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UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

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INVESTIGATIVE INTERVIEW CRAIG D. LUNDIN

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EXHIBIT 53

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1 EXAMINATION 2 BY_MR__MURPHY: 3 Por the record, it is now 1:04 p.m. February 26, 1987. This is an interview of Craig D. Lundin who is 5 employed by Stone Webster Engineering Corporation. The location of this interview is Chattanooga, Tennessee. 6 7 Present at this interview are: Lynn Williamson, Larry Robinson, Leo Morton, John Craig and Dan Purphy. 8 9 As agreed, this is being transcribed by a 10 court reporter. The subject matter of this interview 11 concerns TVA's March 20th, 1986 response to the NRC 12 regarding their compliance with 10 CFR 50 Appendix 3. 13 Mr. Lundin, would you please stand and raise your right hand? 14 15 (Witness complies.) 16 Do you swear or affirm the information you 17 are about to give is the truth, the whole truth and nothing but the truth so help you God? 18 19 A I do. 20 Mr. Lundin, would you be kind enough to 21 furnish this group with a little bit of background 22 information about yourself as far as education and job 23 experience is concerned? 24 Α Certainly. I graduated from Lowell 25 Technological Institute in 1968 with a degree in

mechanical enigneering. At that time, I was employed as a non-destructive test technician at Avco in the aerospace field.

I, then, went into the Portsmouth Naval

2.5

Shippard in the Cuality Assurance Department. And during that period of time -- I was there for five years, progressively, in more responsible positions in the Quality Assurance and inspection field. When I left in 1973, I was the head of the nuclear inspection.

With Stone Webster I was, initially, employed in our Boston office with the Field Ouality

Control Division performing special tasks, which included audits of our commercial nuclear power plant job sites.

Subsequently, I was assigned as the assistant superintendent of Ouality Control at the Peaver Valley Power Station. I was transferred in that same position to Shorum Muclear Power Station. I became the superintendent of Quality Control on the job site at North Anna. And subsequently, I was the Ouality Assurance manager for our River Bend project.

In 1982, I was promoted to the chief engineer of the Quality Systems Division in the corporation in Boston.

Since then, I have, as well as running that division, performed several special projects. "ost

1 notably, the re-inspection, construction re-inspection at 2 Diable Canyon, the diesel inspection of the -- I have 3 done tasks at Clinton and participated in the Vocle readiness review as a technical expert. 5 And subsequently, I have been involved with TVA nearly full-time since January of '86. 6 7 0 Would you describe for us your role in three 8 separate items. Pirst, the technical reviews performed 9 by the line organization regarding the MSR perceptions, 10 your part in the March 20th, 1986 letter, and the work 11 that we're told that a small group of individuals under 12 your supervision performed, what has been described as an independent review at Watts Bar for TVA. If you would, 13 14 the order in which you became involved in each one of 15 these particular items. 16 A During our initial involvement in January of 17 '86, I was a member of a team which was doing a review of 18 the negative correspondence that TVA had received to 19 determine some areas where a new management staff would 20 look to find their problems. 21 0 Is this what, ultimately, people referred to 22 as the Nace report? 23 A

project manager.

Fine.

24

25

0

I think so, because Larry was acting as

We elected John Kirkebo the leader of that group. During that participation, I was asked separately by the staff, the nuclear manager staff, to review the responses that were being prepared to the NSRS's perceptions that had been sent over.

It was my understanding at that time that they somehow had been issued to the Office of Nuclear Power and required a response. So, a response was being prepared. I was asked to review the responses.

Upon review of the responses, I had sporadic involvement over the next few weeks in attempts to resolve my comments. I had several concerns as to the adequacies of the responses. I couldn't comfortably, as an outsider, understand the total responses that were being given. That continued on a part-time basis while those responses were prepared through Pebruary.

It was considered at that time, and I can't tell you now whether Dick Kelley suggested it to me or I suggested it to Dick, that we somehow have to have some facts for me to be able to concur or somehow believe the answers that are being given, one way or the other.

And it was recommended that we do a short-term evaluation of the specific concerns to get some input for me to be able to have confidence, one way or the other, that we had problems, didn't have problems

1 and to what extent were those problems.

I felt that I could sufficiently act on indicators. And I felt that we could get the indicators by just having the right kind of people, asking the right kinds of questions and looking at the right kind of documents. That's, essentially, what we did in parallel with my involvement in the letter.

Q Okay.

I assembled the 10 or 11 people. I believe you have the list. These people were all senior level site people. They all had near term operating plant experience from their current assignments. They had regulatory interface experience, and I felt they could give me some ideas as to whether the conclusions were appropriate.

The chronology I'm not sure of. But at the same time, I did draft an initial letter based in a response for TVA, which I felt was how it needed to be answered at that time. That was not the letter that went out, but that was based on the answers they had and based on what I considered to be the issues at the time.

I am flip flopping back and forth between the three things you wanted me to talk about because they are intertwined.

O That's fine.

A So, I did draft a letter during that period of time. At the end of about 10 days, although, I was out at the job site talking with the people, two out of three days during that period of time, having daily discussions as to what had transpired on the various issues.

I had an afternoon meeting where I discussed and rediscussed all of our daily meetings and what we really felt about the issues that had been brought up by the MSRS and what evidence they could find to support the them as issues and to support the conclusion that 10 CPR 50 was not being followed at Watts Bar.

As a result of that, I formulated a personal opinion as to the issues as well as to the conclusion.

And I gave that conclusion in a brief memorandum, but I also gave it verbally and used that as my basis when I reviewed some drafts of the letter, some later drafts before it went out.

I do not know whether I saw the last draft of that letter before it went out. I do know I saw and commented on some drafts of that letter. It was a period of time that the letter was being prepared. In fact, I'm fairly sure that I did not see the final letter, but I had seen earlier drafts prior to its issuance.

That was my whole involvement in the March

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1
      20th letter.
                   Do you need any more information on that
3
      group?
      Q
                   The 10 or 11 people you had assembled?
      Λ
                   Yes.
6
      0
                   I have not seen the list of names myself,
7
      and I don't --
 8
      A
                   It was an inspection --
9
      0
                   I was here when --
10
                   We did gather the names. Now, I don't know
      A
11
      who they got given to at that time.
12
      Q
                   Okay.
13
                   MR. WILLIAMSON: I think I saw those.
14
      BY_MR._UILLIAUSQU:
15
                   Can I go back with you just a little bit?
16
      Α
                   Sure.
17
                   Por lack of a better term, the Nace report
      which is a systematic analysis of identified issues?
18
19
                   I like that name.
20
      0
                   You participated in that?
21
      A
                   Oh, yes.
22
      0
                    What was your role in responding to these
23
      concerns that had been generated? As I understand, they
24
      were complaints.
25
      A
                   We weren't generating concerns.
```

intention of this was we walked in and Steve White had iust gotten here, a whole new management group, if you will. and without -- except for I realized that there was a study done in the Pall that there was really needed some information as to where the real problems were, the root cause, if you will, or something like that. We were a team of people to try to -- if you

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don't mind the analogy, what rocks do you turn over?

Do you spend a lot of your effort in an area that might be a small problem where you might have some big problems?

So we sat down, a few of us that first arrived and said, "How do we go about this?"

And we determined that we would look at all negative correspondence, come up with some method of coding it that we could trend it and say, what does everybody say bad about TVA more often, and that will have some, you know, that may be an indicator.

We ended up assembling an order of magnitude of maybe 20 people doing this reading and coding, and every document was read and circled.

In fact, part of my job was to identify what documents we should review, go through the printouts of companies and organizations and individuals that corresponded with TVA, and select the ones that we wanted to see their correspondence list just in case there might have been an evaluation.

pulled it because there could have very well been an evaluation done. Any congressional correspondence was automatically pulled because it could have been a complaint by an employee or an organization in the valley.

And our intent -- and I participated in the development of the program and in the conclusions of the program. I didn't do as much coding as some of the people did because of the other things I was asked to do.

And the intention, and I believe we met it.

In fact, I believe that more today than I did then, was
to come up with a top 10, if you will, of things. Here's
the issues that you probably ought to be looking at to
see what they are.

I can't name them in order off the top of my head, but we did it in three different ways. But by coding it, we went into the issues and we tested our coding method and felt it would probably do the job, and we feed it into the computer.

Secondly, we did it as individuals.

Because, now, by this time, all these people had read a lot of this correspondence.

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1
                   So, the other method we used to look for a
      correlation was we split up into three groups. And each
2
3
      of the three groups came up with their -- strictly by
      vote, their top 10 from all their different readings.
5
                   And then, we got together as a group, and we
      found all three groups had an almost identical top 10.
6
7
      And then, we punched the computer, and the computer had,
8
      essentially, the same top 10.
                   So, we felt comfortable that we had
a
10
      identified the issues that really needed to be dealt
      with. And that was lines of authority, you know, basic
11
12
      management things, for the most part, independence
13
      issues. Because the things that people had problems with
14
      were only manifestations of the those things, really.
15
                   Were you not brought in because your
16
      expertise in QA/QC?
17
      Α
                  I expected so.
18
      Q
                   The document says Quality Assurance and
19
      Quality Control management. I guess, this is listing the
      specialties of all of the team members?
20
                   Yes. As I said earlier, I have had a lot of
21
      A
22
      different positions over the years in QA. So, I just put
23
      general OA.
24
      0
                   That's your area of expertise?
2.5
      A
                   That is my area of expertise, inspection and
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1
      quality assurance.
2
      Q
                  You indicated that you also had some input
      into the top 10, as it were conclusions, that were
3
      reached in the Nace report.
 5
      A
                   Those conclusions were pointers. The
6
      intention was to tell management, "This is where I think
7
      you need to look. These are the issues that need to be
 8
      addressed immeditably here. "
9
      0
                  Who is management?
10
      A
                   Steve White.
11
                   This went to Mr. Nace, who was a special
      Q
12
      assistant, I quess, at that time?
13
      A
               Yes, he was on the team of advisors that was
14
      being used.
15
                   So that the purpose of this was to inform
      Q
16
      Mr. White of the --
17
      A
                  TVA management.
18
                   TVA management of the areas -- I believe
19
      they call them issues or concerns within TVA that you
20
      folks had identified, and you felt that some
21
      resolution --
22
                   That someone else had identified and that we
23
      felt those were the types of things that seemed to run as
24
      a common denominator of all of the things where people
25
```

had --

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1
                   Did you discuss the results with Mr. Mace?
      Q
                   I don't know whether I, personally, was
 2
3
      involved with the discussion. I can't remember.
      Q
                   Was Mr. White or TVA management?
 5
                   Certainly not -- I did rat talk to Steve
      White about it at all, no. At this point in time, I was
6
 7
      a member of that team.
 8
                   My contact -- I had no centact with that
9
      ma. ement group as it pertained to this. My contacts
10
      were mostly as a result of other things I was doing, and
11
      this was not discussed.
12
                   Based on the information -- was that your
      Q
13
      your first experience in working with TVA?
14
      Α
                   Yes, the very first.
                   Based on the results of the conclusions that
15
16
      you folks drew as the top 10, as you say, you mentioned
17
      lack of management, control direction, lack of quality
18
      assurance overview and basic program weaknesses, quality
19
      assurance program weaknesses, inadequacy of problems,
20
      evaluation and corrective action, you mentioned this as
21
      being a high degree of consensus among the team members
22
      that these were problem areas.
23
                   Were any of these surprises to you based on
24
      having just come into TVA and the magnitude of these
25
      problems?
```

1 Probably. I say that because, you know, I 2 had no experience with TVA. And I didn't, other than 3 reading the newpapers in recent months before that, you know, I never knew them in -- never had enough 5 information to know whether they were good, bad or 6 indifferent in any of these. But you had been with River Bend and Yogle 7 8 and Clinton and so many other places that had been 9 extensively involved in OA programs, you had something to 10 compare this program to? Tight. At the time -- oh, certainly, 11 12 that's ~~ 1 ke I say, that is my expertise, I like to 1? think. 14 Û I quess what I am asking is, what was your 15 initial reacton when you concluded your review? 16 Well, this review was not of the program but A 17 of all, you know, NRC violations and things and to try to 18 see if there was something that would have tripped it 19 off. 20 If I see a certain type of problem re-arise, 21 you know, from my experience I have an idea of what hight 22 cause that, and that's how it was coded. 23 So, my initial thought was that the controls 24 built into some of the programs in some of the layers

were not all working as they should. Now, that usually

points to two kinds of problems.

One is that there are weaknesses in the program or failures in the program or the implementation of that program isn't being controlled enough that it does its job.

I was surprised that, I guess, TVA, a utility with this many nuclear power plants, had these kinds of problems. That was my surprise. You know, you normally expected them to be, you know, one of the leading utilities.

When you say "Problems," is that in the program, the implementation or the process?

A I would say in the process. All the problems I saw were process problems. As you know, I later got to be involved in some of the procedures. And I have, yet, to find an inadequate procedure.

But the implementation of those procedures, and maybe some of the control programs -- I believe when you read the QA oversight where the oversite programs were not as strong as they should have been, in my opinion, to make sure the things happened. The programs were implemented.

As we are seeing, now, they generally worked. But because of some of those things you see, you ended up with some breakdowns. We have found some

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1
       specific areas.
 2
                    Now, we did determine that the issues were
 3
       real issues.
       0
                    Which issues?
 5
                    The issues -- I am flip flopping, now. Like
      A
      the NSRS's issues. The NSRS's issues were real issues.
 6
      They all were real issues. Some more significant than
 7
      others, but those issues make you draw that conclusion.
 8
 9
                    And my answer was, no, they did not have
      enough information to draw that conclusion at that time.
10
      And I didn't --
11
12
                    "They did not have enough information," was
      this the MSRS's people --
13
14
      A
                   Right.
15
      0
                   -- or the TVA line people who were making
      the technical reviews of these perceptions?
16
17
                   The conclusion was made by NSRS, and I am
      referring to, they did not show enough backing to those
18
      items to draw their conclusion.
19
20
                   Initially, they gave some backup to that.
      That information was very spotty, very incomplete. And
21
      then after several weeks of work, they came up with
22
23
      another document which was purported to be backup for
      those conclusions. That information, as well, was not
24
```

supportive of the conclusion, and in some cases didn't

l even support the issue.

The issues were issues. Some of them had

been closed. Some of them were old issues. There was a

time factor in there that wasn't mentioned. The types of

problems that TVA is experiencing, I think, I have

experienced just about all of them before, but not all at

the same time.

BY_MR__CRAIG:

Q What about to the same extent?

I am trying to think of a specific, but I would imagine I have some that have been just as bad. I am referring to things like where we have had the 10 CFR 5055E reports, I have had them that bad, yes. Things did not get caught when you wanted to catch them. You caught them later on.

MR. WILLIAMSON: Without being disjoined here, are there other questions about this Nace report that we are going to address, because I was going to chronologically move on to the next one, your independent review.

BY_MRA_NORTON:

Mr. Lundin, you were, I guess, regarding this whole matter in a very unique position in the three different areas you addressed.

When you went over to review the technical

responses, and then later on conducting your team 1 evaluation, was there any cross fertilization, you know, 2 in that effort with what you had seen in the systematic 3 assessment? 5 A It supported some of it, yes. The one 6 example I can think of is the inadequacy of the 7 responses, in my opinion. 8 To the corrective action? 0 9 No, to the NSRS's concerns. Α 10 Okay. 0 11 The NSRS's concerns at this time had no A 12 backing. All I could read was a one line concern. The 13 answers to those concerns prepared, in my opinion, were as inadequate as the backup given to explain the concern, 14 15 and it supported what we had found in reviewing some of the documents. And one of the criticisms had always been 16 17 that TVA is not responsive to a concern, be it a 18 regulatory concern. 19 And reviewing the TVA responses to 20 regulatory concerns, they tended to be incomplete and 21 spotty and not stand-alone type documents. Those 22 responses to the MSRS's concerns that were prepared were more examples of that as a problem. 23 24 What I found, and I have found many times

since, is that, generally, all the information is

available. It was a matter of communication, a serious 1 2 communication problem, as far as literally telling all 3 you know about a subject. My experience in the regulatory arena is, 5 just tell them what I know about the facts and tell them 6 all of the facts and everything I know and every conclusion I have drawn. Then, we have got the issue on 7 8 the table. 9 What I found there was, once again, as I 10 said earlier, spotty, appearing to be incomplete answered 11 responses. We have seen quite a bit of that since. 12 Most of my frustration in reviewing the 13 responses in the past year have been to get the information out of the person who answered it always 14 15 seems to be there. 16 The systematic assessment, that was 17 addressed as the whole TVA Nuclear Program? 18 A Yas. We went through all TVA 19 correspondence, if my memory serves me right, literally 20 dumped right out of their computer all correspondence 21 since 1978, and then sorted on that. 22 Q My partner here just showed me an attachment 23 to the report. Maybe that will help you to answer the 24 next question I am going the ask you.

The concerns that you reviewed as part of

- the systematic assessment, were quite a number of them related to Watts Bar?
- It's very difficult, as you know, of all the documents reviewed, I reviewed such a small percentage of all of the documents. I reviewed -- the largest and most significant was a Sauer report. I did those, one for each site, I think I did.

- Q What I am leading up to is that, in your opinion, was the systematic assessment effort relevant to the issue of Watts Bar?
- I didn't see any connection as far as that issue. Like I say, the only connection I saw was the manifestation of some of the things I saw in the systematic analysis. I saw that while reviewing the other thing. I saw it both on the NSRS's side and on the line organization response side.
- That's why in a sense, not in a sense, but your response mystifies me a bit. Because I think in your top 10, in the systematic assessment top 10, many of them seem to almost be taken to a great extent or in NSRS's perceptions, they seem to tally quite closely problems such as inadequacy of problem evaluation and corrective action and lack of timeliness in response to identify the problem?
- 25 A That kind of correlation, I would anticipate

that sort of a correlation. Like I say, every time I go around a corner, I run into that. Every week, it seems, I tackle another problem. And I can go right back to that and say, "It fits right into that."

You know, we did the right thing. We identified a year ago that the stuff -- if we had not done that and not targeted -- because, see, the point is, you can go and find all of your problems, and then decide what the root causes are, and then go fix them. Or you can attack those, make the changes you feel need to be made.

And everything I am doing right now, every problem when we determine the root cause, we found out that we had already fixed it.

Would it happen, again?

No, because the root cause ends up right back in there, and we fixed it a year ago when we started making the changes.

So, the idea was to do not a series function in repairing whatever the problem might be, but to do it in a parallel function. That was why that effort -- that's why I am proud of that effort, to be very frank with you.

Because, now, here I am a year later and I am in a different position, I have the weld project, you

1 know, and I am finding that, you know, the reasons for 2 having the problems, I have go back to the things that we 3 felt were probably the problems that ought to be looked at and fixed. 5 Q Agreed. 6 Do you feel today that the NSRS's perceptions, which you stated earlier did identify real 7 8 problems, were part of what you identified in the 9 systematic analysis report, the root causes of them? 10 A Most certainly. That and many other things, 11 yes, issues that have been around. 12 0 That's why I have a little bit of trouble of 13 not understanding why there wasn't -- and I realize 14 hindsight is 20/20, why when you were doing the 15 evaluation of the technical responses, at least, you didn't have this in mind to some degree, the systematic 16 17 analysis effort? 18 A Because of the systematic analysis, I 19 expected what there was in the NSRS. Remember one of our 20 problems was organization. 21 0 Right. 22 If you had showed me the organizational A 23 chart, I would have told you that a document like that 24 existed somewhere. The organization was built to make

that nappen. The polarization was there.

All you have to do is interview some people, look at the organizational chart. The NSRS was an organization which was -- or should I say a group, which was an organizational disaster to have a group like that.

That was, "Build another organization because your other one doesn't seem to be working the way you want it to." So, you tack on.

As I have been saying, and I even said this this morning on another issue, that the TVA policy is if the damn leaks, you build another damn downstream. You don't fix the damn. I like to fix the damn.

That was the case where something wasn't happening and everybody wasn't comfortable with the way it was meshing. So, another organization gets built to oversee, now, that is more remote, more communication problems, don't report in the same chain of command, guaranteed to have that result. Guaranteed. And they got that result.

Q Guaranteed to have the results that you have an organisation that would criticize Watts Bar or guaranteed to identify the issues that they --

A It's guaranteed that you would have an organization which would have a less than firm grasp on real issues and not articulate them well, and that would result in a communication gap that appears to never be

repaired because they don't report to the same boss. The independence factor becomes a personal thing with the individuals.

I have experienced it at a very small level in my on organization. I took three guys and decided that I was going to have an audit group of my own before the auditors came in from my corporation and looked at me.

They were out of control in about a week.

You know, I say "Out of control" because I had to get it
back in line and understand they worked for me. They did
my bidding. The information was for me, and I would
decide what the right answer to what their questions are.

And they did not have that organizational pyramid in TVA. It was parallel. There was no organizational pyramid where eventually it got on somebody's desk and he said, "This is the way it is."

And then, you get the personality problem which you always create in a group that large with that kind of a charter of independence. There's a question whether they will accept the answer from their boss.

So, it had degenerated at that point in time where I discussed -- when I discussed those issues with people, there was no acceptable answer. The auditor who won't accept any answer to his audit finding, that's

- 1 where we were. There was no acceptable answer to any of those. They had been given several answers, but none 2 3 were acceptable.
- It wasn't enough to fix the problem. There appeared to be some other blood letting that had to be done that nobody could characterize what had to be done 7 to satisfy.

5

6

22

23

- 8 So, consequently it becomes an issue, 9 itself. So, that was an organizational -- I considered 10 it an organizational problem.
- 11 But the problems identified were real by 0 12 them?
- 13 A They either were or had been real. To the best of my knowledge, we found evidence, maybe not as 14 severe as what they said, but certainly -- you know, one 15 16 of the issues was instrumentation. And it was clear to 17 us when we walked on site that instrumentation was a 18 problem. There was a massive instrumentation project to 19 fix instrumentation. It was easy for me to see. Whether 20 it got recognized because of them or in spite of them, 21 you know, I don't know.
 - Well, when was it that you recognized the massive instrumentation problem? You said when you walked on site.
- 25 They sold me. They said, "Rey, we have got

1 a big instrumentation project because we found problems 2 in instrumentation. " 3 Q When was that? A When? 5 0 Yes. 6 I don't know. It had to be about the same A 7 time, Pebruary, something like that. You know, that came 8 when asked about the -- you know, in talking to people 9 about instrumentation, it just came up that there was an 10 instrumentation project. 11 I asked for an explanation because I didn't 12 understand the term "Instrumentation project." Their organization is such where a project is formed, you know, 13 14 my idea of a project is, Watts Bar is a project. 15 So, once I got the communication squared 16 away, I understood what the instrumentation project was. So, that's how I found about it just in reviewing the 17 18 answers to the concerns, it just came up. 19 It had to be somewhere in Pebruary, roughly, 20 that there either was or was going to be an 21 instrumentation project to handle, and that still exists 22 today to handle that problem. 23 So, we looked into those problems to some 24 degree and the fact they were being looked at, and left

it at that. So, that is an example of an issue that was

clearly an issue.

We didn't have any idea of the magnitude at the time. We knew that somebody had enough knowledge, you know, there was enough reason to go look. But, you know, the magnitude at that time was unknown. How bad, you know, do we have a lot of it?

well, we -- the committment had been made to go find out. That was the important thing to me at that point in time.

BY_MR__ROBINSON:

- During the course of your review of the support for the NSRS's perceptions and the adequacy of the responses of the line, was there ever any point in time in your review that you felt that MSRS had, in fact, supported their perceptions?
- Well, it was never a time as far as the overall conclusion, no. But, as far as giving background so that you could chase a specific perception, yes.

 There was some that we got enough information to know where they were coming from, mostly in the second time around.
- And, I guess, I have the same question. The initial shot of inadequate and non-responsive responses from the line, did there ever come a point in time where, in your opinion, they were responsive, they addressed the

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1
      issue and they --
2
      A
                   I believe the last round I felt that, you
      know, immediately there was a lot of people commenting,
3
      so there's little changes. But, as a whole, I felt they
5
      were responsive. They had identified what the real issue
      was, and either were attacking or had attacked the root
6
      causes, if you will, of the problem.
7
8
      0
                   Okay.
9
                   Or had, at least, made a commitment to find
      A
      them, to find the root causes and attack them. Some of
10
      them, you know, some of these programs was pretty
11
12
      embryonic at the time.
13
                   But even if that situation had eventually
      Q
14
      evolved because of the -- and when I say "That
15
      situation, " I mean a reasonably adequate backing for the
16
      NSRS's responses and a reasonably adequate responsiveness
17
      to the perceptions, there was still going to be a problem
      just because of the organizational situation that it
18
19
      would never be resolved?
20
      λ
                    Right.
21
      Q
                    Do you think in view of that situation, that
22
      the representation of that situation might have been a
23
      little bit more clearly explained in the letter that was
      eventually sent to NRC?
24
```

I never considered that. Those problems are

25

Α

```
1
      difficult to explain, in my opinion. They revolve so
2
      much around personality. I am afraid that an explanation
      or an attempted explanation of that situation would only
3
      cause 500 more questions.
5
      Q
                   In your opinion, was the letter misleading
      about being in compliance with the Appendix B?
 7
      A
                   No, it wasn't to me.
                   It wasn't?
8
      0
9
      A
                   No. You know, I understood where we were.
10
      I understood, you know, what the letter meant. I
11
      understood that, you know, I felt from my experience that
12
      I was probably more adamant about the Appendix B issue,
13
      as far as the compliance with Appendix B, because that is
14
      not a line. It's a strike. So, I was more adamant about
15
      it, but I understood it.
16
                   I will tell you, there was enough issues in
17
      there that it was worth continued digging. Because, you
18
      know, if you have weaknesses, you have to look where it
19
      broke. And that was the important thing. If we have
20
      programs that are adequate but we feel they have
21
      weaknesses, you have to say, "Well, maybe it broke a few
22
      times. "
23
                    So, it's important that we turn over every
      rock and make sure that if it broke, we will find it.
24
```

How soon after you came on board did you

25

1 prepare your first draft cover letter for White? Was it 2 within a week or a couple weeks or --3 No, it wasn't that soon. It had to be a month. It's very difficult for me to remember, please understand. It had to be three weeks or a month or 5 6 possibly even more. It may have been after I had the people out there, but I doubt it. Because I felt my 7 first draft addressed it as I, personally, felt it needed 8 9 to be addressed at that time. And that was in terms of it almost being a mute point. This was something --10 11 Compliance? Q 12 Not compliance. λ 13 What being a mute point? 0 14 A As an issue. The NSRS's perceptions and the 15 result and conclusion happened in December. While all of 16 this was happening, TVA made a massive commitment and 17 turned the whole organization upside down in the nuclear 18 business and brought in new people. 19

And on my experience in the regulatory process, you know, these things are running in parallel, and all of a sudden, I made a massive commitment, a commitment that I'm not comfortable that everybody inside TVA appreciates what a commitment and change that was. And it was kind of like, well, this letter came out just before that happened and it was kind of like I

20

21

22

23

24

looked at that letter and I said, "Well, gee, yeah, that
was under the old regime."

What you're telling me is they are saying,

"Hey, I am going to look. I understand that I may have

that kind of a problem. And, now, we're going to tear

this place apart and find out where all the problems
are."

So, to me, it becomes a mute point. I mean, if we did not comply with 10 CPR 50, we are going to find out where we did not and fix it. And if we find out we did, we still have to look for where our problems areas were because we have reasons to believe they are weaknesses. And where you have weaknesses, you have breaks. You have to find those breaks.

So, in either case, the end result is the same. So, as a QA guy, I considered it a mute point when I saw that letter when I first got here with all the activity that was going on.

You wouldn't have necessarily even addressed whether you were in compliance at that point in time or not, you're just saying --

Yes. I thought in the regulatory process,

I, very frankly, was not attuned to all the pressures
that were on all sides of the issue. I felt in my
naivety that the easy answer to this would be, "Well,

obviously, you don't want an answer to this, now, because
I am doing all of this other stuff."

I didn't understand that it was not a technical issue, but a political one, in my opinion. The technical issue was, "Hey, we're going to let, you know, you're going to be watching us. We're going to tear this place apart. We're going to find everything that's under every rock, and we're going to fix what needs to be fixed. And then, we're going to move forward and you're going to agree, or I'm not moving forward."

That's where we were coming from last

January. So, I felt that the issue should have been

diffused so that we could go to work.

Q Did you remember ever expressing that philosophy to any of the members of NSRS when you were talking to them that you should have gone back with an answer right now, real quick, if I had done it, that sort of thing?

I probably expressed that it was probably a mute point because of all of the activities. I did when I talked to the guys in NSRS try to convey what I, as an outsider, was seeing happening in TVA as far as massive changes and committment. I was impressed, and I felt it needed to be passed on. I felt that they needed to understand that they were part of the reason why things

were changing.

whether I agreed technically with them or not, you know, they were one of the people who were raising their voice to say, you know, to say that there's problems. They didn't articulate them very well, and that's unfortunate. And there was the communication gap because of the organization, and that's unfortunate.

But, they still had issues, and at least, they were making noise.

And I feel it is important to tell those people, even though I disagreed with them on so many things, you know, in their approach to so many things, that it was important, however, they are one of the reasons, I am sure, all of these changes were being made.

They had to have been part of the reason, and they have to appreciate that. That's why I felt that it was a mute point, this issue, because they maybe helped make it happen, for all I know.

- O Did you sense a communication problem between you and the NSRS people when you were doing your review?
- Not while I was talking to them, no.
- Obviously, later on, I found out.
- Can you elaborate on that a little bit?

 Later on, what makes you say that there was a

1 communication problem later on? 2 A I was interviewed by the Department of Labor 3 because I, supposedly, threatened or veiled threat to individuals. 5 So, obviously, there was a communication I walked out of there and I thought we had a nice 6 qap. 7 talk, and found out later I was being hauled down here to 8 talk to DOL. So, that's what I was alluding to. 9 Q Okay. 10 BY_MR._MURPHY: 11 Would you characterize what we called the 12 "Nace report," as an independent review of, at least, the 13 negative reports or the external reports related to 14 problems within TVA? 15

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It certainly was independent. I see it more of a compilation than a report. But, certainly, how we titled it was independent. It was intended to be a compilation and a steering document as to where the problems may lie.

And as far as to try to compile being every negative, we took comments out of these letters, some of them may not have been negative comments, and we coded them because we felt there might be something in there.

So, since we did do some extrapolation of the information, I don't like to say that it was just the

```
1
      negative data that we --
2
      Q
                  Please let me correct that. I thought you
      told us early on this was all negative correspondence
 3
      that you were reviewing?
 5
      A
                   It was all correspondence. What we were
 6
      doing was trying to pick out the negative things that
      were in the correspondence.
 7
 8
                   And I'm not characterizing it. Were the
 9
      people who did that study highly qualified, in your
10
      estimate?
11
                   In my estimation, yes, they were, because I
12
      was involved in the selection and recommendation of who
13
      we might use. And we used only people that I felt
      completely comfortable reviewing the documents that they
14
15
      were reviewing, that they had done it before, they had
      been either in the engineering or QA licensing process or
16
17
      QA process or the management process in near term nuclear
18
      power plants right now today. I would have made a lot of
      noise if I felt uncomfortable about any of those guys
19
20
      doing it.
21
      Q
                   They all had good crudentials?
22
                   They all had good crudentials, in my
      A
23
      opinion, for what they were assigned to do.
24
      0
                   Would you, also, characterize that as a
```

fairly in-depth study? I think someone said you reviewed

1 some 800 documents? 2 I considered it extensive, without question. 3 I don't mind saying that I was proud of the amount of work we did in a few weeks. I don't mind saying the 5 numbers impressed ourselves when we found out how many, 6 you know, gee, we did a lot of work. It was a lot of 7 work. Therefore, it was extensive. We believed we 8 9 looked at, you know, most -- I'm not saying we couldn't 10 have missed a document, but we believed we looked at most 11 of the correspondence of an evaluation nature during the 12 period '78 through '85. I consider that extensive. 13 0 When I look at your top 10, there's a high 14 percentage of what one must have to qualify as quality 15 assurance type problems. 16 Is that a fair characterization? 17 A See, I saw most of these as management 18 problems. We used the term "QA." But being a QA quy, I find that Quality Assurance, 90 percent of it is just a 19 20 good management system. And so I see them more as 21 management problems. Even the QA problems were QA 22 management problems, for the most part. 23 BY_MR._CRAIG:

Is that because you thought that the program

Let me ask you a question.

24

25

and the procedures that TVA had -- you said a minute ago that you hadn't seen any inadequate procedure, that the paper, effectively, was there, it was a failure or a problem to adequately implement or failure to manage the implementation of a program that was in place?

A In general, that characterized the way I felt. It was a matter of the managing of the implementation -- I take management right down to the supervision of individuals in that area.

You do understand that my view is now, of course, solidified after having been involved as a line manager for the last three months in the welding project. And I am seeing the manifestation of what we talked about in that I am finding that I didn't a have bad inspector, I had an inspector that may not have been properly directed and supervised. An example of the that might be NSRS's perception of the independence of inspectors.

I couldn't find any problems of independence of inspectors in, at least, recent years. There had been a problem. And we interviewed people just to ask them, just very casual walking down the road kind interviews or whoever is helping you get some documents, talk to them about the independence issue.

And it appears, though, the independence issue is one of an individual thing. It's not

```
1
      organizational, but an understanding of the individual.
2
      That, to me, is a management problem.
 3
                   I have to somehow get my people to implement
      my policies. And if I am saying my program is
5
      independent but the guy at the bottom doesn't think he's
6
      independent, that's a management problem, not an
      inspection problem or a OA problem, if you will.
7
 8
      0
                   Can I go over these top 10 for you because I
9
      understand -- I mean, the top of the heat is lack of
10
      management, direction control, involvement and program
11
      monitoring.
12
                   Obviously, at this time point in time, you
13
      have identified one area of concern; management, right?
14
      A
                   (Nodding head affirmatively.)
15
      Q
                   Let me try a couple of these others
16
      because -- lack of quality assurance overview and basic
      program weaknesses, " I mean, can we -- I mean, it's safe
17
      to say that without good management or if we had good
18
19
      management maybe these problems wouldn't have existed.
20
                   Aren't we identifying a program, a situation
21
      or a process as opposed to who is heading this thing?
22
                   I mean, maybe I don't read that correctly.
23
                   Well, that coding would have come out of
24
      reading a lot of NRC violations or even open items that
```

seem to be repetitive in the area where some, you know,

```
what we felt a strong program would have prevented that
1
      from happening on a regular basis.
 2
 3
                   Now, that doesn't mean that it didn't catch
      it 999 out of a 1,000 times, but it seemed to not catch
      it on a regular basis. That, to me, would have been
 5
      coded as a program weakness.
 7
                   It doesn't mean I have a lousy program.
      But, certainly, I have to look for a weakness in there,
 8
      and it seems to manifest itself by something I saw in
 9
10
      those documents.
11
                   Sure. But, isn't it, in fact, this is kind
      0
12
      of -- not necessarily a consensus, but at least a
13
      majority of opinions of 11 individuals who viewed these
14
      programs that this is the order in which we feel we're
15
      concerned about, these other concerns we have?
16
                   I mean, isn't this a group of people from
      different varied backgrounds saying that, "We view this
17
18
      -- "A 25
19
                   Every one of those individuals would have to
      couch that by saying "That's assuming all of the stuff we
20
21
      read is true. "
22
                   Okay?
23
      0
                   Sure, I understand that.
24
      A
                   This is totally -- I don't know if these
25
      things are accurate. I don't know if somebody writes up
```

1 something, that it's accurate. I am only going by an 2 impression, myself. I am going with the impression that's derived from a reading document that I have no 3 knowledge whether it's true. 5 Q I understand that. BY_MR._NORTON: 6 But you know there is an awful lot of smoke 7 0 8 in this area? There's smoks. And what we're saying is 9 10 "There's the smoke and there's where you need to go look 11 for some fire. " 12 The terminology of that item is a 13 committee's words of characterizing what we meant. 14 when you say "Program weaknesses" or you know, it's a 15 term somebody put on what we're saying. 16 I say "Program weakness," that immediately 17 would say to me a weakness from a power standpoint. I 18 19 20

always expect in OA that, at least, I have the ultimate, you know, stop work authority, if nothing else. You are going to satisfy me or you're going to make me understand why the problem is not a problem, or I feel it's my responsibility to shut you down until you do.

21

22

23

24

25

That's what I say, maybe, program weakness might mean to me, do they have enough power or are they yielding that cower. There's the smoke. You go in and

you find out they had the power, but didn't use it or 1 maybe they didn't have the power. That's the type of 2 things I would be looking for. 3 That's a quality assurance related concern, 0 5 though, right? 6 But, it comes down to a quality assurance 7 related concern, but what would cause those to be 8 problems? 9 What would cause the person not to have the power would be a management problem. What would cause 10 them to not yield the power he has is a management 11 problem. It's the guy. It's the position that he's not 12 using the authority he has properly. So, it's really a 13 14 management problem. 15 See what I mean? 16 Q I understand that we're directing all these weaknesses at poor management. But, because we have poor 17 managers doesn't exclude, what I wouldn't think, from 18 saying that we have a program problem? 19 20 That gives you a potential for not having 21 your program implemented the way it ought to be. That's 22 how it manifest itself, yes. It manifest itself in welds 23 that are not the configuration that they're supposed to 24 be.

We go down here and we have "Inadequacy of

25

1	problem evaluation corrective action.
2	Certainly, that must be a quality assurance
3	type problem or concern?
4	A Well, yes.
5	Q I mean, corrective action isn't a quality
6	assurance concern?
7	A That comes straight from the fact that if
8	you get three guys in a row and they all write up the
9	same thing, they have got an acceptable answer to their
10	concern, but then the next auditor came in and had the
11	same finding. That's exactly where that comes from. I
12	happen to know where that one comes from.
13	What we found is, if you go all the way
14	back, the same findings re-occurred. Yet, in all cases,
15	an acceptable answer was given, you know. The question
16	whether this has happened to me. So, I know.
17	You give a great answer, but you don't
18	implement it like you should. And consequently, you
19	still have the problem. They tended to do that.
20	Looking at the correspondence, it looked
21	like that was one of their problems that they gave a good
22	answer, but didn't always implement that exactly as it
23	would or we wouldn't have seen it come up, again.
24	Q Quality Assurance type of problem?
25	A That is a QA type problem, no question.

```
1
                   "Lack of timeliness and responsiveness to
2
      identify problem. That is No. 4.
 3
                   Is that a Quality Assurance problem?
                   Some of those are. I mean, some of those
      A
5
      problems are Quality Assurance problems. I am
      learning -- I have learned how some of that happens in
6
 7
      the last year in this organization.
 8
                   How about "Procedure not in compliance and
9
      poor attitude towards requirements, quality and
10
      compliance. That's no. 6.
11
                   Is that a Quality Assurance problem?
12
      A
                   A good portion of that are Quality Assurance
      problems. Some of them are safety problems. Some of
13
14
      those are Quality Assurance problems.
15
      Q
                   How about "Inadequacy of preventive action,
      failure to identify root causes of problems."
16
17
                   Would you say that's a Quality Assurance
18
      problem? That's No. 7.
19
                   Some of them are Quality Assurance problems.
20
      They all have -- every one of those cast a snadow on
21
      Quality Assurance that you have to look to whether it
22
      hurts you and what it did to you.
23
      0
                   And I could go on, but I think, basically,
24
      we're running into the same things.
25
                    I mean, in the top 10, it seems to me like
```

1 there's a good number that are almost based entirely on 2 quality problems? 3 They're, basically, management problems. And every management problem affects QA and engineering 5 and everybody else. But, yes, those were what we 6 considered to be the TVA problems. And, certainly, clear 7 lines of authority affects QA, as it goes into that line. 8 Let me ask you this. Just on this 9 conversation, and tell me if I am reading you wrong, that 10 without good management you don't have a good quality 11 program? Is that what you're trying to say? 12 I mean, if we're saying that the reason for 13 all of these problems existing is poor management, 14 without good management you probably don't have --15 Good management is very important to a good A 16 Quality Assurance program. I'm not saying I haven't seen 17 some programs that did very well with poor management. I 18 have seen some poor programs that were managed very well; 19 therefore, they were successful. There's a balance 20 there. 21 Q Your number one item here was that it Yes. 22 didn't appear like you had good management within the TVA 23 structure. Is that safe to assume? 24 Well, it looked like the direction was not A

clearly -- understand, if I did that same review for any

1 utility, I would have a top 10 that looked like that.

The point is, which one smoky place do I
look first?

Α

ever seen in any problem plant or even a non-problem plant, take any plant and take seven years of correspondence and look for the negatives in it and look for trends and what might be the root cause, you would come up with a list like that, and a lot of those same things would enter.

But if I did it for another utility, I would be telling that utility, "Here's where I think you ought to look first and in some sort of order. Here's what I think the top 10 are."

And keep in mind, all that is given without any volume to it. We don't know how big that problem is. We only know that this indicates that might be a problem. It might not be very big. So, the magnitude isn't an assessment here. We don't have an assessment of magnitude.

Let me go back to what, I think, I heard you say earlier that you have seen many of these same problems at other utilities, but you have not necessarily seen them all located at one utility as you have in this?

Not all at the same time. It becomes a time

frame thing. You know, I have arm wrestled with any one of the problems that we have at Watts Bar right now, but I didn't normally have to wrestle with 10 of them at a time. Because of the process, they tend to all get identified late.

You know, I would like to have dealt with the issues as we went along. What I am finding is that there was a lot of issues dealt with, and this is given the fact that they solved a lot of problems, given the fact that they did have problems in '78 that they fixed in '80 and now is not a problem and hasn't been since. We aren't dealing in negatives here. We're focusing on negatives.

When you talk about management, are you talking about upper-level management or management throughout?

I mean, are we talking about supervisors out at the construction site? Are we talking about the Hugh Parris' and the Chuck Masons and the plant managers and things like that?

I'm not quoting from that document. When I talk about management, I am generally talking all the way down to -- maybe not to the first line supervisor, but certainly down into the site supervision, one or two levels into the site supervision.

1 We're not talking about the people who are responsible to the parent organization for getting it 2 done, and that goes fairly low. Their responsibilities 3 are to TVA. 5 0 Let me ask you a question. NSRS -- I mean, this is in all of the newspapers, I'm not bringing up 6 something new, has consistently said that when we went do 7 these technical reviews we asked the same managers, and 8 9 they used the term "Managern," to do the technical 10 reviews as they viewed as the individuals who screwed the 11 thing up to begin with. That's what they say, whether 12 it's true or not. 13 One of your problems that you identified in this particular review, call it whatever you want to call 14 15 it, was that you had poor management. 16 Right? 17 A (Nodding head affirmatively.) 18 When they assigned -- I'm not saying you 19 assigned & task for guys, but what credibility can you 20 put into the managers who are supplying information you 21 need on these technical reviews when we, at least, at 22 some point in time determined that management isn't real

How do you place any credibility to what they said, in addition, to the fact that you're asking a

23

24

25

good to begin with?

```
1
      person in some cases -- in the welding issue, which you
      asked Ken Hastings, who had been at that program for a
2
3
      long while, to tell me whether his program was adequate
      or not?
 5
                   I mean, how -- I guess, I have a little
      problem with that. How do you determine that he's
 7
      credible?
                   Pirst of all, I wouldn't do that and I
 8
 9
      haven't done that. I haven't asked the guy in the line
10
      whether his program is okay. I wouldn't do that.
11
                   But didn't TVA do that? I mean, these guys
      0
12
      responded that Ken Hastings responded on the welding
      issue, and I know he was a welding engineer at Watts Bar
13
14
      and has been for some time.
15
                   Am I wrong?
16
                   You would expect that guy to respond, but
      then you would do some validation of that response.
17
18
                   You just said you wouldn't ask him to if it
      Q
19
      was up to you?
20
                   I wouldn't ask him to evaluate the welding
21
      program at Watts Bar if he was the guy running it. No, I
22
      would not.
23
      0
                  But that occurred?
24
      A
                   I don't know of any case where that has
25
      occurred, in all honesty.
```

```
On the technical review that was prepared on
1
2
      the welding issue, we're told on the interview that Ken
      Hastings did the technical --
3
                   This is on the NSRS's concerns?
5
      Q
                   Right.
6
      A
                   He would be the guy I would have answer
7
      that, yes. I mean, he was in the line. I mean, who
      would you assign it to? You would assign it to the guy
8
9
      in the line of organization.
10
                   You're saying, would I ask Ken Hastings to
11
      do an evaluation of whether the welding program was done?
12
                   No.
13
                   But I would expect him to answer that guy's
                That's his job. If an auditor -- who does an
14
      concern.
15
      auditor send a finding to?
16
                   He sends it to the guy in line organization
17
      who is supposed to have the job to do it.
18
      Q
                   Wait a minute. Let's persue that issue.
19
      do an audit. We send it to the line organization to
20
      respond to, but don't we do something with his response?
21
                    I mean, do we just say "His response is
22
      great and we love it ??
23
      A
                    No.
24
      0
                    There's another step in that process; isn't
25
      there?
```

A That's why, you know, me having very little knowledge of what went on here, felt I needed a little more facts, independent facts, to even review those responses.

That's one of the generators of the assessment we did out at the site because I said, "I don't know whether these statements are true or these statements are true or neither are true. I have to get, at least, an impression, you know, it would take a long time to find out, but I have to get an impression one way or the other."

Q Okay.

But as far as assigning, I don't consider that the wrong process. I mean, if you have -- TVA had a concern from a group, and you have got to put it into the other guy. Yes, there should be some validation process. But at that point in time, they were just answering concerns. I did not consider that to be the part that was the management problem.

And, once again, when you decide you have a management problem, I certainly don't make an assumption that every manager is a bad manager.

Q I understand that.

A You have a management process problem, maybe you have some bad managers, but I have come into

1 situations where I have come in and taken over organizations where some of the people had some awful bad 2 3 press. But, what I found out was, in some cases they were not the right person. 5 And in other cases, they were a person implementing at the management direction they were 6 getting. And given the proper direction, they could 7 8 probably do just fine. 9 My opinion was, is the direction getting to 10 the people? Are they properly directed? Do they have 11 enough direction? 12 Sometimes a guy looks pretty bad just 13 because he isn't getting good direction. 14 Let me go back, then, to give yourself a 15 better feel for what these folks did. 16 You did your own independent review; right? 17 Yes. To try to get an impression, put the A 18 dip stick in and see what, you know. 19 Sure. Correct me if I'm wrong. The last Q 20 time we spoke you characterized your review as a 21 snapshot? 22 Α Yes, pretty much, a short period of time. 23 Q A short period of time. It wasn't an 24 in-depth review? I mean, it wasn't overall? 25 And the basis for that, as you toldd us

1 today, was to give you a better feel for what these guys 2 were telling you, because you were going to act on it at some point in time, is that correct, and say they were 3 going to send the technical reviews to you and you had to have some basis for accepting them? 5 No. I did no acceptance. All I was looking A for was impressions. Point me in a direction. Give me 7 8 some validity to some of these statements. 7 Is this a right statement? Is this a right statement? Does this appear to be a right statement? 10 11 we, generally, do this? 12 We were looking for indicators, you know. 13 had a piece of paper that told me that we weren't complying with 10 CPR 50. 14 15 So, if somebody told you that and you went 16 to a job site, you would have some process in your mind 17

So, if somebody told you that and you went to a job site, you would have some process in your mind saying -- I have some indicators that I look for, personally, to tell me whether that's being complied with. The idea that I was given a road map because I said, "Well, that conclusion was based on these concerns. So, I am going to look at the indicators in these areas."

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And I looked at those indicators, looked at some paper, talked to some people, you know. And it would have taken me three months to do it. So, instead, I had a bunch of people do it in 10 days, you know, as if

```
1
      they were me.
2
      Q
                   Was that -- you know, if I'm wrong, correct
3
      me. You told us this was to be used for you to get a
      better feel for the tech reviews, right, that were going
5
      on?
6
                   Was it intended to be characterized as an
7
      independent review to determine whether Watts Bar was in
      compliance with Appendix B or not?
8
                  No. I don't believe I ever characterized it
9
      A
10
      in that.
11
      Q
                   In your mind, did you intend that? Was it
12
      your intention this is what it would be?
13
      λ
                   No. It was my intention to be able to
14
      either validate the NSRS's conclusions or say it couldn't
15
      be concluded at this time.
16
      0
                   Okay.
17
                   That was my only intention. I really
      focused on those issues, because those seemed to be the
18
19
      ones that they were drawing the conclusion from.
20
                    I felt that the overall compliance issue, as
21
      I mentioned earlier, I had already decided that the
22
      compliance issue was a mute point, you know. So, I
23
      really wasn't thinking about compliance with 10 CPR 50.
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actions steps and programs going on, that eventually that

I believed that we were going in such major corrective

24

would be a mute point.

Right now, I was acting under the pressure to answer that letter. It was strictly pressure to answer a letter and to, at least, be able to tell TVA management, "I think NSRS is right. I think NSRS is wrong. I don't think we can make that conclusion. I don't see anything that says you're not complying. But, yes, there are some problems out there."

I am going to ask you one more question.

Based on the degree of the study, the in-depthness, we might say, of that study, it wasn't designed to say either a "Yes or no" to whether you are in compliance or not in compliance?

No way. I didn't believe I could do that.

I only -- but I believed I could probably, at least,

based on those few concerns, maybe I could come close.

But I didn't believe that I could walk out there and

decide whether it was in compliance with 10 CFR 50.

As my understanding of the letter says and which agrees with my input is, we're going to have to do some hard looking to find out where we may or may not have complied and where we may have failed in compliance.

MR. MURPHY: We're going to take a short break. It's now 2:24, and we're going to break for 15 minutes or so.