 A They may have seen something in their review  
17 of the things, and write a <sup>NCR</sup> ~~NCR~~ That's more possible.  
18 I don't know for a fact that they did, but it's certainly  
19 more possible.

20 Q Do you know if your responses were delayed  
21 at all to insure that final corrective action was taken  
22 on some issues before you responded?

23 A I don't think so. I don't think that's the  
24 case, but I don't know for sure.

25 Q I only say that some because some say that

1 it says, like, 3rd of March actually was completed by  
2 10th of March. That there was some delay.

3 A No, Mr. Murphy, I really believe those  
4 schedules were entirely independent. That's my belief.  
5 I don't think there was any delay for purposes of the  
6 response, because I don't think we really knew when the  
7 response was really going to go out.

8 Q And you don't know if that was a  
9 consideration for people writing the final letter?

10 A I don't think so. I doubt it.

11 MR. ROBINSON: I have a couple of very  
12 specific questions.

13 EXAMINATION

14 BY MR. ROBINSON:

15 Q To your knowledge, Mr. Mullin, how  
16 involved was Tom Burdette in the guiding, editing or  
17 shaping of those individual technical responses?

18 A Let me think a second. Tom Burdette and Ray  
19 Newby, they were my interface with the people that were  
20 developing a response. They were checked <sup>in</sup> to make sure  
21 that they had backup material and they were properly  
22 segregating that backup material and going to have it  
23 available.

24 They certainly saw the responses. They had  
25 an opportunity to review them and then critically comment

1 if they so chose. I don't really remember to what degree  
2 they did comment or express a concern. If they had, in  
3 many areas, I feel I would have acted on it or taken it  
4 very seriously.

5 I don't really recall much in that regard.  
6 Again, at some point in time it phased away from me. We  
7 were still providing, if you will, coordination services  
8 and so forth. But at some point in time, the actual  
9 response, what was in the response, by the time it  
10 finally went out it was, you know, was no longer my  
11 responsibility.

12 To what extent he actually made comments on  
13 it, the opportunity was there. I don't really recall how  
14 much input Tom -- he could have had input with the person  
15 that was preparing the response. But my feeling would be  
16 that it's basically the responsible line organization  
17 that wrote the response.

18 We might have said, hey, try to keep it to a  
19 couple of pages, or we might have give them some  
20 guidelines on, hey, you should have some documentation  
21 available to support what you say.

22 But I don't think, I think the thought was  
23 to let the people that have responsibility for the area,  
24 the program that's fixing things in the area or that had  
25 responsibility for the area when things went wrong, let

1 them say whether it's right, wrong.

2 And Tom could look at it, Ray could look at  
3 it, I could look at it. But the whole thrust was on the  
4 manager who was responsible for the area saying, hey,  
5 it's right, it's wrong, and I'm going to take  
6 responsibility for saying it's right, if it isn't.

7 Q To your knowledge --

8 A That was the major thrust.

9 Q There may have not been one individual,  
10 whether it's Tom Burdette or not, that gathered all these  
11 final technical responses and sort of put them into his  
12 own language before they came up to you?

13 A I guess my feeling, my recollection is they  
14 were fairly individualists<sup>ic</sup>. I think that to the best of  
15 my recollection and knowledge that was the case. I don't  
16 know that anyone, at least while I was involved in it,  
17 you know, did any kind of overall review, to my  
18 knowledge, no.

19 Q You didn't specifically direct Burdette to  
20 do that?

21 A I don't recall doing that.

22 Q Okay.

23 A Did Tom say I did?

24 Q No, not necessarily.

25 A I don't recall doing it.

1 Q You don't recall him talking -- I asked this  
2 question before and you said you didn't recall. I'm  
3 talking about what the January 3rd question about meeting  
4 the requirements of Appendix B meant to him, like as a  
5 former NRC employee, QA inspector.

6 A We probably had a lot of discussions over  
7 this period, but I don't remember that.

8 Q Okay. The second specific are that I have  
9 is, on the night after the January 16th meeting here in  
10 Chattanooga, which was a meeting that was attended I  
11 guess by Mr. ~~Wickner~~<sup>Wagner</sup>, Mike Harrison, ~~Permit~~ Whitt came  
12 from NSRS. And I believe there were some late  
13 candle-burning that evening in preparing for that report?

14 A There was.

15 Q Do you remember Dick ~~DeNease~~<sup>Jwise</sup> coming to you  
16 within a day, coming to you or calling you within a day  
17 or two after that meeting regarding a phone conversation  
18 he had with an NRC lawyer pertaining to a definition of  
19 Appendix B or compliance with Appendix B?

20 A I don't remember that. He may have. Dick  
21 was, I think Dick was involved in the employee concern  
22 program at the time. He was a former NRC guy and may  
23 have been asked by Dick Gridley, I don't know, for some  
24 advice or information.

25 But did he come to me and tell me about it,

1 an NRC lawyer's comments -- NRC's lawyer?

2 Q Yes.

3 A With respect to comments with respect to  
4 compliance with Appendix B, I don't specifically recall  
5 that. I know Dick was around. But he was on a different  
6 program.

7 Q You were not planning to involve him in the  
8 activities in the preparation of the response at all?

9 A If I did, if I was, it would have been in a  
10 very peripheral sense, I think. Well, wait a minute. I  
11 think there was a time when we went up to his office, it  
12 was around the corner on the fifth floor. Dick was not a  
13 major player in this thing, let me say that.

14 There may have been some time, an occasion  
15 or two early on when we did consult with him in terms of  
16 trying to figure out what the question meant, if you  
17 will. But I don't recall the specifics.

18 I do recall his working on employee concerns  
19 and I do recall he was really strung out on it. And my  
20 impression is that we wouldn't have had an opportunity to  
21 get very much help from Dick if we had asked.

22 Q You don't recall him giving you an NRC  
23 definition of compliance with Appendix B?

24 A I don't specifically. If I do<sup>id</sup>, it would  
25 probably be in the file or something. Has he said he

1 did?

2 Q He indicated he tried to come to you with  
3 that information and was essentially told to, you know,  
4 just do your own thing.

5 A By me?

6 Q Yes?

7 A That's not correct.

8 Q That's not correct?

9 A No, sir. I needed all the help I could have  
10 gotten.

11 Q If he would have come to you with that, you  
12 would have welcomed that?

13 A (Nodding head affirmatively.)

14 Again, I had no axe to grind either way  
15 except to try and get an answer. The problems that were  
16 being identified and perceptions were in the construction  
17 and design area, that was not my direct responsibility.

18 Like I say, I had been asked to try and put  
19 a program together. But in terms of historical problems  
20 in those areas, I had no axe to grind. I ~~was not~~ <sup>had not been</sup>  
21 responsible for those ~~for~~ <sup>or</sup> fixing them.

22 I was simply responsible for trying to get  
23 an accurate, honest answer to the question. But I don't  
24 remember Dick trying to give me anything at all.

25 I think I my personality and recollection

1 would be to welcome anything like that as opposed to  
2 rebuffing him.

3 MR. ROBINSON: I don't have anything  
4 further.

5 MR. MURPHY: I have nothing else, just  
6 closing remarks. Mr. Mullin, have I or any other NRC  
7 representative threatened you or offered you any rewards  
8 in return for this statement?

9 THE WITNESS: No.

10 MR. MURPHY: Have you given this statement  
11 freely and voluntarily?

12 THE WITNESS: Yes.

13 MR. MURPHY: Is there anything further you'd  
14 like to add to the record?

15 THE WITNESS: No.

16 MR. MURPHY: We'd like to add that we thank  
17 you for your time. We've taken considerably more than an  
18 hour and a half, and we appreciate your patience in  
19 affording us an opportunity to talk with you.

20 This interview is now concluded at 12:20  
21 p.m. May 13, 1987.

22 END OF INTERVIEW

23

24

25

*R. Mullin*  
4/22/87

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:

AN INVESTIGATIVE INTERVIEW OF: Robert J. Mullin

DOCKET NO:

PLACE: Lookout Place  
Chattanooga, Tennessee

DATE: May 14, 1987

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

(Sigt) *Sheila D. Wilson*  
(Typed) Sheila D. Wilson

Official Reporter

Reporter's Affiliation

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