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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF OHIO  
WESTERN DIVISION

UNITED STATES OF AMERICA,	-	Docket No. 3:06-CR-712
	-	
Plaintiff,	-	Toledo, Ohio
	-	October 2, 2007
v.	-	Trial
	-	
DAVID GEISEN, et al.,	-	
	-	
Defendant.	-	

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VOLUME 3 OF 15  
TRANSCRIPT OF TRIAL  
BEFORE THE HONORABLE DAVID A. KATZ  
UNITED STATES DISTRICT JUDGE.

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1 (Commenced at 8:35 a.m.)

08:35:21 2 THE COURT: Are you ready to call your next  
3 witness, Mr. Poole?

4 MR. POOLE: We are. The government's next witness  
5 is Dr. Allen Hiser.

08:35:36 6 (The witness was sworn by the clerk.)

08:35:50 7 - - -

08:35:50 8 ALLEN HISER, PH.D., DIRECT EXAMINATION

9 BY MR. POOLE:

10 Q. Good morning, Dr. Hiser. Would state your full name  
11 and spell it for the record?

12 A. My name is Allen Lee Hiser, Jr. A-l-l-e-n, L-e-e,  
08:36:03 13 H-i-s-e-r.

08:36:03 14 Q. Dr. Hiser, where do you work?

15 A. I'm employed by the Nuclear Regulatory Commission in the  
08:36:09 16 Office of Nuclear Reactor Regulation.

08:36:11 17 Q. What do you do there?

08:36:13 18 A. I'm a branch chief in the Office of Nuclear Reactor  
08:36:23 19 Regulation. The branch I'm the head of is the Steam Generator  
08:36:28 20 Integrity and Chemical Engineering Branch.

08:36:31 21 Q. You may have had a bit of coffee this morning. Feel  
22 free to take your time. You don't have to rush.

08:36:45 23 What are your duties there?

08:36:47 24 A. I'm a first line supervisor of about eight engineers.  
25 We deal with materials-related degradation issues and chemical

1 engineering issues with nuclear plants.

08:37:00 2 Q. And is that the job you had in 2001?

08:37:04 3 A. No. At that point I was materials engineer in the same  
4 office, but I was a technical reviewer at that point.

08:37:19 5 Q. Would you tell the jury how long you have been with the  
08:37:24 6 Nuclear Regulatory Commission?

08:37:25 7 A. This is my 18th year with the NRC.

08:37:28 8 Q. What jobs have you held?

08:37:31 9 A. I have been in the Office of Nuclear Regulatory  
10 Research, which does a lot of research-related activities on  
08:37:41 11 materials degradation. I've been a technical reviewer in the  
08:37:45 12 Office of Nuclear Reactor Regulation and was -- have also been a  
13 supervisor in the Office of Research and now in the Office of  
08:37:54 14 Regulation.

08:37:56 15 Q. Tell the jury about your educational background.

08:38:00 16 A. I have three engineering degrees: I have a bachelor of  
17 science and master of science degree in mechanical engineering,  
08:38:08 18 and I have a Ph.D. in material science and engineering.

19 Q. What institutions did you get those degrees from?

20 A. The mechanical engineering degrees were from the  
21 University of Maryland. The doctorate was from the Johns  
22 Hopkins University in Baltimore.

23 Q. Were you involved in the development of Bulletin  
08:38:31 24 2001-01?

08:38:31 25 A. I was the lead technical reviewer, which principally

1 means I was the head engineer for the bulletin. I developed  
08:38:38 2 the text of the bulletin, reviewed the operating experience that  
3 preceded the bulletin, and guided the document through our  
08:38:47 4 bureaucracy to get it issued. Then I was the lead engineer for  
08:38:52 5 reviewing the submittals by licensees and providing  
08:38:57 6 recommendation to our management on additional actions we should  
7 take if they were necessary.

08:39:04 8 MR. POOLE: Your Honor, the bulletin's been  
9 admitted into evidence. I'm going to display the first page to  
10 the jury at this time.

08:39:22 11 MR. HIBEY: Could those be identified by exhibit  
12 for us?

13 MR. POOLE: That's Exhibit 29, Counsel.

08:39:27 14 MR. HIBEY: Thank you.

08:39:31 15 BY MR. POOLE:

16 Q. Would you tell the jury specifically what did the  
08:39:37 17 bulletin do and what was its goal?

08:39:42 18 A. What the bulletin did was request information from  
08:39:46 19 licensees that would enable us to determine the condition of  
20 their vessel head, whether they had cracking in the nozzles or  
21 whether it was unlikely they would have cracking. The bulletin  
22 was an information request. I did not dictate any actions by  
08:40:04 23 licensees other than the fact that they were required to provide  
08:40:08 24 us with information.

08:40:09 25 Q. Did it attempt to categorize the different plants

1 according to susceptibility?

2 A. From initial review of operating experience and from  
08:40:22 3 engineering analysis of data, there was a time and temperature  
4 correlation that was developed, and from that we were able to  
5 determine that some plants were potentially more susceptible to  
6 this cracking and some plants were -- tended to have a low  
08:40:39 7 susceptibility, and then there were some that were in the middle  
8 that we didn't expect that cracking was likely in the short  
9 term, but we would not be surprised if it were to be found.

08:40:51 10 Q. So were older plants with higher temperatures more or  
11 less susceptible?

12 A. Higher temperatures, higher operating time would  
08:41:00 13 increase a plant's susceptibility, so it would make it much more  
14 likely that they would experience cracking. A combination of  
08:41:08 15 high temperature and long operating time would push the plant  
16 near the top of the list.

08:41:22 17 Q. Are there other factors that relate to susceptibility  
08:41:25 18 that weren't captured in the bulletin's ranking system?

19 A. There were many factors: Residual stress, material, the  
20 processing history, factors that we maybe now could include in  
21 the susceptibility ranking but probably other factors that we  
22 would not have a way to add in the equation.

23 Q. So at that time you went with time and temperature?

24 A. Those were the -- those were, and I think at this point  
25 still are, the primary variables. That still is what guides a

08:42:01 1 lot of the regulation that we have in this area, is the time and  
08:42:04 2 temperature relationship.

08:42:07 3 Q. Can you tell the jury how it is that older plants and  
08:42:12 4 plants that operate at higher temperatures are more susceptible?

08:42:19 5 A. Well, at the higher temperatures, material just exhibits  
6 a higher propensity for cracking. Longer operating time --

7 Well, the phenomenon of cracking has two stages to  
08:42:34 8 it: One is like an incubation time where damage slowly  
08:42:39 9 accumulates into a point at which you start to get a crack to  
10 form, and then the second stage is -- represents the girth of  
08:42:48 11 the crack. So the longer you operate, the more likely that  
12 you're able to get the accumulation of damage that ultimately  
13 results in a crack forming, and the higher temperature just  
14 enables that damage to occur more rapidly as a function time.  
15 So if you have high temperature and high time, then you're much  
16 more likely to develop cracking.

08:43:14 17 Q. Now, what category was Davis-Besse in?

08:43:18 18 A. I believe when the bulletin was first issued, they were  
08:43:21 19 in the high susceptibility category.

08:43:25 20 Q. Were they right at the top?

21 A. I don't believe they were right at the top. At least  
22 from the initial information that we had when we gather  
23 information from the initial bulletin responses, I think their  
08:43:40 24 operating temperature maybe was a little higher than we  
25 anticipated. So I believe they were firmly in the high

08:43:47 1 susceptibility ranking.

08:43:49 2 Q. You mentioned that you did the technical review of the  
3 bulletin responses; is that right?

4 A. Yes, I was the lead reviewer for those.

08:43:59 5 Q. How many people were involved in reviewing the  
08:44:02 6 responses?

7 A. We had a group of four engineers all together. I was  
08:44:06 8 the lead engineer. There were three other engineers: One that  
08:44:12 9 I believe was probably at the NRC at that point five to ten  
10 years; she's now a branch chief in the Office of Research; a  
08:44:20 11 second member of the group was from our Office of Research; and  
08:44:26 12 then the third member was an employee of my group who was  
13 relatively new to the NRC but had a fairly extensive background  
14 in the Navy.

08:44:44 15 Q. How many responses did your group review?

08:44:48 16 A. Well, we -- because we were able to classify the  
08:44:53 17 responses in the three categories, my group focused on the top  
08:44:59 18 approximately 12 plants because they were the ones that we  
19 thought were most likely to be a concern. So there were  
20 probably about maybe nine or ten responses altogether that our  
08:45:11 21 group really focused on. The other two groups were handled by  
08:45:17 22 other parts of the organization.

23 Q. So your group did the high susceptibility plants?

24 A. We did the ones we thought were most important since we  
25 had the background, and we thought that we expected that the

08:45:31 1 cracking issue would be more focused on that group of 12 plants.  
08:45:36 2 That was the ones that we really focused on.

08:45:40 3 Q. What did the review consist of?  
08:45:48 4 A. The review consisted of each member of our group being  
08:45:58 5 sort of the lead for a particular plant. Each member of the  
08:46:03 6 group would review the submittal by the licensee; we would have  
08:46:13 7 one or two team meetings where we would gather all of our  
08:46:16 8 observations from our reviews and would try to come up with sort  
08:46:23 9 of a consensus on additional information that we needed or any  
08:46:28 10 conclusions that we could reach from our review of the  
08:46:36 11 responses.

08:46:43 12 Q. Do you remember Davis-Besse's response to the reviews --  
08:46:48 13 to the bulletin?  
08:46:53 14 A. Yes.

08:46:58 15 Q. Government's Exhibit 60, I will ask Dr. Hiser to  
08:47:03 16 identify it. Just tell us what that document is, please.  
08:47:08 17 A. This is Davis-Besse's response to the bulletin.

08:47:13 18 Q. What's the date?  
08:47:18 19 A. September 4, 2001.

08:47:23 20 MR. POOLE: Your Honor, we offer Government's  
08:47:28 21 Exhibit 60.  
08:47:33 22 MR. GORDON: No objection.  
08:47:38 23 THE COURT: Government's Exhibit 60, Serial Letter  
08:47:43 24 2731, will be admitted without objection.  
08:47:48 25 BY MR. POOLE:

08:47:28 1 Q. With the Court's permission I will display the first  
2 page of the bulletin for the jury. It's entitled: Response to  
08:47:42 3 NRC Bulletin, Circumferential Cracking of Reactor Pressure  
4 Vessel Head Penetration Nozzles. Is that right?

5 A. Yes.

08:47:52 6 Q. Kind of a mouthful. What do you recall about this  
7 response and your reaction to it?

08:48:00 8 A. The two main impressions related to the prior  
08:48:03 9 inspections that the licensee discussed in their response, and  
10 also their timing and expectations for their next inspection.  
08:48:14 11 Regarding the prior inspection, they indicated that they had  
08:48:21 12 been able to do a fairly good visual inspection of the head in  
13 the year 2000. It wasn't clear to us how that inspection  
08:48:33 14 compared to the inspections that were described in the bulletin,  
15 so we didn't know if they were an adequate substitute for what  
16 the bulletin was requesting or not. So that was one area we  
08:48:45 17 needed to explore with the licensee.

08:48:47 18 In addition, the bulletin had described that  
08:48:50 19 licensees should do their next inspection before the end of  
08:48:56 20 2001. In this response Davis-Besse indicated that their next  
21 outage would be April, 2002, and they did not plan to do an  
08:49:04 22 inspection before that point in time. So I guess from both  
08:49:13 23 items the inspections -- it was not clear that their prior  
08:49:16 24 inspection was adequate; and it was not clear -- or I guess it  
25 was clear that their next inspection was not consistent with the

08:49:24 1 expectations of the bulletin.

08:49:25 2 Q. Okay. Let's look at that in a little more detail.

08:49:31 3 Take a look, if you would, at page 2 of the response. I want

4 to call your attention to the highlighted language. It says

08:50:04 5 NRC Bulletin Request Item 1D. And it describes information

08:50:12 6 about head inspections.

7 Is that the information request that was contained

8 in the bulletin?

9 A. Yeah. That's -- that looks like the request that was

10 in the bulletin itself.

08:50:23 11 Q. So it asks for a description of the nozzle and head

08:50:28 12 inspections and a description of limitations?

08:50:31 13 A. Yes.

14 Q. Including impediments?

15 A. That's correct.

08:50:39 16 Q. I think it's amply clear at this point, but was that

08:50:45 17 information important to your review?

18 A. Yeah. That was the -- we have processes that prevent

19 us from requesting more information than we can demonstrate a

20 need for. This was the kind of information that was critical

21 for us in determining how effective the licensee's prior

08:51:04 22 inspections would have been. Also it would give us an

08:51:07 23 indication of how effective their next inspections were likely

08:51:11 24 to be.

08:51:19 25 Q. Let's look at the response to that request. Do you see

08:51:26 1 the language underneath the word "response"?

08:51:29 2 A. Yes.

08:51:31 3 Q. What does it say, the highlighted portion?

08:51:34 4 A. The scope of the visual inspection was to inspect the  
5 bare metal RPV head area that was accessible through the weep  
6 holes to identify --

08:51:48 7 THE COURT: You have to slow down.

08:51:54 8 A. The scope of the visual inspection was to inspect the  
9 bare metal RPV head area that was accessible through the weep  
10 holes to identify any boric acid leaks/deposits.

08:52:17 11 BY MR. POOLE:

08:52:17 12 Q. Now, do you understand that sentence -- well, what do  
13 you understand this sentence to mean?

08:52:24 14 A. Well, at this point in time my interpretation was that  
15 they were able to access the head and did a full inspection of  
16 the head.

08:52:37 17 Q. Do you view this -- did you at the time view this  
18 sentence as a description of impediments to inspection?

08:52:47 19 A. No. No. Clearly there are no impediments that are  
20 highlighted in this sentence.

08:53:13 21 Q. The sentence we've highlighted says inspections of the  
22 RPV head are performed with the HRP vessel installed in  
23 accordance with DBNPS procedure, boric acid corrosion control  
24 program. Now, what do you understand this representation about  
25 in accordance with a procedure, boric acid control program, to

1 mean? What's that tell you?

08:53:40

2 A. That tells me that it's a program that's proceduralized.  
3 There's a specific -- there's a specific method for doing the  
4 inspection. I believe that procedure would have been reviewed  
5 by the NRC at some point because it is tied to a generic letter.  
6 But in general it's a very organized, structured way of  
7 performing the inspection; so that would give it credibility.  
8 It clearly wasn't a random ad hoc inspection. It was something  
9 that was done according to a procedure, sort of like a cookbook.

08:54:09

08:54:13

10 Q. So does that increase your confidence in the inspection?

11 A. Absolutely, yes.

08:54:26

12 Q. Let's take a look at the next page. We'll highlight

08:54:35

13 some language about the 2000 inspection. It says that

08:54:42

14 inspection of the RPV head nozzles area indicated some

08:54:48

15 accumulation of boric acid deposits. What does "some

16 accumulation of boric acid deposits" indicate to you?

08:54:57

17 A. Given the experience that we had at this point in time,

18 to me that indicated likely that there were random areas of

08:55:06

19 boric acid. Some, to me, is a qualifier; it's not extensive;

20 it's not thick; it's just some areas that had boric acid. So I

21 would have anticipated -- with other plants we'd seen thin

08:55:26

22 layers, scattered patches of boron, things like that that were

23 not extensive on the head. So some accumulation would tend to

08:55:38

24 minimize my expectation of what the licensee found on the head.

08:55:43

25 Q. Now, reading that language, would you anticipate that

1 there were deposits of chunky boric acid so extensive that they  
08:55:57 2 couldn't even put a camera in through the weep hole?

08:56:00 3 A. No. Some accumulation would not have indicated to me  
4 that there was extensive accumulations.

5 Q. In fact, was that information --

08:56:09 6 MR. HIBEY: I'm going to object. He's leading the  
08:56:12 7 witness.

08:56:20 8 THE COURT: Sustained. Rephrase the question.

9 BY MR. POOLE:

10 Q. All right. This jury has heard testimony that there  
11 were deposits of chunky boric acid at the weep holes of the  
08:56:30 12 reactor vessel which prevent the inspectors from even  
08:56:35 13 introducing a camera into the head area. Is that consistent  
14 with your understanding of "some accumulation" of boric acid  
08:56:48 15 deposits?

16 A. No. This would indicate to me that they had access to  
08:56:53 17 likely 100 percent of the head and that there were few, if any,  
08:56:58 18 impediments, the wording of "some accumulation." So I would  
19 have expected clearly no impediment, no extensive boric acid,  
08:57:09 20 things that may have been more of a nuisance rather than a clear  
21 hindrance to the ability to do the inspection.

08:57:22 22 Q. In fact, was that fact ever brought to your attention in  
23 the fall of 2001 in any of the submissions?

08:57:28 24 A. No, not at any point, in spite of a lot of interactions  
25 we had with the licensee.

08:57:34 1 Q. The jury's also heard evidence that in 2000 there were  
08:57:40 2 larger boric acid deposits than in previous outages. They were  
08:57:45 3 harder, and the inspectors had to break them up with steel bars  
4 before they could actually view the head. Is that consistent  
5 with "some accumulation" of boric acid deposits?

6 A. No. That was totally inconsistent with anything we had  
7 seen at any plant and I think we would have anticipated. The  
8 boric acid we found at other -- had seen at other plants was  
9 sort of like powder; I mean, it was a very light material. The  
08:58:16 10 deposits that were from leaking nozzles was very small  
08:58:21 11 quantities adherent to the vessel head itself. But in general  
08:58:29 12 they speak here of deposits below the leaking flanges. That  
08:58:34 13 tends to be sort of like a snow powder deposit is what this  
08:58:39 14 would have -- this wording would have led me to expect, not  
08:58:45 15 something that required crowbars and things.

08:58:48 16 Q. Let's talk about that for a minute. Does this response  
08:58:52 17 attribute the boron deposits to leaking flanges?

08:58:57 18 A. Clearly. I mean, that's the intent of this wording.

19 Q. Well, let's talk about leaking flanges.

08:59:20 20 MR. POOLE: Your Honor, at this time we're going to  
21 use the three-dimensional models. They are 125 and 126.  
08:59:32 22 Yesterday we referred to them, but we had the numbers switched.  
23 So the description you have on your exhibit list is correct, and  
24 the number on the exhibit is correct, but yesterday when Mr.  
08:59:47 25 Stickan referred to them, I think he called Exhibit 125, 126,

08:59:53 1 and we wish to correct that now.

2 THE COURT: Any problem with that, gentlemen?

08:59:58 3 MR. HIBEY: No, Your Honor.

4 THE COURT: Thank you. The record will so

09:00:02 5 reflect.

09:00:11 6 The description on the exhibit list is accurate?

7 MR. POOLE: The description on the exhibit list is

09:00:17 8 accurate.

9 THE COURT: Very good. Thank you.

09:00:22 10 BY MR. POOLE:

11 Q. Dr. Hiser, I'll carry this up here, save you the walk.

09:00:27 12 Would you show the jury where flanges are?

09:00:30 13 A. The flanges are up on this part of the exhibit.

09:00:36 14 Q. We'll bring the life size flange up in a minute, but

15 when flanges leak, where do they leak to?

16 A. What generally happens, since the water inside of these

09:00:50 17 nozzles is at high temperature and high pressure, if you develop

18 a leak, the water flashes to steam. Things like boric acid that

09:00:58 19 are in the water basically fall out, sort of like snow flakes,

09:01:04 20 like I mentioned earlier. Then they would accumulate on top of

21 this insulation layer.

09:01:09 22 Q. So this layer here, what did you call that?

23 A. Vessel head insulation.

09:01:16 24 Q. And how does boric acid get from on top of the

09:01:20 25 insulation onto the reactor vessel head?

09:01:29 1 A. Well, in two ways. At the operating conditions the  
2 vessel has a lot of motion to it, a lot of vibration, so the  
3 boron or boric acid that is on top of the insulation would sort  
4 of filter down through cracks and seams in the insulation.  
5 There's an area between the nozzle and the insulation, so it  
6 would get down that way. When the plant is cooling down, so  
7 that the temperature and pressure are lower, then you might get  
8 water leakage out, and you would likely have a -- like, a flow  
9 path of water down the side of the nozzle. That would be  
10 another way that you would get boron down at that point.

09:02:08 11 Q. All right. So I'm going to set aside Exhibit 125.  
09:02:19 12 I'm going to bring up 126. When the nozzle is in the head, it  
13 looks like this, doesn't it?

09:02:29 14 A. Yes.

15 Q. Can you point to the insulation layer?

09:02:31 16 A. That would be this part.

17 Q. And then the reactor vessel head?

09:02:35 18 A. That's this part.

19 Q. That's the curved part?

20 A. Yes.

21 Q. I'm going to set aside the insulation in the reactor  
22 vessel head. Would you explain to the jury where the leakage  
23 occurs in the flange?

24 A. The flange would be at this area. Clearly this is --  
25 this is metal, so there's no leakage that's going to occur

09:02:57 1 there. Two pieces here are bolted together; generally there's  
2 an O-ring of some sort that's in between to prevent the water  
3 from leaking out.

09:03:10 4 Q. But they do leak, notwithstanding the design is not  
5 supposed to leak?

6 A. Well, sometimes they leak. I think various plants have  
7 different operating experience. Leaks of this sort are not  
09:03:26 8 unexpected or atypical.

09:03:29 9 Q. So if it's operating properly, where is the pressure  
10 contained?

09:03:34 11 A. It's within this cylindrical area.

12 Q. And if there's a leak, how does it escape?

13 A. A leak at the flange would be up in this area, so it  
14 would be -- and the insulation is down here, so it would be  
15 above the insulation.

16 Q. All right. Thank you.

09:04:43 17 Let's look at some language from the same page.  
18 You see on the page there where it says subsequent review of  
09:04:57 19 videotape results?

20 A. Yes.

09:05:02 21 Q. And this was included in the first bulletin response; is  
22 that right?

23 A. Yes, that's correct.

09:05:08 24 Q. And it says: This review determined that indications  
25 such as those that would result from RPV head penetration

1 leakage were not evident. Again, is there any indication there  
2 about the large amounts of boric acid that were on the head in  
09:05:28 3 2000?

09:05:30 4 A. No, there's no indication of impediments or anything  
5 that would restrict drawing that conclusion. In addition, it  
6 indicated to me that the licensee had been deliberate in its  
09:05:42 7 efforts to go back and review all the available information that  
8 it had.

09:05:47 9 Q. Okay. Well, let's talk about an inspection, the kind of  
09:05:53 10 inspection that would find a leaking nozzle. The jury has seen  
11 the indications that were present at Oconee. Would you  
09:06:05 12 describe them, please?

09:06:06 13 A. Very small. I believe the worst case was about one  
09:06:11 14 cubic inch of boric acid that was attributable to a nozzle leak.  
15 That was reflected in the bulletin as one of the indications  
16 that people should look for.

17 In addition, the deposits are generally on the  
18 lower side of the nozzle. Since the head has a slope to it,  
09:06:29 19 gravity would pull the deposit down to the bottom side. The  
20 one description that we used in the bulletin was popcorn-like  
09:06:40 21 appearance because it sort of had a fluffy -- like a popcorn  
09:06:45 22 kernel appearance to it.

09:06:56 23 Q. In order to find the small amounts of boric acid that  
24 you're talking about, do you need to look --

09:07:02 25 MR. HIBEY: Objection. He's leading the witness.

1 MR. POOLE: May I finish the question?

2 THE COURT: Let's wait until he finishes before we  
09:07:09 3 object.

09:07:09 4 BY MR. POOLE:

09:07:10 5 Q. Do you need to look at the head before or after the  
09:07:13 6 cleaning is done?

09:07:15 7 A. Well, you have to look at it in what we call the  
8 as-found condition. So the first thing that you would do would  
9 be to gain access to the area, either visually or through some  
10 sort of equipment, and you would characterize the condition of  
11 it before you do anything to it. That's probably as-found  
12 condition. So it's the way that you found it at the beginning  
09:07:42 13 of the inspection activity.

09:07:50 14 Q. What effect, if any, would it have on the small boric  
09:07:53 15 acid deposits if you went in to clean with hot water and spud  
09:07:57 16 bars?

09:07:58 17 A. Well, that would sort of obliterate all the evidence  
18 that you had of leakage, so it would take the indication of  
09:08:09 19 leakage and would remove it so you would not be able to make a  
20 determination of whether or not you had RPV head nozzle leakage.  
09:08:20 21 That's why you do the as-found inspection. You have to look at  
22 it first before you do any other activity on the head.

09:08:50 23 Q. I have another question about the as-found inspection.  
09:08:59 24 Given the kind of small deposits you're talking about, what  
25 effect would boric acid falling down from above, from the

09:09:13 1 flanges, have on your ability to detect nozzle leakage?

09:09:20 2 A. It all depends. If it's the powdery snow flake type of  
09:09:34 3 boric acid, that material generally can be blown away; it's a  
09:09:41 4 loose material. One could still do the inspection with a loose  
09:09:46 5 powdery deposit from above because it would not prevent one from  
09:09:51 6 determining if one has a tightly adherent popcorn-type of  
09:09:51 7 deposit.

8 There were plants that we saw that had things like  
09:09:56 9 that where they had leaks in the flange, sort of in an area.  
10 They would use air to blow the deposits away or vacuum to vacuum  
11 the deposits, and still they would find a deposit that was  
09:10:11 12 indicative of cracking of the nozzle.

09:10:13 13 Q. But what effect would, as you say, tightly adherent  
09:10:18 14 deposits have on your ability to detect a cracked nozzle?

09:10:21 15 A. Well, I think actually the way the bulletin was laid out  
16 was that if you could not make a determination that your deposit  
09:10:29 17 was not from some other source, that one should -- I think  
09:10:35 18 engineering judgment and prudence would indicate that you should  
09:10:38 19 assume that it's from a leaking nozzle. That's what a tightly  
09:10:42 20 adherent deposit would indicate.

09:10:50 21 Q. So your staff reviewed -- well, did you review,  
09:10:55 22 personally review 2731 at this time?

09:10:58 23 A. Yes. Each member of our group reviewed every submittal  
24 from the top 12 plants.

09:11:07 25 Q. And what conclusions did you draw about that submittal,

09:11:16 1 Government's Exhibit 60?

09:11:18 2 A. In general we did not believe that the response was  
09:11:25 3 consistent with the expectations of the bulletin. In  
09:11:30 4 particular the inspection that had been performed in 2000, it  
09:11:34 5 wasn't clear to us that that was consistent with the standards  
6 that were described in the bulletin of a qualified visual  
7 inspection. Since the licensee did not plan to do an inspection  
09:11:45 8 until 2002, then that clearly did not meet with our expectation  
09:11:51 9 that licensees would have reasonable assurance of no leakage  
10 before the end of 2001. So sort of on both categories it  
11 didn't appear that the licensee met the description that was in  
12 the bulletin.

09:12:11 13 Q. And did you make a recommendation to Dr. Sheron?

09:12:18 14 A. The recommendation that we made was that the licensee  
09:12:23 15 should be contacted and that they should be encouraged to  
09:12:27 16 accelerate their inspection into 2001.

09:12:31 17 Q. And what was the reason for that?

09:12:34 18 A. The main reason was that we didn't have reasonable  
09:12:37 19 assurance that they had previously performed an inspection that  
20 was consistent with the expectations of the bulletin. So we  
21 thought that it was important that the licensee, because they  
09:12:52 22 were a high-susceptibility plant, that they would promptly do an  
23 inspection to provide assurance that they didn't have a  
09:13:00 24 potentially safety-significant issue ongoing.

25 Q. Do you know if Dr. Sheron did so?

1 A. Yes, my understanding is September 28, I believe, he  
2 had a phone call with management of Davis-Besse.

09:13:16 3 Q. Were you part of that phone call?

09:13:18 4 A. No, I was not.

09:13:24 5 Q. Were you subsequently involved in a telephone  
6 conversation with the staff at Davis-Besse?

09:13:31 7 A. Yes, we had a phone call with them on October 3, 2001.

8 Q. What was the subject of that phone call?

9 A. In the course of our group review of the response from  
09:13:46 10 Davis-Besse, we accumulated a list of questions for the  
11 licensee. We wanted to understand better their inspection in  
12 2000, and really their overall inspection history. We wanted to  
09:13:58 13 understand what their expectations were for inspectability in  
14 2002, and just trying to understand better their response,  
15 trying to get clarifications and additional information in  
09:14:14 16 certain areas.

09:14:19 17 Q. Were those requests the same requests for additional  
18 information which were answered in a subsequent supplement?

19 A. Yes. There were several supplements. And generally  
20 this first phone call sort of set the tone for the interactions,  
21 the level of information, the types of information that we were  
09:14:39 22 interested in from the licensee. So that pretty much came out  
23 of this initial phone call.

09:14:56 24 Q. Did the licensee make representations to you about the  
25 inspections that had been done during the phone call?

09:15:08 1 A. Yeah, what we were told was that they had performed 100  
09:15:11 2 percent inspection of the head, that there were five or six  
09:15:17 3 nozzles that were -- that their inspection was impeded. What I  
09:15:28 4 recollect as well was being told that the head was cleaned after  
5 the inspection. So in general it sounded to be an encouraging  
6 record of what the prior inspection was.

09:15:34 7 Q. What kind of inspection were they telling you they were  
09:15:38 8 going to do at their next shutdown?

9 A. They talked about doing a qualified visual inspection  
10 consistent with the description that was in the bulletin.

09:15:46 11 Q. What does that mean to you, a qualified visual  
12 inspection?

09:15:51 13 A. That -- qualified visual inspection as described in the  
14 bulletin has a couple of attributes to it. One is that if you  
15 were to get a leak in a nozzle that -- well, the vessel head  
09:16:06 16 where the nozzle penetrates through the head, at room  
17 temperature it's what's called an interference fit. It's  
18 metal-to-metal contact, real tight.

09:16:16 19 At operating conditions the one concern was that if  
20 you had a leak below that interference fit, then you would not  
09:16:23 21 get a deposit up to the top of the head that you could see. So  
22 one part of the qualified visual is the licensee needed to do an  
09:16:31 23 analysis to demonstrate that they would get an opening of that  
24 gap so that if you have a leak and a deposit, it would flow up  
25 to the top of the head, and you could see it. Otherwise, you

1 wouldn't have a way to determine that you had a leak in the  
2 nozzle. So that was one part of the qualified visual  
3 inspection.

4 The second part was that you had access to the  
09:16:54 5 nozzle-to-head interface, that you could see all the way around  
6 it, that there were no impediments such as insulation or any  
7 other foreign material on the head so that there were really no  
09:17:09 8 impediments to seeing that area.

9 So the qualified visual had an analysis component;  
10 it had an access component; and it had a no-impediment component  
11 it to. So there's really three parts.

09:17:24 12 Q. Is it consistent with a qualified visual examination to  
13 have left boric acid on the head in the previous outage?

09:17:38 14 A. It all depends on where the boric acid is. If it's in  
15 the areas between nozzles, then that would not impede the  
09:17:46 16 qualified visual inspection that's described in the bulletin.

09:17:49 17 If there are deposits left around nozzles, then you  
18 can't see that area. And in order to do a qualified visual,  
09:17:57 19 you had to be able to examine that area visually. If you can't  
09:18:03 20 see it, then you can't make a determination.

09:18:09 21 Q. Do you have any recollection of who it was that made the  
22 representation about 100 percent inspection except for five or  
23 six nozzles?

24 A. No, I don't recollect from the phone call. Since this  
09:18:20 25 was the first phone call with the licensees, the names, faces,

1 and voices didn't have any significance to me.

09:18:43 2 Q. Did FirstEnergy and Davis-Besse have further contacts  
3 with the Nuclear Regulatory Commission after that phone call?

4 A. Yes. Shortly -- I think maybe about a week or so after  
5 the phone call, I believe on October 11, the licensee had a  
09:19:03 6 briefing of our Commissioner of Technical Assistance.

09:19:07 7 Q. All right. We'll go over that in a minute. But did  
8 they contact others about this problem?

09:19:18 9 A. Not --

10 Q. Did they contact congressional representatives?

11 A. I have no idea. I'm not aware of any of these kinds of  
09:19:25 12 activities.

13 Q. All right. Let's talk about the technical assistance  
14 briefing. I'm going to hand the witness Government's Exhibit  
09:19:40 15 87. And I'll ask Dr. Hiser -- don't tell us what's in it, just  
09:19:50 16 tell us what that document is.

09:19:54 17 A. These are the slides that FENOC used with their --  
18 during their presentation to the Commissioner of Technical  
19 Assistance on October 11.

09:20:06 20 Q. Were you present at that briefing?

21 A. Yes. I was notified about an hour ahead of time that  
22 the meeting was being held.

09:20:17 23 Q. And is it a part of the NRC's procedure to retain  
09:20:25 24 records of such meetings?

09:20:27 25 A. Yes, generally it is.

09:20:30 1 MR. POOLE: Your Honor, we offer Government's  
09:20:34 2 Exhibit -- what's that number again?  
09:20:36 3 THE COURT: 87.  
4 MR. POOLE: 87.  
09:20:42 5 MR. HIBEY: No objection.  
09:20:45 6 MR. GORDON: No objection.  
09:20:46 7 THE COURT: Government's Exhibit 87 will be  
8 admitted without objection.  
09:20:53 9 BY MR. POOLE:  
09:20:53 10 Q. So I think you said you had a phone call on October 3.  
11 October 11 is a week later?  
09:21:00 12 A. Yes.  
09:21:02 13 Q. Who are the Commissioners of Technical Assistance?  
14 A. They are the main advisors to the commissioners on  
15 certain technical aspects of things. The NRC regulates a wide  
09:21:20 16 variety of civilian uses of nuclear material: Hospitals,  
09:21:32 17 radiography, industrial, plus nuclear reactors. So the breadth  
18 of things -- breadth of technical issues and things is very  
19 broad, so the commissioners have assistants that work in  
09:21:48 20 specific areas. So they're much more technically conversant at  
21 the detail level, but then they also advise the commissioners on  
22 what their conclusions are from the information that they  
09:22:01 23 understand. So they're advisors to the commissioners.  
09:22:09 24 Q. In your experience, was this contact usual or unusual?  
09:22:15 25 A. The contact characterized by this meeting was -- I have

1 never been exposed to anything like it before this or since  
2 then.

09:22:29 3 Q. What is your normal experience?

4 A. Well, the thing -- I guess the thing that surprised me  
5 about this meeting was that at this point --

09:22:38 6 MR. HIBEY: May I object on grounds of relevance.

09:22:41 7 THE COURT: Overruled.

09:22:43 8 A. At this point we had had two interactions with FENOC;  
9 one was the management phone call that Brian Sheron conducted on  
10 September 28; the second was the technical phone call we had on  
09:22:57 11 October 3. This seemed to be sort of jumping the loop, if you  
12 will, jumping out of the loop of the normal interactions that I  
13 would have expected. It was a surprise to me they would come in  
14 addressing such high-level Commission TAs as opposed to working  
09:23:18 15 at the staff level with us.

09:23:22 16 MR. POOLE: We're now going to display for the jury  
17 the cover page of the slide presentation.

18 BY MR. POOLE:

19 Q. Is that the cover page of the slide presentation that  
09:23:32 20 was used?

21 A. Yes.

22 Q. Is it a list of the presenters from FirstEnergy Nuclear  
09:23:39 23 Operating Company?

24 A. Yes.

25 Q. Is Dave Geisen on the list?

1 A. Yes, he is.

09:23:45 2 Q. Do you recognize him here in the courtroom?

3 A. Yes, I do.

4 Q. Would you just identify him for the jury?

09:23:51 5 A. He's the third -- yeah. That's Mr. Geisen.

6 Q. The individual at counsel table that has a beard?

7 A. Yes.

8 Q. Nothing wrong with that, is there?

9 A. No, I don't believe so.

09:24:23 10 Q. What was the nature of the presentation that was made to

09:24:26 11 the technical assistants?

09:24:30 12 A. Sort of in general character, it was a licensee making a

13 case to the technical assistants that everything was okay at

14 Davis-Besse, that they had already performed activities that met

15 the intent of the bulletin, and that they should not be -- it

09:24:51 16 wasn't necessary for them to shut down before the end of the

17 year to do an inspection. So it was intended to reassure, sort

18 of to -- well, I guess one word may be lobby the commission TAs

19 that everything was okay at Davis-Besse, that there was no need

20 for the NRC to push them to do anything more than they had

09:25:13 21 planned to do.

09:25:22 22 Q. I'm going to display to the jury the page that says

23 Facts; the last four digits is 0842.

24 A. Yes.

09:25:35 25 Q. It says, All CRDM penetrations were verified to be free

1 from popcorn-type boron deposits using video recordings from 11  
2 RFO or 12 RFO.

09:25:46 3 What does it mean to you when the representation is  
09:25:49 4 made that penetrations were verified to be free of those  
09:25:54 5 deposits?

09:25:56 6 A. Well, that meant to me that the licensee had a positive  
7 finding of no relevant deposits. The fact that they verified  
8 it, I mean, to me that meant that they had been able to see the  
09:26:13 9 relevant areas, that there were no popcorn deposits; and,  
10 therefore, they could state that they verified it. This is a  
09:26:20 11 little bit different from being able to say, well, we didn't see  
12 anything that was important because, you know, to me the fact  
13 that they said it was verified meant, yeah, that was a very  
09:26:31 14 positive finding. So it was very confirmatory of the  
15 effectiveness of their inspection and the fact that they had  
09:26:37 16 identified no relevant conditions as described in the bulletin.

09:26:44 17 Q. Now, at the time did you understand that to be a  
09:26:47 18 stronger claim than the ones that were made in the first  
09:26:50 19 bulletin response?

09:26:52 20 A. I believe so. This to me was maybe a little further  
09:27:01 21 reiteration that they reviewed their information, and they were  
22 being very diligent, very careful in reviewing things, and there  
23 was nothing there that was important.

24 Q. Do you remember who it was that made that  
09:27:16 25 representation?

1 A. No, I don't.

2 Q. All right. The following line there says, "All  
3 through-wall cracks in the industry had been verified by visual  
09:27:28 4 inspection."

5 THE COURT: Could you read that again?

09:27:30 6 BY MR. POOLE:

09:27:30 7 Q. "All through-wall cracks in the industry have been  
09:27:34 8 identified by visual inspection."

09:27:37 9 MR. POOLE: Thank you. I think I misread it. I  
10 said verified rather than identified.

09:27:43 11 BY MR. POOLE:

09:27:43 12 Q. Was that a true statement?

13 A. At this point in time, yes.

09:27:47 14 Q. So, in fact, was visual inspection effective in the  
15 industry's experience at that time?

09:27:56 16 A. Yes. It was at that point. And, actually, I believe  
09:28:00 17 still it has been: All through-wall cracks have been identified  
09:28:06 18 visually.

09:28:09 19 Q. I'm going to skip to the summary at the end. The  
20 conclusion is there is a reasonable basis for assurance that  
21 Davis-Besse is safe to operate. Which was ultimately what you  
22 were looking for in the bulletin; is that right?

23 A. That's correct. That was the intent of the bulletin, to  
24 be able to make that sort of determination for every plant.

09:28:41 25 Q. All right. At this time I'll hand up Exhibit Number

09:28:58 1 105. I'll ask Dr. Hiser not to tell us what's in it but just  
2 identify the document for us.

09:29:02 3 A. This is a document from FirstEnergy dated October 17,  
09:29:06 4 2001, serial letter 2735. Subject is: Supplemental  
5 information response to NRC Bulletin 2001-01, circumferential  
09:29:24 6 cracking of reactor pressure vessel head or vessel head  
09:29:32 7 penetration nozzles.

09:29:43 8 Q. And is that a submission that FirstEnergy sent to the  
9 NRC?

09:29:49 10 A. Yeah, I believe this was their first supplemental  
11 response to their September 4th submittal to us.

12 MR. POOLE: Your Honor, we move this exhibit,  
13 Exhibit 105, into evidence.

09:30:04 14 MR. HIBEY: No objection.

09:30:05 15 MR. GORDON: No objection.

09:30:08 16 THE COURT: Exhibit 105 will be admitted without  
17 objection. It may be displayed to the jury.

18 MR. POOLE: I'm going to ask the witness to set  
19 that aside for a minute because I skipped an exhibit.

09:31:51 20 BY MR. POOLE:

09:31:51 21 Q. At this time I'm going to hand up Government's Exhibit  
09:31:54 22 88 and ask Dr. Hiser to not tell the jury what's in it but just  
23 identify it for the Court.

24 A. It's a document entitled Commission Technical Assistant  
09:32:06 25 Briefing, October 11, 2001.

09:32:14 1 Q. Who created this document?

09:32:18 2 A. I did not.

09:32:26 3 Q. Is it a part of the ordinary course of business at the  
4 Nuclear Regulatory Commission to document meetings?

09:32:47 5 A. Normally there would be some documentation of a meeting.  
6 With this being a commission TA briefing, I'm not sure exactly  
7 what their formal processes are for things like that.

09:32:50 8 Q. Is this a memorandum that documented that contact  
9 between FirstEnergy Operating Company representatives and the  
09:32:54 10 technical assistants?

11 A. Yes.

09:33:02 12 MR. POOLE: Your Honor, we move that document into  
13 evidence.

09:33:05 14 MR. HIBEY: We'll object. We don't think this  
09:33:08 15 witness has properly established a foundation for the document.

09:34:08 16 (Discussion had off the record.)

09:34:16 17 MR. POOLE: Your Honor, should we wait for Mr.  
18 Conroy?

09:34:19 19 THE COURT: Proceed, according to Mr. Gordon.

20 MR. POOLE: Okay.

09:34:24 21 BY MR. POOLE:

09:34:25 22 Q. Dr. Hiser, was the meeting described in that document a  
09:34:30 23 meeting that you were present at?

24 A. Yes, it is.

09:34:33 25 Q. Take a look at the document, as long as you need, and

09:34:38 1 tell us, does it accurately reflect what happened at that  
09:34:41 2 meeting?

09:34:51 3 A. Yes, everything I see here is consistent with my  
09:34:55 4 recollection of the meeting.

09:34:58 5 THE COURT: Government's Exhibit 88 will be  
09:35:02 6 admitted over the objection of the defendant.

09:35:43 7 BY MR. POOLE:

09:35:43 8 Q. I'm going to display the second page to the jury.  
9 There is a portion of that document that describes the  
09:35:48 10 differences between FENOC representatives and NRC staff as they  
09:35:57 11 were described by the FENOC representatives.

12 A. Yes, I believe so.

09:36:13 13 Q. It says FENOC representatives stated that their  
09:36:17 14 analytical results differed with the staff's on several points.  
15 The staff did not believe that Davis-Besse has a qualified  
09:36:33 16 method for visual inspection of the penetration welds.  
17 Accurate?

09:36:41 18 A. We did not have a position at that point in time. We  
19 had -- only had the initial bulletin response, and we had not  
09:36:49 20 concluded that the inspection method was qualified visual, but  
21 we had not concluded that it was not either.

22 Q. All right. So still an open question in your mind at  
23 that point?

24 A. Yes, absolutely.

09:37:18 25 Q. And there's a representation about inspections,

09:37:23 1 videotaped inspections: The videotapes were of sufficient  
09:37:34 2 quality that permitted reinspection of the head looking for the  
09:37:37 3 characteristic boron deposits.

09:37:34 4 Was that your understanding at the time? Is that  
09:37:37 5 an accurate statement?

09:37:38 6 A. Everything that we'd been told up to that point, this is  
09:37:46 7 consistent with this, yes.

09:37:53 8 Q. Let's turn to the response, serial letter 2735,  
09:37:58 9 previously admitted. And I'm displaying the first page to the  
10 jury now. And there's the heading.

09:38:16 11 I believe you said this was the first supplemental  
12 response to that original response?

13 A. That's correct.

09:38:26 14 Q. And the date?

15 A. October 17, 2001.

09:38:39 16 Q. Now, did this response provide additional information  
09:38:49 17 about inspections?

09:38:50 18 A. Yes.

09:38:51 19 Q. Specifically, did it add an inspection that was not  
09:38:55 20 previously addressed? Let me show you some language. This  
21 isn't a quiz.

09:39:07 22 Displaying for the jury now language from the first  
09:39:10 23 page that says in May, 1996, during a refueling outage, the  
09:39:15 24 reactor pressure vessel head was inspected. No leakage was  
09:39:19 25 identified, and these results have been recently verified by a

09:39:25 1 rereview of the videotapes.

2 Was this the first information you received about  
3 the '96 inspection?

4 A. I don't believe they had mentioned it prior to this  
09:39:34 5 point in time.

09:39:59 6 Q. I'll ask you to turn to page 2. I'll display it for  
7 the jury. And I'd like to specifically call your attention to  
09:40:22 8 some portions of that page. Do you see the language that's  
09:40:33 9 magnified on the screen?

10 A. Yes.

09:40:35 11 Q. It says that inspections performed during the 10th, 11th  
12 and 12th refueling outages, which were '96, '98 and 2000,  
09:40:47 13 consisted of a whole head visual inspection in accordance with  
14 the Davis-Besse Nuclear Power Station -- they used the  
09:40:57 15 acronym -- boric acid control program.

16 I think you testified to the significance of that  
17 language to you, about the boric acid control program?

09:41:08 18 A. Yes.

09:41:09 19 Q. And does the language here give you the same assurance  
20 as to the type of inspection that was --

09:41:16 21 A. Well, actually, this response is even more specific.  
22 It says a whole head visual inspection, which told me that not  
23 only did they see around each nozzle, but they were able to  
09:41:30 24 examine the entire head 100 percent, which I think is more  
25 complete than their prior indications of the effectiveness of

09:41:42 1 those inspections.

09:41:53 2 Q. I'll show you another passage. Here's a representation  
3 about inspection at the 10th refueling outage. It says 65 out  
4 of 69 nozzles were viewed. What significance did that have to  
5 your review?

09:42:12 6 A. Well, that indicated a high level of effectiveness of  
7 the inspection. The inspection that they would have done at  
8 that point in time would not have been documented in a way that  
9 more recent inspections would have been. So my expectation at  
10 this point in time would have been that they had gone back and  
11 reviewed all of the information and they had been able to  
12 positively see 50 of 69 nozzles. For the 10 RFO, 65 of 69 we  
13 could see that nozzle, could say it was clean, did not have any  
14 deposits indicative of nozzle leakage and that there were no  
15 impediments to observing those nozzles. So it would have been  
16 a certain level of assurance of the quality of those  
17 inspections.

18 Q. Let me call your attention to the following language  
19 right after the highlighted portion. It says: During the 11th  
20 refueling outage -- that was in 1998, wasn't it?

21 A. Yes.

09:43:24 22 Q. -- 50 nozzles were viewed.

09:43:32 23 Is this new information to you, new with this  
09:43:36 24 submittal?

25 A. Yes.

09:43:38 1 Q. What was the significance of that?

09:43:45 2 A. From a technical standpoint what it meant to us was that

09:43:51 3 their inspection at least two outages before was not quite as

4 effective as they had told us that it had been initially.

09:44:06 5 Q. Then following that it says: During 12 RFO, 12th

09:44:13 6 refueling outage -- that was in 2000, wasn't it?

7 A. Yes.

09:44:17 8 Q. -- 45 nozzles were viewed?

09:44:21 9 A. Yes.

10 Q. Was that new information to you when you received this

09:44:26 11 submission?

12 A. Yes, it was.

09:44:31 13 Q. Was it consistent with what you were told previously in

14 the earlier submission?

15 A. No.

09:44:42 16 Q. What was the significance of 45 out of 69 nozzles being

09:44:48 17 viewed?

09:44:49 18 A. Well, that meant that there were about two dozen nozzles

09:44:55 19 that one had to go back to an earlier time frame to be able to

09:44:59 20 say that they did not have cracking at that point in time, which

09:45:03 21 meant that there was additional time for cracks to develop in a

09:45:10 22 through-wall manner. So what it did was indicate there might be

23 a little higher risk of those nozzles -- that they could rupture

24 or cause a loss of coolant accident.

09:45:39 25 Q. Another passage on the same page contains a

1 representation about the cleaning. It says: Following 12 RFO,  
2 the RPV, reactor pressure valve, head was cleaned with  
09:46:01 3 demineralized water to the extent possible to provide a clean  
09:46:05 4 head for evaluating future inspection results.

09:46:14 5 At the time you read this did you know that, in  
6 fact, boric acid had been left on the head?

09:46:19 7 A. At this point in time, no.

09:46:27 8 Q. Is this submission accurate and complete without that  
09:46:31 9 disclosure?

10 A. No, I don't believe so. I guess the way -- the way  
11 that I interpreted this statement was to the extent possible at  
09:46:51 12 other plants there had been, if you will, stains found on the  
09:46:54 13 head, things like that. My expectation reading this statement  
14 in conjunction with other statements that they could do a  
09:47:02 15 qualified visual in 2002 was that the head was cleaned as far as  
16 they could get it to, but there may be residual stains and  
17 things like that on the head. But there clearly would be  
18 nothing that would impede their inspection in 2002. Large  
19 boric acid deposits left on the head would clearly impede the  
09:47:21 20 ability to do that kind of an inspection.

09:47:25 21 Q. And the bulletin specifically asked for a description of  
09:47:29 22 impediments to inspections, didn't it?

09:47:31 23 A. That's correct. It clearly laid out, I think in  
24 several places, that for qualified visual there need to be no  
09:47:39 25 impediments.

09:47:47 1 Q. Moving ahead: In summary, results from previous  
09:47:50 2 inspections of the CRDM nozzle penetrations provide reasonable  
09:47:54 3 assurance for the continued safe operation of the power station  
09:48:00 4 until the next outage; which was the goal of the board?  
5 A. That's correct.

09:48:19 6 Q. Do you recall there was a table attached to this  
7 submission?

09:48:24 8 A. I don't recollect exactly for this submission.

09:48:27 9 Q. This is not a quiz. Let me show you Attachment 2 to  
10 the submission. Do you recognize that table?

11 A. Yes.

09:48:47 12 Q. What information does this table contain?

09:48:51 13 A. This provides what I assumed was a result of their  
09:48:59 14 rereview of all their videotapes from the 1998 and 2000  
09:49:04 15 inspections, shows the condition that was observed at each  
09:49:09 16 nozzle. In general, you know, a large number of the recordings  
17 there are -- it indicates that no leak was observed in the --  
18 from the review of the videotapes.

09:49:34 19 Q. Okay. The print may be a little small for the jurors,  
20 so tell them, what is the heading on that first column?

09:49:44 21 A. Nozzle number.

09:49:51 22 Q. And that column?

09:49:53 23 A. 1996 inspection results.

09:50:00 24 Q. That column?

09:50:02 25 A. 1998 inspection results.

09:50:06 1 Q. And that column?

2 A. 2000 inspection results.

09:50:21 3 Q. All right. That's the title in the upper left-hand  
4 corner, isn't it?

5 A. Yes.

09:50:36 6 Q. I've highlighted the '96 column. What does it say in  
7 that column?

8 A. See note 1.0.

09:50:48 9 Q. Does it contain information about the inspection on a  
10 nozzle-by-nozzle basis?

11 A. For 1996, no, it does not.

09:51:12 12 Q. I'll show you now note 1.0 which is noted in that  
13 column. 1.0 is on the next page. It says in 1996 during 10  
14 RFO, the entire RPV head was inspected. Since the video was  
15 void of head orientation narration, each specific nozzle view  
16 could not be correlated.

09:51:45 17 What was your understanding of that footnote; what  
18 did it tell you about the 1996 inspection?

09:51:51 19 A. It told me that they were not able to go back and verify  
09:51:55 20 on a nozzle-by-nozzle basis that there were no signs of leakage  
09:52:00 21 in 1996. There really were no requirements to do that. There  
09:52:06 22 were -- my guess is that the videos were not even required, so  
23 the licensee had gone sort of above and beyond what was required  
09:52:16 24 at that point in time. The fact that their -- that their  
09:52:21 25 inspection did not identify any boric acid or anything like

1 that, I think that would have been an accurate representation.  
2 It isn't mandated that inspections at that point in time, that  
3 they would have been documented in a real formal, rigorous  
4 manner. So it may have just been the engineer's recollection  
5 as well. You know, we say the whole head. There were no  
09:52:51 6 indications of leakage. Everything looked fine.

09:53:15 7 Q. Did you ever have an opportunity to interview the  
8 engineer who conducted the 1996 inspection?

09:53:22 9 A. No.

10 Q. Were you ever told that that inspection --

09:53:30 11 MR. HIBEY: Objection.

12 MR. GORDON: Objection.

09:53:34 13 THE COURT: Sustained.

09:53:42 14 BY MR. POOLE:

09:53:42 15 Q. Would it have been material to your review to know that  
09:53:48 16 the engineer that conducted that inspection or the Condition  
17 Report said that only 50 to 60 percent of the vessel head could  
18 be inspected in '96?

19 A. Yes, it would have been -- that would have qualified  
20 better the effectiveness of that inspection. I mean, from  
21 what's indicated here, I would assume that pretty much the  
22 entire head had been observed.

09:54:16 23 MR. POOLE: Your Honor, we intend to connect that  
24 up with a subsequent witness.

09:54:19 25 THE COURT: Very good. That would avoid the

1 hearsay objection.

09:54:30 2 BY MR. POOLE:

09:54:54 3 Q. All right. So after the October 17 submission, was  
4 there a public meeting?

09:55:03 5 A. Yes. At some point after that.

09:55:14 6 Q. All right. At this time I'm going to hand the witness  
09:55:18 7 Government's Exhibit 108. Dr. Hiser, I'll ask you not to tell  
8 us what's in it, but just identify that document for the Court.

09:55:33 9 A. This is a memorandum to document the meeting summary of  
10 the October 24, 2001 meeting with FENOC to discuss the  
11 licensee's response to Bulletin 2001-01.

12 Q. Do you know who created this memorandum?

09:55:53 13 A. My expectation would be -- it was Stephen Sands, the  
14 project manager for Davis-Besse.

09:56:00 15 Q. Were you present at that meeting?

16 A. I believe so.

09:56:03 17 Q. Does it accurately reflect what happened at the meeting?  
18 If you need to take a minute to look at it, go ahead.

09:56:31 19 A. I believe it accurately reflects the meeting.

20 Q. Is this the type of document that the Nuclear Regulatory  
09:56:37 21 Commission staff creates as a part of the ordinary course of its  
22 business?

09:56:44 23 A. For interactions with licensees, generally there's a  
09:56:47 24 memorandum summarizing the meeting such as this, or if we have a  
25 phone call, then that normally is summarized as well in a

1 document that's publicly available.

2 MR. POOLE: Your Honor, we offer that document.

09:57:02 3 MR. GORDON: No objection.

09:57:03 4 THE COURT: It will be admitted without an  
09:57:05 5 objection, may be displayed to the jury.

09:57:24 6 BY MR. POOLE:

09:57:24 7 Q. Is that Government's Exhibit 108 with the heading  
09:57:27 8 enlarged?

9 A. Yes, it is.

09:57:29 10 Q. And it's a meeting summary of an October 24 meeting?

09:57:33 11 A. Yes.

09:57:40 12 Q. Does the memo attach a meeting handout?

09:57:46 13 A. Yes, it does.

09:57:53 14 Q. Do you remember -- it calls it a meeting handout. Was  
15 this also projected as slides or in this case was it just the  
16 paper that was handed to the people who were present at the  
17 meeting?

09:58:05 18 A. I would expect that it was projected as well.

09:58:11 19 Q. Showing you the list of people who attended, is David  
20 Geisen on the list?

21 A. Yes, he is.

09:58:34 22 Q. All right. Moving forward to the page entitled, Facts,  
09:58:49 23 does it contain the representation all CRDM penetrations were  
09:58:53 24 verified to be free from popcorn-type boron deposits using video  
09:58:57 25 recordings from 10 RFO, 11 RFO, or 12 RFO?

1 A. Yes, it does.

09:59:10 2 Q. Do you remember who made that representation at the  
09:59:14 3 meeting?

4 A. No, I do not.

09:59:20 5 Q. It says: A review of visual recording as well as  
09:59:25 6 eyewitness accounts serves as the means of inspection?

7 A. That's what I was describing earlier, that the  
09:59:34 8 documentation of some of the earlier inspections may not have  
9 been as thorough as we would expect now. But, you know,  
09:59:41 10 clearly talking to the people that did the inspections was --  
11 was an adequate record.

09:59:48 12 Q. So when you read that, did you read that to apply to the  
13 '96 inspection?

09:59:56 14 A. In particular the '96. But again, all three of them.  
15 It would have had equal weight and validity, and it would have  
16 added weight and validity to all three of the inspections.

10:00:23 17 Q. Projecting the page headed "Analyses."

10:00:28 18 THE COURT: For ease for me, could you give me the  
19 DOJ number at the bottom right?

10:00:36 20 MR. POOLE: 657, Your Honor.

10:00:41 21 BY MR. POOLE:

10:00:41 22 Q. Does this contain the same representation about all  
23 except four in '96?

24 A. Yes, that's correct.

10:00:51 25 Q. I think the last time we looked at it it said 65 out of

1 69, right?

2 A. Yeah.

3 Q. But the numbers are the same?

4 A. Yes.

5 Q. Then all but 19 in '98, and all but 24 in 2000?

6 A. Yes.

10:01:07 7 Q. Same numbers as in the last submission?

10:01:10 8 A. Yes, just the converse. I think they said 50 in 1998  
9 and 45 in 2000. That's out of 69.

10 Q. Farther down the page there's two paragraphs, one says  
11 the limiting nozzle population is those nozzles that could not  
12 be inspected in 1998 or 2000. Then it says: It is

10:01:44 13 conservatively assumed that for these penetrations, an axial

10:01:48 14 through-weld flaw occurs immediately upon start-up from 10 RFO  
15 (May 1996).

10:01:59 16 What does that mean to you?

17 A. Well, at this point this analysis is intended to

10:02:04 18 demonstrate the risk of a nozzle suffering a crack that would

10:02:10 19 cause a separation of the nozzle. So with this, as we talked

10:02:17 20 earlier, the longer time that you operate, the higher the

10:02:21 21 chances the risk is that you'll get a through-wall crack. If

10:02:26 22 the licensee did an analysis that was very recent, that provides

10:02:31 23 assurance that there were no through-wall cracks at that point,

24 so you would have a very short time of operation, so the risk

10:02:39 25 presumably would be very low. If they never examined the head

10:02:42 1 for the entire operating period, then the risk would be much  
2 higher because you may have developed leaks at various points in  
3 time, but you didn't realize that and didn't take remedial  
10:02:54 4 measures, so you didn't correct the problem.

5           So at this point what the licensee was trying to do  
6 was to be able to put numbers on the risk that was involved.  
7 So the more recent inspection that they could say a certain  
10:03:09 8 nozzle was free of leaks, then that would give them a specific  
9 time frame that they could do their analysis for. And again,  
10:03:18 10 clearly the more recent inspection provides better assurance  
10:03:22 11 because as you have to go back in inspection, then you have a  
10:03:27 12 greater operating time over which the cracks could propagate and  
13 get to a critical size.

10:03:40 14       Q. Based on these assumptions, how important was the '96  
15 inspection?

16       A. Well, that was sort of the baseline for the entire  
10:03:48 17 analysis that they had. The assumption from this submittal and  
18 from other interactions was that the '96 inspection was a very  
19 clean inspection, that there was proof positive, even from  
10:04:07 20 eyewitness accounts, that there were no boron deposits that  
10:04:11 21 would be indicative of a leak of the nozzle. So that was sort  
22 of the starting point they were using for the analysis.

23       Q. What effect would it have had on your review if you had  
10:04:21 24 known that it was untrue that 65 out of 69 were inspected in  
10:04:29 25 1996?

1 A. Well, that would have -- that would have caused a  
10:04:33 2 reexamination of the analyses, and it would have caused us to  
3 look at things in a much deeper detail.

10:05:13 4 Q. At this time I'll hand up to the witness Government's  
10:05:16 5 Exhibit 111.

6 Dr. Hiser, would you identify this for the Court?

10:05:28 7 A. This is another submittal by FirstEnergy dated October  
8 30, 2001, serial letter 2741. The subject is: Responses to  
9 request for additional information concerning NRC Bulletin  
10 2001-01, circumferential cracking of reactor pressure head  
11 penetration nozzles.

10:05:57 12 Q. Is this another submittal from the owner of Davis-Besse  
13 Nuclear Power Station to the Nuclear Regulatory Commission?

14 A. Yes, it is.

15 Q. Pursuant to the bulletin?

16 A. Yes.

10:06:09 17 MR. POOLE: Your Honor, we offer Government's  
10:06:13 18 Exhibit 111.

10:06:15 19 MR. HIBEY: No objection.

20 MR. GORDON: No objection.

10:06:17 21 THE COURT: Government's Exhibit 111 will be  
22 admitted without objection.

10:06:31 23 BY MR. POOLE:

10:06:31 24 Q. I'm now displaying the first page of that response.  
25 It's serial 2741?

10:06:41 1 A. Yes.

10:06:42 2 Q. And I think this is the third one that we've seen, is

10:06:46 3 that correct, here in court today?

10:06:47 4 A. I believe so, yes.

5 Q. And the date is October 30, 2001?

10:06:52 6 A. Yes.

10:06:55 7 Q. The last one was October 17, wasn't it, about two weeks

8 later?

10:07:00 9 A. Yes.

10:07:03 10 Q. Now, the title is Responses to Requests for Additional

10:07:06 11 Information. Does this submission contain responses to the

10:07:12 12 questions you asked during a telephone call earlier in October?

10:07:18 13 A. It would have -- well, in the various phone calls we

14 had, we would have developed sort of a pool of questions. And

15 I believe the cover letter indicates that we had faxed those to

10:07:33 16 the licensee on October 12. So it was sort of a compendium of

17 information that we still wanted formal responses from the

18 licensee on.

10:08:05 19 Q. I'll display page 3. That's the page number in the

20 upper left-hand corner, Your Honor. NRC number at the bottom

10:08:13 21 is 1452.

10:08:15 22 MR. HIBEY: 14 --

23 MR. POOLE: 52.

10:08:20 24 MR. HIBEY: Thank you.

10:08:30 25 THE COURT: Page 3 of the supplemental.

1 BY MR. POOLE:

2 Q. Now I'll enlarge the highlighted portion at the bottom  
3 of the page. Let me back up. I think you'll probably need to  
10:09:01 4 refer to the paper to answer this question, but can you tell the  
5 jury what the question was that this passage answers?

10:09:20 6 A. This is a response to RAIBR-3, which reads: For the  
7 four nozzles which cannot be demonstrated to have annular gaps  
8 at the operating conditions (as described in the SAI report on  
9 the finite element gap analysis), what examinations will be  
10:09:39 10 performed at future inspections to provide assurance that there  
11 are no through-wall cracks nor circumferential cracks above the  
12 J-groove weld in these nozzles?

10:10:00 13 Q. All right. And then does it -- does it describe the  
14 elements of a qualified visual examination?

15 A. Yes.

10:10:12 16 Q. And now enlarging that highlighted paragraph, does it  
17 tell you what they're going to do if they can't do a qualified  
18 visual examination?

19 A. Yes. It says: If any other nozzle to RPV head annulus  
20 area is found to be obscured from visual examination during the  
21 qualified visual examination, to be performed during the DBNPS  
10:10:40 22 13 RFO outage, supplemental examinations will also be performed  
23 on each of these nozzles.

10:10:48 24 Q. Is there any indication there that masking deposits were  
25 left on the head at the end of the 2000 refueling outage?

10:11:03 1 A. No, there's no indication of that. It actually -- it  
10:11:08 2 seems to anticipate that that would be the exception rather than  
3 the rule.

10:11:16 4 Q. Is this response accurate and complete without that  
10:11:19 5 information?

10:11:23 6 A. Of what their expectations should have been? I believe  
7 it's not accurate.

10:11:46 8 Q. All right. Now we'll proceed to page 11 of that  
10:11:51 9 attachment. And the number in the lower right-hand corner of  
10 the page is 1460. I will magnify the highlighted portion.

10:12:31 11 Well, first, what was this request for additional  
10:12:35 12 information about?

10:12:37 13 A. This related to the quality, if you will, or the  
10:12:52 14 procedure that was used to -- for the visual examination in  
15 April 2000. So this just requested information regarding  
10:13:02 16 whether the inspection was implemented in accordance with the  
17 written procedure. Again, such a procedure would provide a  
10:13:12 18 cookbook to add considerably to the credibility and validity of  
10:13:18 19 the inspection that was performed.

10:13:20 20 Q. Okay. And this is the inspection that by this point you  
10:13:26 21 know was incomplete, that there were 24 nozzles not viewed?

22 A. That's correct.

23 Q. The 2000 inspection?

10:13:39 24 A. Yes.

10:13:47 25 Q. All right. Let's take a look at the response. It

1 says that: The inspection during the 12th RFO in April 2000 was  
2 conducted using the Boric Acid Corrosion Control Procedure.

10:14:04

3 You've already explained the importance of that in  
4 your mind?

5 A. Yes.

10:14:27

6 Q. The subsequent sentence describes that procedure. It  
7 says: The purpose of this procedure is to provide a systematic  
8 method to identify and resolve boric acid leakage and/or  
9 resultant corrosion.

10:14:45

10 In retrospect, knowing what you know now, did the  
11 2000 inspection use a systematic method to identify and resolve  
12 boric acid leakage and/or corrosion?

10:14:50

10:14:57

10:14:59

13 A. I don't -- there's no way that it resolved things in a  
14 systematic manner. With the boron that was left on the head  
15 after the inspection, that clearly did not resolve the leakage  
16 problem.

10:15:10

10:15:45

17 MR. POOLE: At this time, Your Honor, we're going  
18 to hand up Exhibit Number 113. I'll ask Dr. Hiser to identify  
19 it for the Court. After he does so, we'll offer it.

20 BY MR. POOLE:

21 Q. Would you tell the Court, what is that document?

22 A. This is a letter from FENOC dated October 30, 2001,  
23 serial letter 2744. The subject of the letter is transmittal  
24 of results of reactor pressure vessel head control rod drive  
25 mechanism nozzle penetration visual examinations for the

10:16:18

10:16:25

10:16:32 1 Davis-Besse Nuclear Power Station.

10:16:38 2 Q. Was that another one of these submittals to the NRC in  
3 response to the bulletin?

4 A. Yes, it was.

10:16:44 5 MR. POOLE: We'll offer 113, Your Honor.

10:16:48 6 THE COURT: Any objection?

10:16:49 7 MR. HIBEY: No objection.

10:16:50 8 MR. GORDON: No objection.

10:16:51 9 THE COURT: It will be admitted without objection.  
10 It may be displayed to the jury.

10:17:06 11 BY MR. POOLE:

10:17:06 12 Q. So that's the first page with the heading enlarged of  
10:17:12 13 serial letter 2744; is that correct?

10:17:15 14 A. That's correct.

15 Q. The date is October 30, 2001?

10:17:20 16 A. Yes.

17 Q. Was that the same day as the last submittal?

18 A. I believe that was. Yes.

19 Q. You said the last one answered requests for additional  
20 information?

10:17:34 21 A. Yes.

10:17:36 22 Q. Go ahead. Yes. Thank you.

10:17:41 23 A. Yes.

24 Q. Does this one attach a number of photographs from  
25 inspections?

10:17:46 1 A. Yeah. This one provides information specific to their  
10:17:49 2 visual inspections that they performed previously.

10:18:01 3 Q. Prior to the photographs, does it again attach a copy of  
10:18:09 4 the table of nozzle inspections?

10:18:14 5 A. Yes, it appears to be the same table.

10:18:26 6 Q. All right. And the second page of the table, does that  
7 contain Footnote 1?

8 A. Yes.

10:18:38 9 Q. Does it appear to be a little bit longer this time?

10:18:41 10 A. Yes, it does.

10:18:46 11 Q. All right. I'll display it to the jury. It says in  
12 '96 during 10 RFO, 100 percent of nozzles were inspected by  
10:18:59 13 visual examination. Since the video was void of head  
14 orientation narration, each specific nozzle view could not be  
10:19:09 15 correlated by nozzle number. Then it says: Nozzles 1, 2, 3,  
16 and 4, which do not have sufficient interference gap, were  
10:19:17 17 excluded. The remaining 65 did not show any evidence of  
10:19:21 18 leakage.

10:19:23 19 I believe you alluded to this before, but can you  
10:19:27 20 explain to the jury the significance of the language about  
10:19:30 21 Nozzles 1, 2, 3, and 4 not having a sufficient interference gap?

22 A. The interference fit is what I talked about earlier  
23 where the metal -- there's tight metal-to-metal contact. And,  
10:19:41 24 actually, the way that that's performed is the vessel head has a  
10:19:46 25 hole bored in it of a certain diameter. A nozzle that's of a

10:19:51 1 slightly larger diameter is going to be inserted in that hole.  
2 What they do is they chill it to a very low temperature, minus  
10:19:58 3 250 Fahrenheit, so it will contract sufficiently that it will  
10:20:02 4 fit through the hole. So you put it in through the hole, then  
5 as it warms back up, you end up with a tight fit, very tight  
6 fit.

10:20:11 7 What they were indicating here with these four  
8 nozzles is that they could not demonstrate by calculations that  
9 they would have that gap open up. So if they had leakage, then  
10 they would definitely get deposits on top of the head. That  
11 was important because those nozzles could not be inspected  
10:20:30 12 according to a qualified visual inspection. So the licensee  
13 would have to do a different kind of an inspection for those  
14 four nozzles. And that's why they indicate that the remaining  
10:20:41 15 65 do not show any evidence of leakage. For those four, they  
10:20:46 16 may not have evidence of leakage even though the nozzles may  
17 have been cracked and leaking.

10:21:38 18 MR. POOLE: The next image we're going to project  
19 is on page 1276. The image that you have in the book is not a  
20 good quality image, and we have replaced these images for the  
10:21:52 21 purpose of displaying them to the jury with a better quality  
10:21:55 22 image obtained from the NRC's public web site, same image.

10:22:02 23 THE COURT: Same image?

10:22:04 24 MR. POOLE: Yes, Your Honor. I'll ask the witness  
25 to confirm that after I display it to him if you wish.

1 THE COURT: Very good.

10:22:19 2 BY MR. POOLE:

10:22:20 3 Q. Dr. Hiser, if you'll look at the image displayed on the  
4 screen there, is that the same image that's contained in the  
10:22:30 5 exhibit?

6 A. Yes, it is.

10:22:48 7 Q. All right. Now we'll enlarge the caption so the jury  
10:22:52 8 can read it. So is this -- are these pictures from the 1996  
10:23:01 9 inspection?

10 A. That's what -- that's what it states, yes.

10:23:07 11 Q. And does it state that these pictures are representative  
10:23:13 12 of the head in the 1996 spring outage?

13 A. Yes, it does.

10:23:18 14 Q. States that the head was relatively clean and afforded a  
15 generally good inspection?

16 A. Yes.

10:23:24 17 Q. Now, looking at these pictures, would you say that?

10:23:32 18 MR. HIBEY: Objection. Leading.

10:23:41 19 THE COURT: Sustained.

10:23:43 20 BY MR. POOLE:

10:23:43 21 Q. Would you say these pictures are consistent or  
10:23:46 22 inconsistent with the representation that they show a clean head  
23 permitting a good inspection?

10:23:58 24 A. Yes, I think it is. I think they're consistent with  
25 that representation.

10:24:13 1 Q. We'll do a more close-up version of the photograph, the  
10:24:19 2 image in the upper right. Do you see white streaks in that  
3 photograph?

10:24:31 4 A. Yes.

10:24:32 5 Q. Do you have an opinion what those are?

10:24:35 6 A. The one there that you had the pointer on, it would  
7 indicate to me likely a nozzle flange leakage that when the  
10:24:48 8 vessel was cooling down, so the water now that has escaped from  
9 the flange leak was liquid and did not flash to steam, that is  
10:25:00 10 what one would expect to see.

10:25:02 11 Q. All right.

12 A. That would be one interpretation of that appearance.

10:25:07 13 Q. And is that a type of deposit that would interfere with  
10:25:12 14 your ability to do an inspection for nozzle leakage?

10:25:15 15 A. Not -- no. With other deposits that were observed at  
16 other plants, with leaking nozzles you would still be able to  
17 see that deposit in this photograph if that nozzle had a  
18 through-wall leak.

10:25:48 19 Q. Have you subsequently reviewed the 1996 inspection  
10:25:57 20 videotape?

10:25:58 21 A. Yes.

10:26:03 22 Q. And are these pictures representative of the condition  
10:26:09 23 that you saw on the videotape?

10:26:11 24 A. The first time I viewed the videotape, this is entirely  
25 consistent with what we saw in the videotape. Subsequent

10:26:21 1 review, more thorough reviews of the videotapes, this is not  
2 entirely consistent.

3 Q. Okay. Let's talk about the first time you reviewed the  
10:26:31 4 videotape. We're jumping ahead a little bit, but that's okay.  
5 Tell us about the first time you saw the videotape of the '96  
10:26:39 6 inspection.

10:26:41 7 A. After one of the public meetings we had with FENOC, we  
10:26:46 8 expressed interest in reviewing some of the videos from the  
9 prior inspections. The licensee provided Mr. Geisen to us to  
10:27:00 10 review the videos with us. Mr. Geisen brought videos in, like,  
10:27:07 11 a briefcase and showed some of them to us, both from the 1996  
10:27:14 12 inspection and also from the 1998 inspection. So we  
13 reviewed -- maybe an hour or two hours, we reviewed some  
10:27:24 14 portions of the tapes.

10:27:34 15 Q. You said portions of the tape. Which portions did you  
10:27:38 16 review?

17 A. In retrospect, the good portions I think is what we  
10:27:42 18 reviewed. Mr. Geisen had control of the remote that ran the  
10:27:51 19 VCR showing the tapes, and we -- he would fast-forward and jump  
20 to various places in the tapes, and we would review maybe for a  
21 minute or five minutes just looking at the general condition of  
10:28:05 22 the head that was visible, and then we'd go maybe forward to  
23 another part of the tape, things like that. So we didn't sit  
10:28:14 24 down and review the entire tapes. That would have been many  
25 hours of review. But we were trying to get sort of a general

10:28:22 1 impression of the condition of the head at each outage, then how  
10:28:29 2 credible the inspections were for the outage.

10:28:35 3 Q. Tell the jury about your subsequent review of the  
10:28:38 4 videotape.

5 A. Subsequent review for the 1996 outage, a lot more boron  
6 than what we had expected. Certain portions of the head just  
7 having very large piles of boron, which was inconsistent really  
8 with anything that we had been provided previously. It was  
10:29:01 9 not -- the photographs that are shown here were consistent with  
10:29:06 10 part of the head, but not -- was not really representative of  
11 the entire head.

10:29:12 12 Q. And that subsequent review that you did, was that at the  
13 request of the investigators for this case?

10:29:20 14 A. It was -- yes, it was at the request maybe with the NRC  
10:29:26 15 representatives who had reviewed the videos.

16 Q. Okay. Now, do you know, yourself, whether Mr. Geisen  
10:29:36 17 intentionally skipped over the bad portions of the tape?

18 A. I have no idea of whether he selected specific portions.  
10:29:49 19 The only thing that I know is the tapes that we saw, whether it  
20 was in a play mode or fast-forward mode, that the areas that  
21 were visible to us were not consistent with things that I saw  
10:30:03 22 subsequently in the review with the NRC folks.

10:30:24 23 Q. Let's get back to the serial review letter, 2741. I'll  
10:30:29 24 display for you now a subsequent page.

10:30:36 25 THE COURT: 2744?

10:30:39 1 MR. POOLE: Thank you for that correction. This  
2 is page 1278 in the book Your Honor has. And we have a  
3 somewhat better image here on the screen.

4 BY MR. POOLE:

5 Q. Is this another photograph from the 1996 inspection?

10:30:57 6 A. Yes, I believe so.

10:30:59 7 Q. That's what it says, anyway?

8 A. Yes.

9 Q. And it says some boron piles were observed at the top of  
10 the head in the vicinity of previous leaking flanges. Because  
11 of its location on the head, it could not be removed by  
10:31:14 12 mechanical cleaning but was verified not to be active or wet and  
13 therefore did not pose a threat to the head from a corrosion  
14 standpoint.

10:31:24 15 What, to you, was the significance of the language,  
10:31:28 16 "Verified not to be active or wet"?

10:31:34 17 A. That would have indicated to me that it was sort of a  
18 static pile, that it was -- it had accumulated at some point,  
19 that it was not growing, it was not changing character in any  
10:31:48 20 way, the observed color, or whatever, was the same. And the  
10:31:56 21 conclusion it did not pose a threat to the head from a corrosion  
22 standpoint, again would have been an indication that there were  
23 no other signs that would have led one to conclude that there  
24 was corrosion ongoing in that area.

10:32:11 25 Q. Would it have affected your review to know that, in

10:32:15 1 fact, there was no such verification?

10:32:18 2 A. Yes, it would have -- that would have been very  
3 important since we did not -- we could not review every  
4 videotape and verify every single statement that was made in  
10:32:31 5 these submittals. We relied upon the licensee to provide us  
6 with accurate and complete information. Things like this,  
7 evidence like this we would -- we would have to take sort of at  
8 face value, if you will, because we can't review every piece of  
9 information, or we can't verify every piece of information.

10:32:55 10 MR. POOLE: At this time I'll hand the witness --

10:33:00 11 THE COURT: Is this a good breaking point? Do you  
12 have much more?

10:33:10 13 MR. POOLE: This isn't the last one. If Your  
14 Honor is asking whether this is a good time for a break, this is  
15 a fine time for a break.

10:33:17 16 THE COURT: Very good. They've been at it two  
17 hours.

10:33:21 18 Ladies and gentlemen, as you just heard my  
10:33:23 19 discussion with Mr. Poole, this appears to be a good breaking  
10:33:26 20 time. We'll take a 15-minute break until quarter of the hour.  
10:33:30 21 Please remember my previous admonitions to you: Do not discuss  
22 this case among yourselves or with anyone else and do not let  
23 anyone else discuss it with you; do not read anything touching  
24 on this matter; do not make up your minds on the ultimate issues  
25 which you will decide at the end of the case. Enjoy your short

1 recess.

10:53:15 2 (Recess taken).

10:55:04 3 THE COURT: Please proceed.

10:55:08 4 BY MR. POOLE:

10:55:08 5 Q. Dr. Hiser, do you remember during your testimony you  
10:55:13 6 showed the jury some things about flange leakage using this  
10:55:18 7 model?

8 A. Yes.

9 Q. I would like to redo part of this at this time because I  
10 was told during the break that some of the jurors couldn't see.

11 A. Okay.

10:55:32 12 Q. Is this a representation of a nozzle and flange cut in  
10:55:37 13 half?

14 A. Yes, it is.

10:55:44 15 Q. Would you show the jury which portion of the nozzle and  
16 flange structure the pressurized coolant water is contained in?

17 A. It is within the cylindrical portion, the central  
10:55:58 18 portion.

10:55:59 19 Q. So that's 600 degrees, 2,000 pounds per square inch?

20 A. Yes.

21 Q. And when you have flange leakage, how does that occur?

22 A. That would occur up at this point. These two members  
23 are bolted together, and there would be an O-ring or some  
10:56:20 24 similar material in between to provide leak tightness.

25 Q. So are these the bolts here?

10:56:26 1 A. Yes.

10:56:29 2 Q. And is it bolted tightly?

10:56:32 3 A. It's supposed to be bolted tightly enough to prevent  
10:56:36 4 leakage, because you can also overtighten it and damage the  
10:56:42 5 openings.

10:56:43 6 Q. But is leakage a common problem for nuclear power plants  
7 at these flanges?

8 A. At times it can be, yes. I think plants have various  
10:56:55 9 operating histories. Some have very little leakage; some have  
10:56:59 10 more problems with flange leakage.

10:57:03 11 Q. So again, what is the escape route where the pressurized  
10:57:08 12 water escapes?

10:57:09 13 A. It would come out through the joint between the two  
10:57:13 14 meeting surfaces of the flange and out to the environment.

10:57:17 15 Q. So after it escapes from the flange, then what happens?

10:57:22 16 A. At the operating conditions of roughly 600 Fahrenheit  
17 and 2,000 PSI, the water would flash to steam and the boric acid  
10:57:32 18 would precipitate out of the fluid. So it would likely flow  
19 down as a light, fluffy material, sort of like snowflakes.

10:58:18 20 MR. POOLE: The Exhibit Number B nozzle we were  
10:58:24 21 just looking at is Exhibit Number 126.

10:58:28 22 I'm going to hand up for identification  
10:58:32 23 Government's Exhibit Number 115. I'll ask him to look at it  
24 and tell the Court what it is.

10:58:37 25 A. This is a letter from FENOC to the NRC dated November 1,

1 2001, serial letter 2745. The subject, the transmittal of  
2 Davis-Besse Nuclear Power Station Risk Assessment of Control Rod  
10:58:57 3 Drive Mechanism Nozzle Cracks.

10:59:02 4 Q. Is that another one of those submittals that FirstEnergy  
10:59:13 5 supplied to the Nuclear Regulatory Commission?

10:59:15 6 A. Yes, it is.

10:59:17 7 Q. And again, that's Government's Exhibit 115?

10:59:21 8 A. Yes.

10:59:24 9 MR. POOLE: Your Honor, we offer 115.

10 10 MR. HIBEY: No objection.

10:59:27 11 MR. GORDON: No objection.

10:59:28 12 THE COURT: It will be admitted without objection.

10:59:43 13 BY MR. POOLE:

10:59:43 14 Q. All right. We're displaying the first page of 115 with  
15 the heading enlarged. Is this serial letter number 2745?

16 A. Yes, it is.

17 Q. Dated November 1, 2001?

18 A. Yes.

11:00:02 19 Q. And does this letter contain a risk assessment using  
11:00:11 20 probabilistic techniques?

11:00:13 21 A. Yes, it does.

11:00:18 22 Q. This is one of the ones you reviewed, isn't it?

23 A. Yes.

11:00:33 24 Q. Could you tell the jury what role does probabilistic  
11:00:37 25 risk assessment play in the NRC's work?

11:00:42 1 A. Probabilistic risk assessment is one of the tools that  
2 we use to understand the significance of vulnerabilities that  
3 may occur in a plant. It generally are things that have a very  
4 low likelihood of occurring. So it's sort of like if you toss  
5 a coin, the probability is 50 percent heads, 50 percent tails.  
11:01:09 6 What a probabilistic risk assessment would give you is how  
7 likely an event were to occur within one operating year. So  
8 the normal units would be something per reactor year. Generally  
9 the numbers are in the ten to the minus four, five, six, seven  
11:01:32 10 per reactor year sort of a frequency.

11 Q. So when you see -- for the part of the jury that aren't  
12 engineers, could you, when you see a number that's 10 to the  
13 minus five, what does that mean?

14 A. That means that the likelihood is one in 100,000  
11:01:52 15 likelihood to occur.

16 Q. And if it's ten to the minus six, what does that mean?

17 A. One in one-million years.

11:02:01 18 Q. So that's a very small likelihood?

11:02:04 19 A. Yes.

11:02:06 20 Q. And is it the goal of NRC regulation to keep those  
11:02:15 21 probabilities of risk very small?

22 A. Yeah. That's one of the ways that we regulate plants,  
23 is by keeping the risk very low.

11:02:28 24 Q. I'm going to call your attention then to some pages in  
25 this document. At the lower right-hand corner, it's pages 932

1 and 933, that's pages 1 and 2 of 14. And next I'm going to  
11:02:55 2 enlarge the highlighted area.

11:03:04 3 Now, are you familiar with this probabilistic risk  
4 assessment?

11:03:08 5 A. Yes.

11:03:09 6 Q. Can you tell the jury generally what risks it was trying  
7 to model?

8 A. The risks that it was trying to model was failure of one  
9 of the CRDM nozzles. If a crack were to grow far enough around  
10 the circumference, then there was a likelihood the nozzle would  
11:03:32 11 separate, so you'd end up with a loss of coolant accident. And  
12 the concern, one of the major concerns of the bulletin was that  
13 one of these loss of coolant accidents could occur during  
11:03:43 14 operation of the plant. So this assessment would take into  
15 account the likelihood of the occurrence of such a loss of  
11:03:58 16 coolant accident, and then potential consequences of that.

11:04:08 17 Q. Okay. In these risk assessments, are they based on  
11:04:20 18 assumptions?

11:04:21 19 A. Generally there are a lot of assumptions that go into  
11:04:27 20 it.

21 Q. Let me call your attention to the highlighted language  
11:04:31 22 being displayed to the jury. During 10 RFO in the spring of  
23 1996 the entire head was visible, so 100 percent of nozzles were  
11:04:40 24 inspected with the exception of four. The CRDM nozzles in the  
25 center of the head are not expected to show leakage -- I think

11:04:51 1 we saw a discussion of that before -- and that was because of  
2 the interference fit; is that correct?

3 A. Yes.

11:04:58 4 Q. During subsequent outages a number of nozzles could not  
5 be inspected, and it gives the same numbers as before, 45 were  
11:05:08 6 inspected in 2000 -- maybe those aren't the same numbers. It  
7 says 45 in 2000 and 50 in 1998. Is it fair to say those were  
11:05:23 8 assumptions on which this analysis was based?

9 A. Yeah, that's correct. They would have been some of the  
10 key assumptions because they would have been used to benchmark  
11 the operating time for each nozzle whereby it could crack, leak,  
12 and potentially lead to a loss of coolant accident. And again,  
13 the further or the more recent in time that a nozzle could be --  
14 could have been demonstrated to have had an inspection, the  
15 shorter period of time that it would have operated in a  
11:05:56 16 potentially vulnerable state; and, therefore, the risk would be  
11:05:59 17 lower. If you had to go back to the very beginning of  
18 operation of the plant, then each nozzle would have a much  
19 higher risk associated with it. So that was one of the key  
11:06:11 20 assumptions that tied to likelihood of a loss of coolant  
11:06:15 21 accident, an issue.

11:06:22 22 Q. Let me jump ahead a little bit. Was this risk  
11:06:25 23 assessment, was it ultimately found persuasive and was it in  
24 part responsible for the agency's decision on the Davis-Besse  
25 matter?

11:06:39 1 A. It was one of the factors that was considered. If this  
11:06:45 2 risk analysis had indicated a very high risk, then I think the  
3 decision would have gone a certain way. The results that came  
11:06:55 4 out of this risk analysis were -- didn't really support the NRC  
11:07:02 5 taking very aggressive action. But this is one of the tools  
6 that we would have used in our decision-making process. And  
11:07:10 7 clearly the assumptions that go into this calculation would have  
11:07:14 8 a high impact to the decisions that would be made.

11:07:19 9 Q. And you said that this language about the prior  
11:07:24 10 inspections was a key assumption in this analysis?

11 11 A. Yes. My guess is at this point that it was one of the  
11:07:32 12 key assumptions overall. Because many of the other parts of  
11:07:39 13 the analysis are sort of specific to the plant, but they're  
14 argued in different space, and basically there's a lot of  
15 agreement on how mitigating systems would respond and things  
16 like that. So this would have been one of the key variables  
17 that was at issue in this analysis.

11:08:03 18 Q. Earlier I think you said the analysis yielded a result  
19 that predicted very low risk.

20 A. Yes.

11:08:14 21 Q. Moving ahead then, I'll display page 935. I believe  
11:08:26 22 it's 4 of 14. The heading is Probability of Core Damage.

23 Does this explain some of the conclusions of this  
11:08:39 24 analysis?

11:08:40 25 A. Yes.

11:08:43 1 Q. The heading says Probability of Core Damage. What is  
11:08:46 2 core damage?

3 A. That would be a case where the core is not adequately  
11:08:52 4 cooled, and it would overheat and end up being damaged, such as  
11:08:58 5 what occurred at TMI.

6 Q. The text says the consequence of a CRDM nozzle  
11:09:07 7 failure -- and we know that's control rod drive mechanism --  
11:09:12 8 would be RCS -- what's RCS?

9 A. Reactant coolant system.

10 Q. -- leakage or, in the worst case, a medium LOCA.  
11 What's LOCA?

12 A. Loss of coolant accident.

11:09:31 13 Q. Can you explain what a loss of coolant accident is?

14 A. That's where the -- there's a leak somewhere in the  
11:09:39 15 reactor coolant system, for example, through one of the CRDM  
11:09:44 16 nozzles, or maybe a pipe break, something like that. So a loss  
11:09:49 17 of coolant accident is where you have a large, very large leak  
18 that would potentially challenge some of the mitigating systems  
19 that are in the plant. So it may be, depending on the size of  
20 the break and depending on functionality of other equipment, you  
21 may not be able to keep water flowing into the core, and you  
22 could end up with a core damage event occurring.

11:10:23 23 Q. Let's unpack that a little bit. Nuclear plants have  
11:10:27 24 coolant leaks; that's fairly common, isn't it?

25 A. From various sources.

1 Q. Yes.

2 A. Leaks like we're talking about here are very uncommon.

11:10:39 3 Q. Well, but let me ask you about that. Is every time you  
4 get a leak, are they all loss of coolant accidents? What  
11:10:49 5 distinguishes a leak from a loss of coolant accident?

6 A. Probably as much as anything, the magnitude of the leak  
7 or the volume flow rate of the leakage.

11:11:00 8 Q. Okay. So is a loss of coolant accident a leak of such a  
11:11:07 9 magnitude that it challenges the mitigating systems?

11:11:10 10 A. I think that would be a good working definition of it.

11 11 Q. Could you explain to the jury what the mitigating  
12 systems are designed to protect against?

11:11:19 13 A. Well, the main thing that they are designed to protect  
11:11:22 14 against is the core being uncovered. There are storage tanks  
15 with water, things like that that can supply water to the core  
16 to ensure that it is covered. And there may be other actions  
17 that operators need to take to ensure that the core stays  
11:11:44 18 covered with water. One of the clear purposes is not to  
19 challenge the systems because they may function or they may not  
11:11:55 20 function. And that's -- so that's why we like to avoid  
11:12:00 21 challenges to those systems.

11:12:03 22 Q. I'm going to jump forward to the conclusion of this risk  
11:12:08 23 analysis. This is page 9 and 10 of 14. It states, "In  
11:12:20 24 summary, using bounding analysis, the risk of core damage from  
25 CRDM nozzle" -- I think it probably says "cracks," but the S is

1 cut off -- "can be categorized as small using the guidelines in  
11:12:37 2 Regulatory Guide 1.174 for core damage frequency."

11:12:47 3 So it characterized the risk as small based on some  
4 guidelines. Can you explain that?

11:12:52 5 A. The Regulatory Guide 1.174 provides criteria for doing  
6 these kinds of calculations, and it gives values that are -- if  
7 the risk is below a certain value, that you can take certain  
8 actions. If it's -- the risk is too high, you may need to take  
11:13:15 9 other measures to reduce the risk or reduce the consequences.  
10 So the regulatory guide just provides a process to do this sort  
11 of an analysis.

12 Q. But those guidelines, based on these assumptions in this  
13 analysis, allow them to characterize it as small?

14 A. Their analysis came out that way, that's correct.

11:13:37 15 Q. The following sentence says, "The large early release  
16 frequency risk is very small, and the per year contribution from  
17 this event can be considered to be negligible." Let's unpack  
18 that.

19 Can you tell the jury what "early release frequency  
20 risk" is?

11:13:59 21 A. Early release frequency relates to that if you were to  
22 have an event in the plant, let's say you have leakage from the  
11:14:10 23 nozzles, certain likelihood that you would have core damage.  
11:14:16 24 Then the large early release relates to the likelihood of a  
25 large release from containment. So that would be out in the

11:14:25 1 open environment, so that would be outside the plant. It would  
2 be outside the --

3 MR. HIBEY: May we have a sidebar?

11:21:38 4 (Whereupon the following discussion was had at the  
5 bench outside the hearing of the jury:)

6 THE COURT: Mr. Hibey.

7 MR. HIBEY: I'm objecting on the grounds of  
8 relevance. I don't know where this is going to because if it's  
9 going to some issue of danger, then it seems to me that's off  
10 limits here.

11 THE COURT: Correct.

12 MR. HIBEY: So I'd like to know if that's what this  
13 is.

14 MR. POOLE: The submission that we're looking at  
15 was done by people at FENOC, and it's an attempt to model the  
16 level of the risk of the sort contemplated by the bulletin.  
17 So, in other words, they're directly responding to the  
18 bulletin's concern about circumferential cracks leading to loss  
19 of coolant accidents, and other possible consequences of a rod  
20 or nozzle ejection.

21 THE COURT: I understand that, but the issue is how  
22 deep do you have to go as to the reasons for the request by the  
23 bulletin or through the bulletin and the last series of  
24 questions going to why it's important? The why has nothing to  
25 do with the charges of the indictment. It's, was it -- was the

1 response accurate, or was it misleading, et cetera, as we've  
2 previously discussed. I don't know where we're going with  
3 this. And if we are going to the dangers beyond where we  
4 already are, then that's off limits.

5 MR. POOLE: Actually, my intention was -- my  
6 intention was merely to explain the meaning of the terms in this  
7 submission to the Nuclear Regulatory Commission and leave it  
8 there.

9 MR. HIBEY: I think it doesn't get left there. I  
10 think it has its intended effect to lead to this conclusion that  
11 the danger is very much a part of the story of this case, and it  
12 isn't.

13 MR. POOLE: I do have one further comment when Your  
14 Honor's ready.

15 THE COURT: I'm concerned. We're now going into  
16 risk analysis. And I don't think that that has an important or  
17 integral role with the investigation now being undertaken by  
18 Counsel. That's my problem. I had -- please.

19 MR. POOLE: Up to this point the NRC staff, as  
20 you've heard, basically was skeptical of the responses they were  
21 getting from Davis-Besse. Davis-Besse volunteered this risk  
22 analysis to persuade the NRC that they were safe to continue to  
23 operate. And as you've already heard, it was an important  
24 factor in deciding to allow them to continue to operate. As  
25 such, it goes directly to the materiality of the false

1 statements that were made. I mean, it clearly -- this analysis  
2 influenced the decision of the Nuclear Regulatory Commission.  
3 For that reason we think the jury needs to understand what this  
4 analysis said.

5 MR. GORDON: If I may, Your Honor, I would suggest  
6 that Dr. Sheron's testimony yesterday established that that's  
7 not so.

8 THE COURT: Well, that's something for  
9 cross-examination.

10 MR. GORDON: It's his rationale for going into what  
11 he wants to go into.

12 THE COURT: I understand. But my feeling is that  
13 that can be established very easily through saying you've  
14 reviewed -- I'm not telling you how to ask this -- after your  
15 review of the risk analysis presented by FENOC, did the NRC  
16 accede to the request to extend beyond 12-31-01? Answer: Yes.  
17 Was that based on the information that you received? Was that  
18 information correct? Did you later learn that it was not  
19 correct? That's the kind of questioning, it seems to me,  
20 rather than getting into all these definitions of the risk  
21 analysis.

22 MR. POOLE: We'll do that, Your Honor.

23 THE COURT: All right.

24 MR. HIBEY: As long as it's shut down from there.

25 I don't want to come back again. I know your

1 aversion to these side bars.

2 (End of sidebar.)

11:21:43 3 BY MR. POOLE:

11:21:43 4 Q. Dr. Hiser, subsequent to receiving this risk analysis,  
11:21:48 5 did the Nuclear Regulatory Commission go along with FENOC's  
11:21:54 6 request to continue to operate after December 31?

11:21:58 7 A. Before this risk analysis?

8 Q. No, subsequent --

11:22:02 9 A. Oh, subsequent.

11:22:03 10 Q. -- to receiving this, did the NRC go along with the  
11:22:07 11 request to continue to operate?

12 A. We allowed -- we did not -- we agreed to their operation  
11:22:17 13 until the middle of February, 2002, that's correct.

11:22:26 14 Q. Was the analysis present here significant to that  
11:22:30 15 decision?

16 A. That was one of the pieces that drove the decision, that  
17 this analysis was, again, one of the parts of the decision that  
18 was included in the decision-making process.

11:22:41 19 Q. Did you later learn facts which in your mind undermined  
11:22:50 20 the reliability of this analysis?

11:22:52 21 A. Yes, I think some of the assumptions on conditions of  
22 nozzles and inspectability of nozzles, I think, is not  
23 accurately considered within this analysis.

11:23:07 24 Q. Would that have -- had you known that information, would  
25 that have affected your actions in this process of making the

11:23:16 1 decision about Davis-Besse?

11:23:17 2 A. I think it would have made my recommendations to have  
3 the plant shut down before December 31 -- it would have made me  
4 more effective in being able to communicate that to my manager,  
5 yes.

11:23:33 6 Q. Now, the date on this risk assessment was November 1; is  
7 that right?

8 A. Yes.

11:23:39 9 Q. Did there come a time -- well, you've already testified  
11:23:43 10 that there came a time when Defendant Geisen displayed  
11:23:48 11 videotapes, and you saw videotapes of the '96 and '98  
11:23:54 12 inspection?

13 A. That's correct.

11:23:58 14 Q. And prior to taking the stand here today did you  
11:24:03 15 rereview some portions of the '96 inspection tape?

16 A. Yes.

11:24:09 17 MR. POOLE: Your Honor, the '96 inspection tape is  
11:24:13 18 Exhibit 4A, and we would at this time seek to offer it in  
19 evidence and display a portion of it to the witness and to the  
20 jury.

11:24:28 21 MR. HIBEY: No objection.

11:24:31 22 MR. GORDON: Subject to Counsel's representation  
11:24:39 23 the foundation of this will be established through a subsequent  
24 witness, subject to that representation.

11:24:47 25 THE COURT: Agreeable?

11:24:48 1 MR. POOLE: It's agreeable.

2 THE COURT: Subject to that limitation,

11:24:56 3 Government's Exhibit 4A will be admitted.

11:24:56 4 (Video is shown.)

11:25:08 5 BY MR. POOLE:

11:25:08 6 Q. If you'd call your attention to the video, I believe

7 it's going to stop on its own accord. And when it does, I'd

8 like you to tell the jury whether what you saw is representative

11:25:22 9 of the portions you saw back in November of 2001.

11:25:29 10 A. The areas to the upper half of the screen are not

11:25:33 11 consistent with what I remember seeing from the 1996 video.

12 Q. How are they different?

13 A. The large piles of boric acid are not what I recollect

11:25:43 14 from the 1996 video. The nozzle, for example, to the lower

11:25:48 15 left of the screen, it's clear in the bare vessel head in that

11:25:54 16 area is what I recollect from the 1996 videos.

17 Q. What significance would those piles of boric acid have?

18 A. It would have caused us to go back and question the

11:26:09 19 assumptions in the analyses and also make us much more

11:26:15 20 suspicious of some of the other statements by the licensee.

21 The credibility would have diminished quite a bit from the

11:26:23 22 representations that they had made about their review of these

11:26:26 23 videos.

11:26:30 24 MR. HIBEY: Will the record reflect this is at the

11:26:33 25 2:26 mark on the tape?

11:26:37 1 THE COURT: Yes, it does.

11:26:48 2 BY MR. POOLE:

11:26:48 3 Q. We're now at 4:12 on the tape. Tell the jury, is that  
11:26:55 4 the type of -- a type of deposit that you saw when the video was  
11:27:01 5 shown in November, 2001?

11:27:03 6 A. No, I don't remember seeing anything like that.

11:27:09 7 Q. How is it different?

8 A. Large piles of boric acid that I don't remember seeing  
.9 in the 1996 video at all.

11:27:19 10 Q. Now, you say you don't remember seeing it. Do you know  
11 whether you saw such a deposit?

11:27:28 12 A. I did not.

11:27:29 13 Q. How do you know you did not?

14 A. Because we would have taken other measures, other steps,  
15 other actions if this had been shown to us.

11:27:40 16 Q. All right. Will you roll the next portion?

11:27:55 17 THE COURT: 5:19.

11:28:02 18 MR. HIBEY: Is that where we are?

19 THE COURT: 5:19.9. It had run for just a second  
20 or two.

11:28:12 21 MR. POOLE: So we aren't to the end of this clip  
11:28:15 22 yet. I'll read out the number when we do end the clip.

11:28:26 23 We are now at 5:25.

11:28:32 24 BY MR. POOLE:

11:28:32 25 Q. Is what you see here consistent with what you saw in

11:28:37 1 November, 2001?

11:28:39 2 A. This is much more consistent. The moderately sized  
3 pile of boric acid that's in sort of the background between  
11:28:51 4 those two nozzles is not the kind of deposit that I remember  
11:28:55 5 seeing. Something like that would not have been -- they may  
11:28:59 6 have been on some of the videos, but I don't remember seeing  
11:29:03 7 something like that.

8 Q. From what you can tell, is that pile in the background  
11:29:08 9 obscuring the interface between the nozzle and the reactor  
11:29:13 10 vessel head?

11 A. From this view I wouldn't want to draw either  
12 conclusion. It looks to me like it may be between nozzles, but  
13 one would need a different angle to be able to see whether or  
14 not it really did obscure.

15 Q. But if it's between nozzles, then it's not preventing  
16 you from seeing the interface?

17 A. That's correct. And that would have been -- that would  
18 not have been an impediment to inspection.

11:29:37 19 Q. Roll the next clip. We're at 5:42. Is what you see  
11:29:53 20 here or saw on this clip consistent with what you saw in  
21 November of 2001?

11:30:03 22 A. In many ways except some of the -- again, the deposits  
23 that are on the upper end of the picture here, I guess it's  
24 about in the middle of the picture, and we had maybe five or six  
11:30:17 25 engineers reviewing these tapes, and I don't remember anybody

11:30:21 1 highlighting any real issues with the '96. I don't believe  
11:30:25 2 these were on the tapes that we saw.

11:31:00 3 MR. HIBEY: What is the number, please?

11:31:02 4 MR. POOLE: Counsel, it's 7:19.

11:31:05 5 BY MR. POOLE:

11:31:05 6 Q. Is what you see here consistent with what you saw?

11:31:09 7 A. This would be more consistent. There is some material  
8 on the head, but the size of the deposits that would have been  
11:31:16 9 relevant would be much larger than those. And if there had  
10 been deposits from nozzle leak, then I think one could see it  
11:31:24 11 here.

11:32:06 12 Q. Am I making you sea sick yet? All right. This is the  
13 last one we'll use.

11:32:13 14 MR. HIBEY: Number?

11:32:14 15 MR. POOLE: 15:14.

11:32:20 16 BY MR. POOLE:

11:32:20 17 Q. Is what you see here, was what you see here something  
18 that you saw in November of 2001?

19 A. No, I don't believe so.

20 Q. How do you know --

11:32:34 21 A. Again, the deposits are much larger than what I remember  
22 seeing. And I think they would have caused us a lot of  
23 questions about the 1996 inspection.

11:32:54 24 Q. So then going back to November 8, 2001, I think you said  
11:33:03 25 that Defendant Geisen fast-forwarded through some portions of

1 the videotape?

2 A. Yes.

11:33:14 3 Q. Do you recall in minutes, if you can, approximately how  
4 much of the videotape you saw?

11:33:24 5 A. My guess would be that we maybe viewed video for maybe  
11:33:32 6 half an hour, on that order, of this inspection. A lot of it  
7 was stopping and starting and fast forwarding. So there may  
8 have been more tape coverage than 30 minutes, but that would be  
11:33:48 9 my recollection, something on that order. Again, the purpose  
10 of looking at this tape was generally to confirm that the head  
11:33:55 11 had -- was in a good condition in 1996, and we didn't see  
12 anything that undermined that sort of a conclusion. It was all  
11:34:03 13 consistent.

14 Q. Okay. You said you saw portions of the '96 and '98  
11:34:10 15 inspection. Did Defendant Geisen tell you anything about the  
11:34:13 16 2000 inspection?

11:34:15 17 A. Yeah, the 1998 video had much more boron on it. And  
18 what we were told was, if I remember the words, it was on the  
19 order of, if you think this tape is bad, the 2000 tape is even  
20 worse, so I won't bother to show it to you.

11:34:36 21 Q. Do you recall any other comments by Defendant Geisen?

11:34:44 22 A. No, that was the main one that sticks in my mind.

23 Q. What was your takeaway from viewing those videotapes?

24 A. From what we saw, I didn't think that it contradicted  
11:34:55 25 any of the other statements that they had made. I think it

11:34:59 1 generally supported or was consistent with the things that they  
2 had indicated in some of their submittals that they had told us  
3 verbally in meetings and phone calls and things like that. So  
4 I think it generally supported the position that they had put  
5 forth to us.

11:35:28 6 Q. All right. Now, in your view did these videotapes  
11:35:35 7 permit an effective inspection of the reactor vessel head  
11:35:44 8 penetrations?

11:35:45 9 A. The videos that were shown to us supported that there  
10 were some nozzles that could be and that the licensee could rule  
11 out leakage from certain nozzles.

11:36:05 12 Since we did not do a comprehensive review, whether  
11:36:09 13 the correct number at the 2000 inspection is 45 or 15 was not  
14 something that we could -- we would have been able to draw a  
15 conclusion about without doing a thorough review. What we knew  
16 at that point, I think, again, it supported the conclusions they  
11:36:28 17 were making. What we've seen subsequently from both the '96  
18 and '98 videos, I think, would clearly have undermined the  
11:36:38 19 position that the licensee was putting out.

11:36:47 20 Q. Were you involved in proposing a proposed shutdown order  
21 in November of 1991 [sic]?

11:36:53 22 A. Yes, I was.

23 Q. What was your role?

11:36:56 24 A. I was one of the contributors to the proposed order,  
11:37:04 25 provided mainly technical facts and assessments to the order.

11:37:16 1 Q. Backing up to the tapes, did Defendant Geisen or any  
2 other FENOC representative leave copies of tapes or digital  
11:37:28 3 copies of these videos with you or with anybody at the NRC?

4 A. No, they did not. As I mentioned before, the tapes  
11:37:37 5 came in in, like, a briefcase and they left NRC in a briefcase  
6 with Mr. Geisen. The only indication that we had were some of  
7 the photographs that were in some of the submittals we've  
11:37:50 8 already looked at.

11:38:01 9 Q. At this time I'm going to hand the witness Government's  
11:38:06 10 Exhibit 118, and I'll ask him to identify it for the Court.

11:38:25 11 A. This is a transmittal of meeting handout materials. It  
11:38:31 12 says that the date of the meeting was 11-28, 2001. The purpose  
13 of the meeting: To discuss information related to supplemental  
14 information regarding inspection plans and commitments for  
11:38:49 15 Davis-Besse in response to Bulletin 2001-01.

11:39:01 16 Q. So that was minutes of a meeting, or it is just slides  
11:39:09 17 with a cover page attached?

18 A. It looks like it's just slides with a cover page.

19 Q. So is the cover page something produced by NRC?

11:39:17 20 A. Yes, this is an NRC form, and that's the way it would  
21 have been documented in our computer system with this form.

11:39:32 22 MR. POOLE: Your Honor, we'll offer Government's  
11:39:34 23 Exhibit --

11:39:34 24 BY MR. POOLE:

25 Q. Oh, was that a meeting you were at?

1 A. Yes.

2 Q. Do you recognize the slides?

11:39:41 3 A. Yes. Yes.

11:39:44 4 MR. POOLE: Your Honor, we offer 118.

11:39:47 5 MR. HIBEY: No objection.

6 MR. GORDON: No objection.

11:39:49 7 THE COURT: Government's Exhibit 118 will be

11:39:51 8 admitted without objection, may be exhibited to the jury.

11:40:03 9 BY MR. POOLE:

11:40:03 10 Q. At this time I'm showing the first page of the agenda to

11 11 the jury. It contains a list of the participants; does it not?

12 A. A list of the presenters from FENOC, yes.

13 Q. Presenters. And does it say Deterministic Model, Dave

11:40:31 14 Geisen?

15 A. Yes, it does.

11:40:34 16 Q. Does a later slide lay out deterministic aspects?

17 A. Yes, it does, Slide 4.

11:40:49 18 Q. That slide is 6675? I'm going to enlarge the

11:41:13 19 highlighted area. So the participants said deterministic

20 model, Dave Geisen, and here are the deterministic aspects?

21 A. Yes.

11:41:24 22 Q. Do you have an active recollection of whether Mr. Geisen

11:41:29 23 presented this material?

11:41:30 24 A. I don't actively remember, but licensees tend to stick

25 with their agenda very specifically. So I would expect that he

1 presented this.

2 Q. It says the evaluation is based on inspections in the  
3 10th and 11th and 12th refueling outages?

11:41:52 4 A. Yes.

5 Q. Then it gives dates?

6 A. Yes.

11:41:55 7 Q. And it repeats that the results afford us assurance that  
11:42:02 8 all but four nozzle penetrations were inspected in 1996,  
11:42:07 9 inspection results that have been contained in earlier  
10 submissions?

11:42:10 11 A. Yes.

11:42:23 12 Q. Now, at this point you're getting fairly late in the  
13 process. This is just a few weeks before the final decision  
14 was made, was it not?

11:42:31 15 A. It's about one month before the end of the year time  
11:42:35 16 frame outlined in the bulletin, yes.

11:42:42 17 Q. I'm going to display now the risk-informed evaluation.  
11:42:47 18 This shows the same conclusions as were drawn by 2745, the  
11:42:56 19 submission that we discussed before with the probabilistic risk  
11:42:59 20 analysis?

21 A. Yes.

11:43:02 22 Q. And at this time it's based on the same assumptions that  
23 were operating back then, which nozzles were inspectable?

24 A. Yes.

11:43:18 25 Q. And it concludes essentially that the risks are very

1 small?

2 A. That's correct.

11:43:26 3 Q. Do you remember who presented the probabilistic portion  
4 of this presentation?

11:43:33 5 A. No.

11:43:36 6 Q. Let's backtrack to the first page. Probabilistic risk  
11:43:44 7 assessment, Ken Byrd. Do you remember his presentation?

11:43:52 8 MR. CONROY: Objection. No foundation. I'm  
9 sorry, it's not my turn, but the witness just indicated he  
10 didn't know who made the presentation. Now he's being asked  
11 what Mr. Byrd told him.

11:44:09 12 THE COURT: No, I don't believe. He asked, did you  
13 remember the presentation?

11:44:22 14 MR. CONROY: I thought he asked did he remember the  
15 presenter.

16 THE COURT: "Well, let's back up to the first page.  
11:44:27 17 Probabilistic risk assessment, Ken Byrd. Do you remember his  
11:44:31 18 presentation?"

11:44:32 19 Overruled.

11:44:35 20 A. I remember Mr. Byrd making a presentation. I don't  
21 remember the specific -- which slides that he used, but I do  
22 remember his participation in the risk discussion.

11:44:51 23 BY MR. POOLE:

11:44:51 24 Q. What was his role on behalf of FENOC? What did he  
11:44:56 25 present?

1 A. He presented the risk analysis. He was their risk  
2 expert that apparently did that part of the analysis for them.

11:45:10 3 Q. Do you recall whether he was persuasive or unpersuasive?

4 A. I think generally he did a very good job of presenting  
5 the information. They seemed to have a reasonably thorough and  
11:45:25 6 complete analysis overall.

11:45:54 7 Q. Do you remember a meeting on November 28, 2001, with  
11:46:02 8 representatives from FirstEnergy?

11:46:04 9 A. November 28?

11:46:06 10 Q. Yes. What happened at that meeting?

11:46:13 11 A. I think those are the slides that we're just discussing;  
11:46:25 12 is that correct?

11:46:25 13 Q. If you'll look at the cover page, it should give you the  
14 date.

11:46:28 15 A. Yeah, meeting, November 28.

16 Q. Okay. Thank you. So then we have been describing the  
17 November 28 meeting?

18 A. Yes. That's correct.

19 Q. All right. Thanks for that.

20 So the comments you've made about that meeting are  
11:46:48 21 about what happened on that date?

22 A. Yes.

11:46:51 23 Q. Now, was a decision made that day about whether

11:46:58 24 Davis-Besse should shut down or whether it could continue to  
25 operate?

11:47:03 1 A. I'm not sure when the decision was made. Subsequent to  
2 this meeting we did have an internal staff meeting where we  
11:47:12 3 discussed all the relevant information on Davis-Besse and to be  
4 able to present a recommendation, if you will, to the upper  
11:47:25 5 management on whether we should take regulatory action against  
6 Davis-Besse and issue the order, or whether we should not.

11:47:33 7 Q. What was your belief?

8 A. My belief was that we should issue the order and we  
11:47:38 9 should have required them to shut down and inspect before the  
10 end of the year.

11:47:43 11 Q. All right. So what was your position based on?

11:47:46 12 A. My position was based on the experience at other plants  
13 that are similar to Davis-Besse where all of them, had it found  
14 leaks and cracked nozzles, we were fortunate in that the plants  
15 that had been inspected previously did not have anything that  
11:48:10 16 really was a safety challenge.

17 But with Davis-Besse, we didn't know if they were  
11:48:16 18 worse or in a better condition than those plants. So they  
19 could be worse, and they could have been in a dangerous  
11:48:23 20 situation. And just things like that.

11:48:28 21 Just what we had found over the reviewing of all  
22 the bulletin responses and supplemental inspections licensees  
11:48:37 23 had performed from plants that had shut down and done  
24 inspections. Things like that sort of reinforced to me that  
25 Davis-Besse was going to be the only high-susceptibility plant

1 that would not inspect by December 31 or, like, two weeks later  
2 the D.C. Cook was going to shut down.

11:49:00 3 The thing that was -- that I think did not make my  
11:49:07 4 position persuasive to upper management is there was no single  
5 piece of information that I could put on the table and say,  
6 here, this shows that Davis-Besse is much worse than the other  
11:49:18 7 plants. Here's some sort of evidence that proves that  
8 they're -- that they may be in a worse condition than other  
9 plants.

10 Q. Let me ask you about this. Who made the ultimate  
11 decision to allow them to continue to operate until February?

12 A. I believe the office director of the Office of Nuclear  
11:49:38 13 Regulation, Sam Collins, who presided at the meeting where the  
14 decision was made, the meeting on the 28th.

15 The meeting on the 28th, Brian Sheron was sort of  
16 the leader of the meeting. Mr. Collins was involved sort of at  
17 the very beginning or the premium part. And we were just having  
18 sort of a general discussion about what we knew about  
19 Davis-Besse and things like that.

11:50:12 20 Q. I think you said before you're not sure when the actual  
11:50:15 21 decision was made?

11:50:17 22 A. Correct.

23 Q. But if you knew then what you knew now about the prior  
24 conditions of -- the condition of the reactor head, would you  
25 have done anything differently?

1           A.    I think we would have had more ammunition, if you will,  
2 more evidence to present to our management to show really the  
3 plant should be shut down.    I think some of the photos and  
4 things like that that have subsequently come out, if we had  
5 access to those, we would have had a clearly different decision  
11:50:57 6 from our upper management.

11:51:25 7           Q.    At the NRC do you rely on licensees to provide accurate  
11:51:32 8 and complete information?

11:51:33 9           A.    Those words are in Regulation 50.9, that licensees are  
11:51:40 10 supposed to provide complete and accurate information in all  
11:51:44 11 material aspects.    So yeah, the expectation is we are  
12 engineers, licensees are engineers.    My expectation, and I  
13 think all of the NRC staff engineers' expectation, is that the  
14 facts will be on the table.    The licensee may have one  
11:52:03 15 interpretation of the facts, we may have a different one, but at  
16 least everybody can see all of the evidence, if you will, of  
11:52:12 17 what the state of the situation is.

11:52:17 18                       MR. POOLE:   Thank you.    That's all the questions  
19 we have, Your Honor.    Maybe I'll take a minute and clear things  
20 away for Mr. Hibey.

11:53:25 21                       THE COURT:   Ladies and gentlemen, rather than break  
22 up cross-examination and redirect, Counsel and the Court have  
23 agreed that we'll take our lunch break at this juncture and  
24 resume -- because I understand that all or at least a great  
11:53:46 25 majority of you are going out for lunch, we'll resume at 1:15.

1 I'll try to be prompt. I do have a 12:30 hearing.

11:53:57

2 In any event, please remember my previous

11:54:01

3 admonitions. Do not read, listen to, or watch anything

11:54:07

4 touching on this case. Do not discuss the case among

5 yourselves, nor with anyone else, nor permit anyone else to

6 discuss it with you. Do not make up your minds on the ultimate

7 issue or issues in this case which you will have to decide after

8 all the evidence is in, you've heard the instructions of the

9 Court and the closing arguments of Counsel. Enjoy your lunch.

10 We'll see you at 1:15.

11 (Luncheon recess taken.)

13:20:00

12

- - -

13:20:00

13

ALLEN HISER, PH.D., CROSS-EXAMINATION

13:20:27

14

BY MR. HIBEY:

13:20:27

15

Q. Good afternoon, ladies and gentlemen. Dr. Hiser, I

16

represent David Geisen. My name is Richard Hibey.

13:20:36

17

As you sit here today, you believe you were

13:20:50

18

deceived by the licensee in this case; isn't that correct?

19

A. Yes, it is.

13:21:05

20

Q. And you can date the time when you felt deceived by what

21

had transpired from February of 2002 when word had come back to

22

the NRC that a cavity had been found in the head; is that right?

13:21:25

23

A. Not at that point I didn't feel that we had been

24

deceived, no.

13:21:30

25

Q. Tell us when you felt you were deceived.

13:21:33 1 A. I felt deceived when our Lessons Learned Task Force had  
13:21:42 2 gathered information on Davis-Besse and actually the first piece  
3 of -- first indication I had was a photograph that's generally  
13:21:51 4 been referred to as the red photo from Davis-Besse.

13:21:55 5 Q. We are going to get to that.

6 A. But that was the first indication that I had.

7 Q. That was the first indication that you had been  
13:22:04 8 deceived; is that right?

9 A. Uh-huh.

10 Q. From that point where you had received and looked at  
13:22:14 11 this red photograph, you concluded that there had been incorrect  
12 information given to you regarding the condition of the head; is  
13:22:30 13 that right?

14 A. I think at that point I knew that incomplete information  
15 had been provided to us, whether it was clearly what was  
13:22:39 16 provided was not consistent with 50.9, complete and accurate  
17 information, because that was directly material to the kind of  
18 information we had requested in the bulletin.

13:22:52 19 Q. From that day since, you've gone through the process of  
20 reviewing in your mind how it is that you were deceived by the  
13:23:11 21 licensee; isn't that correct?

13:23:16 22 A. Yes.

13:23:18 23 Q. You've gone through that thought process on a number of  
13:23:22 24 occasions with the Office of Investigation; isn't that right?

25 A. Yes.

1 Q. With the Office of the Inspector General; is that  
13:23:32 2 correct?

13:23:32 3 A. Yes.

13:23:33 4 Q. With the prosecutors in this case as well; is that  
5 right?

6 A. Yes.

13:23:41 7 Q. And the process that you've undertaken in each of those  
13:23:47 8 occasions was to reflect back on what it is you learned, what  
13:23:55 9 your experience was during the period within which the NRC and  
13:24:06 10 the licensee were interacting on the question of the bulletin,  
13:24:12 11 and the bulletin responses, and the ultimate decision whether to  
13:24:16 12 stay open or shut down; is that right?

13:24:18 13 A. Yeah, that's correct.

13:24:20 14 Q. So part of that process then included your looking back  
13:24:30 15 on documents that had been presented and studied by you and your  
13:24:37 16 staff during the period between September 4th and February of  
13:24:50 17 2002; is that correct, sir?

13:24:57 18 A. Yes.

13:24:58 19 Q. Now, one of the documents, the first document that you  
20 as the lead reviewer of the high susceptibility plant known as  
21 Davis-Besse looked at, was 2731, the serial letter dated  
22 September 4th that was shown to you and admitted into evidence  
23 on your testimony, correct?

24 A. Yes.

13:25:24 25 Q. And with respect to that, you were shown page 3 of

13:25:35 1 Attachment 1 of Exhibit 60, which I'm going to put up on this  
13:25:44 2 ELMO, is what I think it's called, the mechanism.

13:25:53 3 MR. HIBEY: I would like to state, Your Honor, that  
4 I'm using a copy that I underlined, so these are my underlines;  
5 they don't appear in the original, but they're my way of trying  
6 to focus.

13:26:05 7 THE COURT: That's instead of highlighting?

13:26:09 8 MR. HIBEY: Indeed.

13:26:10 9 MR. POOLE: We don't object.

13:26:12 10 THE COURT: Thank you.

13:26:20 11 MR. HIBEY: He's asking for me to do something?

13:26:27 12 THE COURT: Stand aside, sir. We're going to get  
13:26:30 13 an expert. We don't need another novice; we have one sitting on  
13:26:34 14 the bench.

13:26:45 15 BY MR. HIBEY:

13:26:45 16 Q. On your direct examination you were asked by Mr. Poole  
13:26:49 17 about the language on page 3, and specifically with respect to  
13:27:03 18 the reference to 100 percent video inspection, and then in the  
19 second paragraph that there was an indication that inspection of  
20 the RPV head nozzle area indicated some accumulation of boric  
13:27:25 21 acid deposits. You remember your testimony in that respect?

22 A. Yes.

13:27:28 23 Q. You recall, sir, that you were asked what there was  
13:27:37 24 about that particular sentence that caused you some concern  
25 today in retrospect. And in light of the fact that you know it

1 is there as a person who has been deceived, and you said that it  
13:27:55 2 was the use of the word "some"?

13:27:57 3 A. Uh-huh.

13:27:59 4 Q. Now let me ask you something about that. Is that in  
13:28:11 5 retrospect that you thought that way? You didn't think that  
6 way on the day you read this thing in September of 2001?

13:28:23 7 A. Actually, that is the way I thought back then. Clearly  
8 in retrospect "some" does not appear to be an accurate word, but  
9 "some" does -- "some accumulation" does plant the mental image  
13:28:36 10 of what the licensee found in April, 2000.

13:28:40 11 Q. Well, when you gave your testimony you talked about  
13:28:43 12 some, but you didn't talk about accumulation, and later you  
13:28:50 13 said, this is sporadic. You don't see the word sporadic there,  
14 do you?

15 A. No, but to me, that's how I interpreted "some".

16 Q. That's how you interpreted "some", as sporadic, so you  
17 brought that to the piece, you brought that to what you were  
18 looking at; is that correct?

13:29:07 19 A. That's correct.

13:29:23 20 Q. They say here the RPV head area was cleaned and  
21 subsequent video inspection of the cleaned RPV head areas and  
22 nozzles was performed for future reference. You didn't find  
13:29:35 23 any problem with that, did you?

13:29:45 24 A. At that point in time?

25 Q. At that point in time. I'm trying to find out what your

1 mindset at the time was.

13:30:05 2 A. Well, at this point in time the licensee was just  
3 telling us what they did. The fact that they stated they  
4 cleaned the head with demineralized water, again, planted a  
5 certain image that the head was cleaned of boric acid, that the  
6 fact that they did a subsequent video inspection of the cleaned  
7 head and head areas and nozzles seemed like a very positive  
13:30:15 8 proactive step for the licensee to have taken. So that I would  
9 consider both of those to have been positive measures.

13:30:22 10 Q. But, sir, let me ask you something. Isn't there in  
11 this same page reference to the fact that they were cleaning as  
12 reasonably as possible?

13:30:38 13 A. Yeah, I think that's the wording that's there, that's  
14 correct.

15 Q. And that would mean it is not that the head cleaning  
16 could not have been complete; is that right?

13:30:49 17 A. To the greatest extent possible, it does indicate that  
18 it's not 100 percent complete, but if there is only some boric  
13:30:58 19 acid accumulation to start with, then, I mean, there can't be  
20 that much that's left.

13:31:04 21 Q. But you don't know how much is left, but only that  
13:31:07 22 there's some left; isn't that right? And in this same page,  
23 there is reference to the fact that there are leaking flanges;  
13:31:15 24 isn't that right?

25 A. That's correct.

13:31:17 1 Q. So you don't have a situation in which you were of the  
13:31:23 2 belief that all of the nozzles were clean and inspectable?

13:31:37 3 A. I believe at this point, given what we were told in a  
13:31:41 4 subsequent phone call October 3, where we were told that 100  
5 percent of the head was inspected except for five or six  
6 nozzles, I mean, that's close to 100 percent.

13:31:52 7 Q. But it's not 100 percent -- it was not 100 percent in  
8 your mind, was it?

9 A. It's 90-plus percent. And that was for as-found  
13:32:00 10 condition clearly coming out of it. If one does cleaning to  
11 the extent possible, then there should be some percentage  
12 between 90 and 100 percent which would be visible after the  
13 inspection and cleaning.

13:32:16 14 Q. Now, so that I'm very clear on this, you understood that  
15 there was not a 100 percent complete inspection of the head when  
16 you read 2731?

13:32:28 17 A. Actually, in reading 2731 it's not -- that is not what  
13:32:35 18 2731 says. There was a subsequent clarification.

13:32:40 19 Q. Well, you do have on there the fact that there are  
13:32:44 20 certain leaking flanges that are also reported in there; isn't  
21 that right?

13:32:51 22 A. That's correct.

13:32:52 23 Q. Now, very quickly, though, none of this persuaded you  
24 that the company should continue to operate after December 31;  
25 is that right?

1 A. It did not persuade me, that's correct.

13:33:10 2 Q. So if it had persuaded you, you -- there wouldn't have  
3 been a need for the telephone call that transpired on October 3?

13:33:22 4 A. If the submittal had been 100 percent clear and all of  
13:33:26 5 the engineers had no questions, there would not have been a need  
6 for a phone call, that's correct.

13:33:38 7 Q. That is to say there would not have been a need for a  
8 phone call if you were satisfied?

13:33:43 9 A. Correct.

13:33:45 10 Q. And so when you came to the October 3 phone call, you  
13:33:53 11 required certain additional information?

13:33:57 12 A. Uh-huh.

13 Q. Is that right?

14 A. Yes.

15 Q. And that was in the nature of a nozzle-by-nozzle  
13:34:03 16 analysis of the head?

13:34:06 17 A. Yes.

13:34:07 18 Q. And you wanted a gap analysis as well; isn't that right?

13:34:12 19 A. The nozzle-by-nozzle gap analysis was one of the major  
20 things that we wanted because that impacted prior inspections  
21 and future inspections. I believe at that point or subsequent  
22 discussion with the licensee we requested a nozzle-by-nozzle  
13:34:30 23 review of the past videotapes.

13:34:40 24 Q. Now, in that phone call they indicated, did they not,  
13:34:44 25 that they would provide that additional information; is that

1 right?

2 A. Yes, that's correct.

13:34:51 3 Q. And in that phone call they inquired of the staff of the  
4 NRC certain information about how it is that they were taking  
13:35:08 5 the position they were taking relative to Davis-Besse; is that  
13:35:13 6 right?

13:35:13 7 A. I don't believe at that phone call they did because the  
8 NRC did not have a position at that point in time.

9 Q. What does predecisional mean?

13:35:23 10 A. Predecisional means before the decision is made.

13:35:27 11 Q. What is the consequence of predecisional?

13:35:32 12 A. Predecisional normally is something that's kept internal  
13 to the NRC before public release.

13:35:41 14 Q. So it won't be discussed with the licensee until --

15 A. Well, with anybody --

13:35:50 16 Q. Well, focusing specifically on the licensee.

17 A. Yeah.

13:35:53 18 Q. So they were told in that phone call that certain  
13:35:58 19 information was predecisional and would not be shared at that  
20 point; is that correct?

21 A. No, I don't believe that at all.

22 Q. You don't recall that?

23 A. No.

13:36:06 24 Q. All right. Now, there came a time when on October 11  
13:36:15 25 you were summoned to a meeting with the technical assistants to

1 the commissioners; is that correct?

2 A. I was notified. It wasn't so much summoned but  
3 provided the opportunity to attend, yes.

13:36:33 4 Q. And you were surprised by that?

13:36:39 5 A. I was surprised at the circumstances of the meeting,  
6 yes.

13:36:43 7 Q. And probably annoyed, too?

8 A. No, not at all.

9 Q. Oh, good. Now, when you arrived at that meeting you  
10 received information in the form of -- I guess they call it a  
13:37:03 11 PowerPoint presentation regarding the position of FENOC on the  
12 subject of the circumferential cracking of reactor pressure  
13:37:19 13 vessel head penetration nozzles; namely, the Bulletin 2001-01?

14 A. That's correct.

13:37:30 15 Q. You were shown a couple of slides in Government's  
13:37:53 16 Exhibit 87 and 822. Does that do it?

13:38:08 17 I'm showing you Government's Exhibit 822. This is  
18 a slide, is it not, from Government's Exhibit 87 that you were  
19 shown on direct examination; is that right?

20 A. Yes.

13:38:19 21 Q. And you were cited to the first entry on top of the  
13:38:29 22 page; is that correct?

23 A. Yes.

24 Q. But would it be fair to say, sir, that that was not all  
13:38:38 25 that was discussed regarding that slide?

13:38:44 1 A. No, that's correct. You are correct.

13:38:47 2 Q. As a matter of fact, if you go down to the third entry,  
13:38:51 3 here you have plant specific finite element analysis shows that  
4 65 out of 69 will open up sufficiently to provide visual  
13:39:04 5 indication; is that right?

6 A. Could you demagnify it a little bit? Part of the words  
7 are missing from that.

13:39:24 8 Q. Isn't that right?

13:39:26 9 A. What was the question again?

10 Q. There was also on this page reference to the fact that  
11 not all of the nozzles could be credited for the purpose of this  
13:39:37 12 inspection; isn't that right?

13 A. That's correct. That goes back to the interference gap  
13:39:42 14 analysis that we talked about earlier.

13:39:56 15 Q. With respect to those remaining four, in the fourth  
16 entry, remaining four CRDMs located in the lowest stress area,  
13:40:06 17 there have been no circumferential cracks found in the industry.  
18 That was also discussed, wasn't it?

19 A. Yes. Those four are the same four that are --

13:40:22 20 Q. At the top?

21 A. Numbers 66, 67, 68, and 69 of the prior bulletin.

13:40:28 22 Q. So they're the ones at the top of the head?

23 A. Correct.

13:40:32 24 Q. So there is, again, a situation in which you understood  
25 that there was not 100 percent inspection for which all of the

13:40:42 1 nozzles could be credited; isn't that right?

2 A. That's correct.

13:40:51 3 Q. Now, there came a time, did there not, when FENOC, also  
13:41:02 4 in that meeting, discussed with the technical assistants and  
13:41:20 5 those of you who were in attendance various plant-specific  
13:41:25 6 positions and analytic assumptions as well as differences that  
7 FENOC had with the staff; isn't that right?

13:41:33 8 A. I believe so, yes.

13:41:35 9 Q. In fact, the staff, it is reported in Government's  
13:41:42 10 Exhibit 88, which is the minutes of the meeting -- let me just  
11 quickly put that up there so you can be assured what I'm talking  
12 about. The minutes of the meeting of October 11, right?

13 A. Yes.

14 Q. That on the second page there is a statement that you  
13:42:03 15 don't quarrel with because, as I recall, you said this was an  
16 accurate presentation of what transpired, wherein Number 1,  
17 under differences with the staff, it says: The staff does not  
13:42:14 18 believe that Davis-Besse has a qualified method for visual  
19 inspection of the penetration nozzles [sic]. Is that right,  
13:42:23 20 sir?

13:42:26 21 A. Actually, I don't believe that I agreed with that  
22 statement at that point in time.

23 Q. That statement was made?

13:42:32 24 A. The statement was made by FENOC, that's correct.

13:42:55 25 Q. At the bottom of the page, Number 3, FENOC --

1 MR. HIBEY: Can everybody see that, or do I have to  
2 punch it up?

13:43:13 3 THE JUROR: Up a little.

4 BY MR. HIBEY:

5 Q. In Number 3 it said at the bottom of the page, FENOC  
6 stated that during the October 3 call they informed the staff  
13:43:23 7 they had videotapes of the head, a finite element analysis, and  
8 a crack growth rate model that differed from the NRC's. FENOC  
9 also informed the staff they would submit all data for staff  
13:43:37 10 review. The staff has not requested to review this data.

13:43:41 11 Do you recall that being covered in the meeting?

13:43:44 12 A. Not entirely.

13 Q. You don't have a recollection of that?

14 A. No. It wouldn't surprise me, though, because the volume  
13:43:51 15 of information they're talking about and the number of plants we  
13:43:54 16 were reviewing would have been a very onerous task for us.

13:43:59 17 Q. Well, are you saying that somebody affirmatively on your  
13:44:03 18 side said, we don't want it?

13:44:05 19 A. No.

13:44:06 20 Q. All right.

13:44:08 21 A. No, the fact that we did not request it, which is what  
22 that statement says, does not surprise me. I mean, the October  
13:44:17 23 3 was the first phone call of what we expected would be a series  
24 of interactions with Davis-Besse.

25 Q. Well, they didn't withdraw the offer, did they, sir?

13:44:26 1 A. I don't remember -- in all honesty, I don't remember it  
13:44:30 2 being offered, and I do not remember it being reiterated at any  
13:44:34 3 future point in time.

13:44:35 4 Q. I see. So all you do is rely on what you understood to  
5 have transpired in that meeting. You're looking at that  
13:44:44 6 document, and one that you said was accurate when it was  
13:44:48 7 identified and admitted into evidence, and now you're saying,  
8 while that may be there, you don't have any independent  
13:44:56 9 recollection?

13:44:57 10 A. I don't remember that statement being made by the FENOC  
11 representative.

12 Q. You don't deny that that happened?

13 A. It may have.

13:45:06 14 Q. Now, you then received on October 17 serial letter 2735;  
15 is that right? That is just quickly to rerefresh you. That's  
16 Government's Exhibit 105.

13:45:33 17 A. Yes.

13:45:42 18 Q. Now, on page 2 -- let me see if I can find that in the  
13:45:46 19 attachment. There is a line in there, in the large paragraph  
13:46:22 20 toward the bottom of the page under Previous Inspection Results.  
13:46:28 21 Your attention was directed to the words "a whole head visual  
13:46:33 22 inspection;" is that right?

13:46:38 23 A. Yes.

24 Q. You said you understood that to mean that all nozzles  
13:46:43 25 were viewed; is that correct?

1           A. To me that meant that the entire head was accessible and  
2 was viewed, and whether each individual nozzle -- I mean, the  
13:46:55 3 requirements to do an inspection that the bulletin was looking  
13:47:00 4 for versus what may have been done in 2000 was different,  
13:47:04 5 different level of sensitivity and care.

6           Q. Dr. Hiser, I want to ask you a question. Do you make a  
13:47:11 7 distinction between what's accessible and having access?

13:47:18 8           A. What is accessible and having access, the two are the  
9 same.

10          Q. You think the two are the same? You don't believe that  
11 having access means you can go to it and handle it versus it's  
12 there and able to be handled but perhaps not, in fact, accessed?

13:47:44 13          A. I suppose that one can have access and choose not to  
14 access it.

15          Q. The reason why I ask is in this same paragraph there's  
13:47:55 16 reference to various nozzles that were viewed and those that  
17 were obscured in the various refueling outages.

13:48:05 18                           Do you see that down here in the page?

19          A. Yes.

13:48:08 20          Q. I'm asking you, sir, is it possible in light of the fact  
21 that you sit here as a person who has been deceived, that your  
13:48:25 22 interpretation today about the language that you were directed  
23 to in your direct examination might be a hindsight reaction, a  
13:48:41 24 retrospective of what you understood to be the case at the time  
13:48:44 25 you were looking at these things?

1 A. No, I don't believe that at all.

13:48:55 2 Q. Well, sir, it's the case, is it not, that you were not  
3 persuaded by 2735 at the time you saw 2735; isn't that right?

13:49:01 4 A. I believe that it provided a complete and accurate  
13:49:04 5 record. Did it ultimately lead me to a conclusion that  
6 Davis-Besse should operate beyond December 31? No, it did not.

13:49:14 7 Q. Let me get on that for a moment. When you say you  
8 believe it provided you a complete and accurate record, I take  
9 it, therefore, you would agree that you found nothing in the  
13:49:26 10 behavior of anyone at Davis-Besse to have been deceptive; is  
13:49:38 11 that correct?

13:49:38 12 A. I agree with you. There were no appearances of  
13:49:43 13 deceptiveness.

13:49:48 14 Q. Now, there's also at the bottom of that page this  
13:49:53 15 business again about cleaning with demineralized water to the  
13:49:57 16 extent possible to provide a clean head for future inspection  
13:50:02 17 results; is that right?

18 A. That's correct.

13:50:05 19 Q. And once again, that cannot mean that the head was  
13:50:09 20 completely clean; is that right?

21 A. I think within this statement I think that's correct.

22 Q. Yet on direct examination, sir, is it not correct, sir,  
23 that you stated that you believed the head was completely clean?

13:50:22 24 A. In combination with another statement in here that  
13:50:29 25 discusses their inspection plans for 2002, a fully clean head

1 would have been necessary for them to make the commitment -- the  
13:50:42 2 licensee commitment that they had implemented.

13:50:47 3 Q. Back to my question. You stated, did you not, on  
13:50:50 4 direct examination you understood the head to have been  
5 completely clean? Is that right? That's what you said from  
6 the stand?

13:50:59 7 A. From the words here and from our phone call with  
8 Davis-Besse, I expected that they had fully cleaned the head.

9 Q. Even though you agree today that that language says "to  
10 the extent possible;" is that right?

13:51:18 11 A. That's correct.

13:51:20 12 Q. All right. Now, there came a time, did there not, when  
13 there was a meeting of the staff with certain Davis-Besse  
14 personnel on October 24th; is that right, sir?

15 A. I would need to see records just to refresh the dates  
16 and all.

17 Q. Let me see if I can help you on that. Let me show you,  
18 at least as a cover sheet, Government's Exhibit 108, which while  
13:51:57 19 it is dated November of '01, it says in the subject line,  
13:52:03 20 Meeting Summary of October 24 to discuss the licensee's response  
21 to Bulletin 2001-01?

22 A. Yes.

13:52:16 23 Q. In the memorialization of that particular meeting,  
13:52:20 24 they -- the NRC recovered again another presentation that -- in  
13:52:30 25 a slide nature that Davis-Besse had submitted; is that correct?

1 A. Uh-huh. Yes.

2 Q. And the analyses section and the facts section slides,  
3 let me just quickly put them up there so that you might all  
13:52:52 4 remember having seen these. Remember that? Your attention was  
13:53:02 5 directed to the beginning of that particular slide. And then  
13:53:13 6 the facts slide was shown to you; is that right, sir? Let's  
7 see if I can do this. How's that? Do you remember that?

8 A. I don't remember it from the earlier discussion, but it  
9 does look familiar.

13:54:02 10 Q. From your recollection?

13:54:04 11 A. Yes.

12 Q. Does that help you?

13 A. Yes.

13:54:11 14 Q. Now, those were two slides that you received after 2735  
13:54:23 15 and the tables that you were shown in 2735; is that correct?  
16 So there is -- there's no more shifting from that point in terms  
17 of the FENOC's identification of what nozzles could be seen free  
13:54:45 18 of boron and which were obscured; is that right, sir?

19 A. I believe that's right, yes.

20 Q. So that the remainder of these pages all had to do with  
13:54:56 21 flaw size and crack growth rates and risk-informed evaluations,  
22 and other subjects of that nature; isn't that right?

23 A. That's correct.

13:55:11 24 Q. So you wouldn't want to leave anybody with the  
25 impression that the only thing that was talked about at that

1 meeting were the slide regarding the facts or the slide  
13:55:24 2 regarding the analysis?

13:55:26 3 A. I think that would not be an accurate representation of  
4 the meeting, that's correct.

5 Q. Not a complete and accurate --

13:55:36 6 A. Complete and accurate, that's correct.

13:55:43 7 Q. Now, there came a time in November, November 8, when you  
8 attended an evening meeting at the NRC at which videotapes were  
9 shown; is that correct?

10 A. Yes, that's correct.

11 Q. And it was late in the evening?

13:56:14 12 A. I would expect, if I remember, 5:00, 4:30, something  
13 like that, after normal working hours.

14 Q. After the normal working hours. So it wasn't  
15 altogether convenient, was it?

16 A. It wasn't a big problem. Rush hour traffic in  
17 Washington is impossible, so going home late is not a problem.

13:56:34 18 Q. I'll have to readily stipulate to that.

13:56:45 19 MR. HIBEY: Just indulge me a moment, Your Honor.

13:56:59 20 Q. So you recall testifying before the grand jury, is that  
13:57:04 21 right, on April 28, 2004 --

22 A. Yes.

13:57:11 23 Q. -- when you gave testimony to this effect: That, at  
24 page 57, Counsel, that, referring to the meeting, was pretty  
13:57:23 25 much in the evening; it was pretty inconvenient for us.

13:57:27 1 MR. POOLE: May I ask -- I'm sorry, Your Honor.

13:57:30 2 MR. HIBEY: Page 57 of the grand jury testimony of

13:57:35 3 April 28, 2004.

13:57:39 4 MR. POOLE: Thank you.

13:57:41 5 BY MR. HIBEY:

13:57:41 6 Q. So it was inconvenient that evening; is that right?

7 A. It was -- if I said that then, sure, that's what I said

13:57:50 8 on April 28, 2004.

13:57:53 9 Q. Now, you also said that -- maybe you didn't, and I'll

10 ask you. There were other people there besides yourself; is

11 that right?

12 A. Yes.

13 Q. Do you have any recollection who attended that

13:58:09 14 particular meeting?

13:58:11 15 A. No. I believe my branch chief, my section chief.

13:58:15 16 Q. Names?

17 A. Bill Bateman, Keith Wickman, I'm sure some of the other

13:58:22 18 engineering staff members that were reviewing the information.

19 I don't remember any other specific names or numbers of people.

20 Q. All right. Putting aside the name, how many people do

13:58:34 21 you think were there for the staff?

22 A. My expectation would be there were probably about six or

23 eight, something like that.

13:58:41 24 Q. Now, in that meeting Mr. Geisen was there; is that

25 correct?

1 A. That's correct.

13:58:54 2 Q. And was there anyone else from Davis-Besse in attendance  
3 at that meeting?

13:58:55 4 A. No. My recollection is Mr. Geisen was the only non-NRC  
13:58:59 5 staff member who was at that meeting.

13:59:05 6 Q. And he's the one who brought the videotapes of the head;  
7 is that correct?

8 A. That's correct.

13:59:15 9 Q. I want to understand the setup. There was a television  
10 set there; is that correct?

11 A. Yes.

12 Q. And it had a VCR machine; is that right?

13 A. That's correct.

14 Q. Of course, under penalty of death I cannot move this  
13:59:35 15 podium, at least that's what the sign says.

16 THE COURT: That's correct.

13:59:39 17 BY MR. HIBEY:

13:59:39 18 Q. But there's a VCR machine in here, and it's one where  
13:59:43 19 you stick in the --

20 A. Uh-huh.

13:59:45 21 Q. That's what you fellows had up there, isn't that right?

22 A. Yes.

13:59:48 23 Q. And it sat on a metal cart?

24 A. Uh-huh. That's correct.

25 Q. And you play the thing by pressing a button; is that

13:59:57 1 correct?

13:59:57 2 A. Either pushing buttons or -- I don't remember if it had  
3 a remote or not. My guess is it had a remote.

14:00:06 4 Q. Your recollection is that it had a remote?

5 A. That would be my guess. I don't know.

6 Q. So when you testified on direct examination a few  
14:00:14 7 moments -- a few hours ago, you said that he controlled the  
8 remote; is that right?

9 A. Well, he controlled the playing of the tape, yes.

14:00:26 10 Q. Now, you testified on direct examination that he  
11 controlled the remote; isn't that right, sir?

14:00:34 12 A. I believe, if that's what I said, that's what I said.  
13 Yes.

14 Q. And in keeping with the thought processes that you have  
15 explained to us both on direct and cross-examination about what  
16 you thought and what you assumed, you have an image or you  
14:00:59 17 wanted to leave us with the impression that he was holding a  
14:01:02 18 remote in his hand; isn't that right?

14:01:05 19 A. No, actually the image I wanted to be left that is  
20 accurate is that he controlled whether the tape was played, fast  
14:01:14 21 forwarded, rewound, held, whatever. That was --

14:01:17 22 Q. Let's talk about the word control. Are you saying that  
23 he exercised exclusive dominion and control and decision making  
14:01:31 24 over the running of the tapes that he played?

25 A. He is the one that pushed the buttons to play the tape

14:01:40 1 or to fast forward or rewind.

14:01:44 2 Q. Are you telling this jury that it was his decision and  
14:01:48 3 no one else's that a tape should be fast-forwarded and then  
4 slowed up or fast-forwarded?

14:02:00 5 A. No, generally we requested if there was something we  
6 saw, say, in a fast-forward mode, we'd ask him to rewind it just  
7 so we could review that section of tape again.

8 Q. Okay. So now we have the situation in which his  
14:02:16 9 control is not to the exclusion of anybody; is that right?

10 A. That's correct.

11 Q. It is in cooperation with others in the room, isn't that  
14:02:29 12 right, that he is pressing the button or not pressing the  
13 button?

14 A. In some cases, yes.

15 Q. During the viewing of the tapes?

16 A. In some cases, yes.

14:02:40 17 Q. You never got the feeling at any time that he was  
14:02:47 18 handling this tape that he was selectively presenting elements  
19 of it to you?

14:03:00 20 A. No, I never had that impression at all.

14:03:27 21 Q. Now, you concluded that you had not seen the entire tape  
22 of 1996; is that correct?

23 A. That is correct.

14:03:39 24 Q. And you came to that conclusion not in the room on  
25 November 8 of '01, but only when you met with the Office of

14:03:51 1 Investigations well after this whole event; isn't that correct?

2 A. No, we knew at that point that we had not seen the whole  
3 tape.

14:03:57 4 Q. All right. So your testimony is that you did not see  
14:04:01 5 the entire 1996 tape?

14:04:04 6 A. In November, 2001, that's correct.

14:04:07 7 Q. On November 8, 2001?

8 A. Yes. Correct.

14:04:20 9 Q. Now, you concluded in November that it was a waste of  
14:04:25 10 time what you had experienced looking at the tapes; is that  
11 right?

12 A. No, not at all.

14:04:33 13 Q. You didn't -- Mr. Geisen expressed frustration at the  
14 quality of the videos?

14:04:43 15 A. He expressed frustration -- actually, I wouldn't even  
14:04:47 16 say it was frustration, more conclusion that the -- not the  
17 technical quality of the tape from 1998, but the ability to view  
18 the head within 1998, that if we thought that was bad, then the  
19 2000 tape was even worse.

20 Q. He couldn't even narrate what nozzles you were looking  
21 at; is that correct?

14:05:17 22 A. I don't believe that he necessarily could on any of the  
14:05:22 23 tapes, I mean, with the information he had there.

24 Q. So the answer is he couldn't do it to your satisfaction,  
25 could he?

1 A. We didn't request that he do that.

14:05:31 2 Q. And -- all right. And the pictures were of very poor  
14:05:36 3 quality; were they not, sir?

4 A. The videos actually were generally fairly good quality.  
5 I mean, everything is relative. You could see nozzles. You  
6 could see the intersections of nozzles with head. You could  
7 see debris. You could see what obviously was flange leakage  
8 from up above the insulation. I would say the quality was  
14:06:04 9 actually fairly readily discernible from a layperson's  
14:06:09 10 perspective even.

14:06:13 11 MR. HIBEY: Indulge me a moment, Your Honor.

14:06:57 12 BY MR. HIBEY:

14:06:57 13 Q. Do you recall, sir, that he expressed an opinion about  
14 the poor quality of the '98 tape and also the 2000 video?

14:07:10 15 A. I don't believe it was criticism of the quality of the  
16 tape itself, but what the tape was showing, yes.

14:07:18 17 Q. Well, let me ask you this: Did you testify in a  
14:07:23 18 proceeding for the -- that was pending before the Commission on  
14:07:30 19 October 2, 2006, in the matter of Steven Moffitt?

14:07:46 20 A. I believe I was deposed for that, yes.

14:07:49 21 Q. Exactly. Do you recall on page 129 he asked this  
22 question: "Do you recall whether he," meaning Mr. Geisen,  
14:07:57 23 "expressed some frustration about the quality of the videos?"

14:07:57 24

25 "answer: I think he did, mainly about the 2000 video."

1 Is that right?

14:08:08 2 A. Yeah, that's just not a complete answer, that's all.

14:08:12 3 That quality is correct, but it was not the technical quality of  
4 the video; it was the images; it's the information that's being  
14:08:20 5 portrayed.

14:08:22 6 Q. You say that's not a complete answer; is that correct?

14:08:25 7 A. The answer that you read off from October 2, 2006 is not  
14:08:29 8 complete.

14:08:30 9 Q. All right. The question was: Do you recall whether he  
14:08:36 10 expressed some frustration at the quality of the videos?

14:08:39 11 Answer: I think he did, mainly about the 2000  
14:08:43 12 video.

13 Is that right?

14:08:44 14 A. Yes.

14:08:48 15 Q. Then you went on to say: I recollect a statement along  
16 the lines, "If you think the '98 video is hard to see, hard to  
17 interpret, then the 2000 is even more difficult;" is that  
14:08:59 18 correct?

14:08:59 19 A. That's correct.

14:09:03 20 Q. Now, it's also the case that you and your colleagues  
14:09:09 21 said outright in that particular meeting that the NRC would not  
22 give credit for the inspections because of what they were seeing  
14:09:18 23 in the videos; isn't that correct?

24 A. I don't recollect when that statement was made, and I do  
25 not recollect the contents of it.

1 Q. Well, sir, let me see if I go on a bit with the story  
2 you might recall more.

3 Do you recall that Mr. Geisen did not disagree or  
14:09:43 4 try to persuade anybody in that meeting that these tapes should  
5 be the basis upon which you would credit Davis-Besse regarding  
6 the condition of the vessel head?

14:10:04 7 A. I would believe that that may have occurred, yes.

8 Q. Indeed, sir, is it not a fact that he definitely agreed  
14:10:12 9 with the assessment that there could be no credit given; isn't  
10 that correct?

11 A. I don't believe that he ever made that statement, that  
12 there could be no credit, because I don't believe that was ever  
14:10:27 13 any information that was provided to us by FENOC. Their risk  
14 analysis continued to assume credit for nozzles.

14:10:35 15 Q. Yes, but on the occasion of November 8, which if I  
14:10:40 16 understand correctly is the time that you and Mr. Geisen were in  
17 the room together with only him there on behalf of Davis-Besse,  
18 on that occasion you're telling me you don't have a recollection  
14:11:02 19 of that?

20 A. I don't remember him saying that no credit should be  
14:11:06 21 given for that inspection.

22 Q. No, you said -- your people said that, and he agreed;  
23 that's what I'm asking.

24 A. I'm sorry. I don't remember.

25 Q. You just don't remember that?

1 A. I don't remember that specific statement.

14:11:27 2 Q. Now, you testified, did you not, that he did not show  
3 the 2000 video; is that correct?

4 A. That's correct.

14:11:39 5 Q. Now, he didn't refuse to show it, did he?

6 A. Well, he recommended that it would be a waste of time  
7 for us to look at it.

8 Q. And none of you insisted that it be put on; is that  
9 correct?

10 A. That's correct.

14:11:52 11 Q. And at the time, sir, which would be November 8, 2001,  
14:12:04 12 2744 had already been submitted by FENOC; is that correct?

13 A. I believe that has a date of October 30.

14 Q. 30. So that's one plus seven, just a rather solid  
14:12:23 15 week; is that correct?

16 A. Yes.

14:12:25 17 Q. And you had occasion, because of your duties at the  
14:12:29 18 Commission, to review carefully everything that's in 2744; is  
19 that right?

20 A. That's correct.

14:12:38 21 Q. And you -- that included looking at all the photographs  
22 that were submitted with 2744? So you have an understanding as  
23 of the time you read 2744, which I take to be before the  
14:13:01 24 meeting, that the photographs which were submitted in 2744  
14:13:10 25 depicted rather bad photographs of the -- bad quality

1 photographs of the various nozzles that were in the submission;  
2 isn't that correct?

14:13:27 3 A. I don't remember the quality of the photographs from  
14:13:31 4 2000 to say they were poor quality or bad quality. But I  
5 remember my recollection is the photos were better quality than  
6 the prior; for example, the '96 or '98 photographs.

14:13:47 7 Q. That the 2000 photographs were better than the '9 --

14:13:51 8 A. Better technical quality, yes.

9 Q. In this submission?

10 A. Yes, more interpretable than, say, the '98 photographs.

14:14:12 11 Q. When he said the photographs or the videos in 2000 were  
12 as bad or worse than '98, did you take issue with him and say,  
13 wait a minute, no, the pictures in here in 2744 as we've come to  
14:14:25 14 know them indicate that 2000 is much better than '98 or '96?

15 A. No. The context of that exchange did not relate to  
16 the -- again, the technical quality of the videos. What it  
17 related to was the ability to do a visual inspection of the  
14:14:41 18 nozzles and the fact that the 1998 video indicated some  
14:14:46 19 impediments to that. And what Mr. Geisen was referring to was  
20 the fact that the 2000 video was even less from that perspective  
14:14:55 21 because there were more impediments.

22 Q. Did he use that word, "interpretable"? Are you sure of  
23 that?

24 A. He did not use that word, but in the context of the  
14:15:04 25 discussion --

14:15:05 1 THE COURT: Ladies and gentlemen, there is one  
2 court reporter with one pair of hands; one person at a time.  
14:15:12 3 Please do not interrupt when he's questioning. Please do not  
4 interrupt when he's answering.  
5 MR. HIBEY: That one's on me, Your Honor. I'm  
6 sorry. I interrupted. I'll take a deep breath and try again.  
14:15:30 7 BY MR. HIBEY:  
14:15:30 8 Q. You don't say anything in your testimony, as I read it  
9 to you before, that spoke to the question of the  
14:15:37 10 interpretability of these photographs, only to the quality;  
11 isn't that right, sir?  
12 A. The question of interpretability never came up within  
14:15:47 13 that context.  
14:15:50 14 Q. So that when you're providing that context here today as  
15 a person who's been deceived, we are learning that that's your  
14:16:00 16 interpretation today of what went on on November 8; is that  
17 correct?  
18 A. That is an interpretation I've had since the very first  
19 time I saw those videos, yes.  
20 Q. But this is the very first time that you've told us that  
21 interpretation?  
14:16:16 22 A. It's the first time I've been queried about it in such a  
23 manner, yes.  
24 Q. You don't believe that you had the opportunity when you  
25 were asked the question that I read to you earlier, that would

1 have caused you to do what you're doing here today?

2 A. No.

3 Q. All right. Now, let's talk quickly about -- and I will  
4 stand corrected if I've covered this and I'll move on, so if  
5 somebody wants to object, they can.

14:16:55 6 THE COURT: It won't be me.

14:16:57 7 MR. HIBEY: It won't be you, but I don't need you  
8 to be frowning, either, at me.

14:17:03 9 THE COURT: We needed that at 2:15. We did.

14:17:11 10 BY MR. HIBEY:

14:17:12 11 Q. When the film that you watched was moved forward and  
12 moved backward, can we agree that that was on request?

14:17:22 13 A. No, it was not totally on request. Sometimes it was on  
14:17:28 14 request. We would see something in the video, somebody would  
15 say, hey, stop, go back, and we would rereview portions.

14:17:37 16 Q. So that happened?

17 A. Yeah.

18 Q. He had no reluctance to do that; is that correct?

14:17:42 19 A. No, not at all.

14:17:43 20 Q. And moving forward didn't create an impression on the  
21 part of the viewers that somehow he was moving past something  
22 that he didn't want you to see either?

23 A. I don't believe -- I believe at every point the tape was  
14:17:56 24 fast forwarded it was still in a mode that you could view what  
14:18:00 25 was going on on the tape.

1 Q. So you did not think he was deliberately withholding any  
2 of the video?

14:18:05 3 A. At no point did he stop the tape -- to the best of my  
14:18:09 4 recollection, at no point did he stop the tape, fast-forward it  
5 to a specific point then reinitiate showing the tape.

14:18:18 6 Q. So I put it to you: You did not think that he was  
14:18:22 7 deliberately withholding any information from the staff in the  
8 evening of November 8, 2001? That was your frame of mind at  
9 that time?

10 A. Yeah, the tapes that he brought, I believe, that we  
11 would -- we had access to every part of those tapes.

12 Q. And he wasn't trying to scare you off? You didn't get  
13 that impression either, did you, scare you off from viewing  
14 anything?

15 A. Well, the 2000 tapes, I don't know if I would say scare  
16 us off, but he recommended that we not view those because they  
14:18:56 17 were less interpretable than the 1998 tapes.

14:19:10 18 Q. In that Moffitt proceeding of October 2, 2006 -- at page  
14:19:15 19 131, Counsel -- were you not asked this question and did you not  
14:19:21 20 give this answer:

21 "Question: Did you think he was deliberately  
22 withholding it or scaring you off?

14:19:27 23 "Answer: No, I did not have that impression."

14:19:34 24 Is that correct, sir?

14:19:34 25

1 A. Correct.

2 Q. You gave that testimony?

3 A. I believe that was my testimony then. That's correct.

14:19:40 4 Q. You're not changing it here, are you?

14:19:42 5 A. Well, the only part that I would again add some context  
6 to is was with the comments on the 2000 tape. We were  
7 definitely not encouraged to view those. Were we scared off of  
14:19:57 8 those? I wouldn't -- that would be the subject of hair  
14:20:02 9 splitting at this point. But clearly my testimony a year ago  
10 was I did not interpret it that way at that point.

11 Q. In fact, you didn't think there was any additional  
12 information you all were looking for after that; is that  
14:20:15 13 correct?

14:20:15 14 A. I don't understand the question, after that on November  
14:20:19 15 8?

14:20:20 16 Q. Yeah, after that session, after that session with  
14:20:25 17 respect to the tapes, you didn't think you needed any more  
18 information from these tapes?

14:20:31 19 A. We -- again, my expectation was we had been provided  
20 with all relevant information from the tapes, representative  
21 information, and from that context there was no need for us to  
22 do more rigorous review of the tapes.

14:20:46 23 Q. Question on page 131:

24 "What happened? Did the session end with the  
14:20:52 25 videos?

1                   "Answer: I just believe he packed up his tapes and  
2 was escorted out. I don't think there was any additional --  
14:21:00 3 any additional information we were looking for from the licensee  
4 following that."

5           A. Yeah. That's correct.

14:21:27 6           Q. I want to ask you again, forgive me for saying it again  
14:21:31 7 because I was looking for it, now I think I found what I want.  
14:21:38 8 Based upon the way and what he described about the 2000  
14:21:42 9 inspection, you were not willing to give him credit for that; is  
14:21:51 10 that correct?

14:21:51 11          A. I believe -- I have a hard time recollecting, but I  
14:21:57 12 think the staff was not clearly going to give 100 percent credit  
13 for the inspection. I don't remember our calculations, how  
14 much credit we ultimately thought was reasonable.

14:22:13 15          Q. 131 to 132:

16                   "Question: Did the staff basically decide it  
17 couldn't credit Davis-Besse's prior inspections based upon the  
18 tapes?

19                   "Answer: Well, based upon what Mr. Geisen described  
14:22:25 20 of the 2000 inspection, I think we were less willing to give  
21 them credit for it at that point."

14:22:32 22                   Remember that testimony?

14:22:33 23          A. Yes.

24          Q. All right. Now, he didn't argue with that, did he?

14:22:44 25          A. I don't recollect a lot of discussion about it.

1 Whether on November 8 we said, no credit for this, and he argued  
2 or agreed with us or -- I don't remember an extensive  
14:22:59 3 discussion, a formal discussion like that.

14:23:01 4 Q. Again, on 132:

5 "Did he argue with you or seem to agree that --"  
14:23:11 6 Then you jumped in with your answer.

7 "Answer: No, he definitely agreed. He made fairly  
14:23:21 8 disparaging remarks about the 2000 video."

9 A. Okay.

14:23:25 10 Q. That was your testimony; is that correct, sir?

11 A. Yes.

14:23:33 12 Q. Let me ask you this: Isn't it the case that in that  
14:23:40 13 meeting he said, meaning Mr. Geisen, to all assembled that he  
14:23:51 14 simply wasn't the guy who could identify and make the calls  
14:23:58 15 regarding the nozzles in the tapes that he was showing?

14:24:05 16 A. I don't remember that he said that. He may have and --

14:24:09 17 Q. Do you recall that he indicated that he was not the  
14:24:13 18 person the staff needed to talk to to be able to understand the  
14:24:18 19 calls regarding the nozzles that the company had made in its  
14:24:24 20 submissions?

21 A. I don't remember him saying that, no.

14:24:28 22 Q. Do you remember that less than a week later on November  
14:24:33 23 14, 2001, Andrew Siemaszko, a systems engineer at Davis-Besse  
14:24:42 24 whose name has been mentioned prominently in this trial, came to  
14:24:47 25 Washington to discuss his inspection of the tapes?

14:24:55 1 A. I don't remember the date. I remember in that time  
2 frame, that's correct.

3 Q. So your answer to that is yes?

4 A. Whether it's November 14 or later is the only --

5 Q. I'll say on or about November 14 to satisfy and not get  
6 you hung up with the date. But there was that occasion, was  
7 there not, when Mr. Siemaszko came to Washington to talk about  
8 his inspection of the tapes?

14:25:21 8  
14:25:25 9 A. I don't remember a specific meeting just on his  
14:25:30 10 interpretation of the tapes. My recollection is we were having  
11 another fairly large comprehensive public meeting with FENOC,  
12 and he made certain statements at that meeting.

13 Q. And do you recall, sir, that the statements he made  
14:25:49 14 concerned his inspection of the tapes?

14:25:53 15 A. I don't remember if they were his inspection of the  
16 tapes or his, if you will, eyes-on recollection from the actual  
17 inspection itself. So if it's from the inspection, I don't  
18 remember if it was from the tapes, from a review of the tapes,  
19 since he was the one that did the inspection in 2000.

14:26:15 20 Q. Let's get to it. What did he say he saw? How did he  
21 conclude his comment regarding his inspection of the tapes?

22 A. My recollection of his characterization of the  
23 inspection itself was that everything looked fine, and he was --  
14:26:35 24 I recollect words along the line that he would swear on a stack  
25 of Bibles about how good it was coming out of that inspection.

14:26:43 1 That's my recollection.

2 Q. And you understand -- did he say "stack of Bibles," or  
14:26:49 3 did he say he was at peace in his soul about the inspection?

14:26:54 4 A. The exact wording doesn't stick with me.

5 Q. But the fervor of his comments certainly does stick with  
14:27:02 6 you?

7 A. That's correct.

14:27:03 8 Q. And you understood him to be the person who was  
14:27:10 9 responsible for the cleaning and the inspection in the year  
10 2000?

11 A. I think that had been stipulated in prior discussions  
14:27:19 12 with FENOC.

14:27:26 13 Q. Sir, is it not also the case -- withdrawn.

14:27:46 14 In that time frame, in November, 2001, would it be  
15 fair to say that nothing in the conduct of Mr. Geisen as you  
14:28:05 16 witnessed it led you to believe that he was lying or attempting  
17 to deceive the NRC?

18 A. I would agree with that. I had no indication that he  
14:28:17 19 was lying or being deceitful to us.

14:28:22 20 Q. Now, with respect to the 2000 video, even as you  
21 reflected on it, you did not believe seeing the 2000 video in  
14:28:57 22 November of 2001 would have been terribly relevant to the NRC?

14:29:05 23 A. In November of 2001, the facts that I knew at that point  
24 in time, I do not believe that would have been relevant.

14:29:16 25 Q. In fact, when you saw the 2000 video, you thought that

1 the '98 and the 2000 video were pretty comparable?

14:29:25 2 A. May have made that statement at one point. I did  
3 not -- have never reviewed the 2000 video in a lot of detail.

14:29:36 4 Q. So you can offer no sinister reason why Mr. Geisen did  
14:29:41 5 not see -- or you did not see, rather, the 2000 video on  
6 November 8; is that correct?

7 A. The only factual difference that I know between '98 and  
8 2000 was the prevalence of corrosion product on the vessel  
9 flange that may have been identifiable in the 2000 video. That  
10 would -- other than that, everything we've been told is that the  
11 quality of the two videos is somewhat similar.

14:30:09 12 Q. So let me get back to my question. You can offer no  
14:30:12 13 sinister reason why you did not see the 2000 video on November 8  
14:30:21 14 of '01; is that correct?

14:30:24 15 A. Well, again, if --

14:30:26 16 Q. Yes or no?

17 A. Yes, I think there may be sinister motives, yes.

14:30:32 18 Q. So since November of 2001, you saw nothing that led you  
14:30:37 19 to believe Dave Geisen was lying or deceiving you?

14:30:44 20 A. I believe that's correct.

14:31:06 21 Q. Would you agree that you would not support the  
14:31:14 22 proposition that Mr. Geisen did not want you to see, watch the  
14:31:24 23 2000 video on November 8?

24 A. There were a lot of "nots" in there.

25 Q. Yeah, there were. You cannot say that he didn't want

14:31:31 1 you to do that?

14:31:33 2 A. I cannot say that he did not want us to do that. All I  
14:31:37 3 can say is that he recommended that we not view it.

14:32:15 4 Q. Now, in your direct examination, toward the end, you  
5 were asked a question about if you knew then what you know now,  
6 would things have been done differently. Do you remember that  
7 question?

8 A. Yes.

14:33:14 9 Q. And I believe your answer was to the effect, yes, I  
10 would have. And I would have, if I had known these things,  
11 would have urged the shutdown of the facility; is that correct?

12 A. I think I would have been more effective in urging the  
13 shutdown, because I recommended shutting the plant down.

14:33:39 14 Q. You didn't feel you had any evidence as of the date of  
15 the vote?

16 A. Did not have a smoking gun that I could have put on the  
17 table and said, here, this proves that that plant needs to be  
18 shut down.

14:33:50 19 Q. But you did reference in your direct testimony to the  
20 fact that there was a photograph that, had it come out, would  
14:34:02 21 have caused you to take the necessary steps to act; is that  
22 correct?

23 A. I think it would have enabled me to be more effective  
24 than -- I think it would have swayed the discussion to where  
25 shutdown would have occurred, yes.

14:34:27 1 Q. Your position is no one in the NRC saw that photograph,  
2 is that correct, until the root cause came out; isn't that  
3 right, sir?

4 A. I don't believe that I've said that. I know that no  
5 one in the group of engineers that was reviewing information  
14:34:45 6 from Davis-Besse in the fall 2001 time frame had any knowledge  
7 of the red photo or similar information.

14:34:56 8 Q. Well, now, let's stop right there for a minute. The  
9 NRC has a section called the Nuclear Regulatory -- what is it  
10 called, NRR?

14:35:20 11 A. Nuclear Reactor Regulation.

12 Q. Nuclear Reactor Regulation. The Nuclear Reactor  
14:35:27 13 Regulation has within its ambit the important duty of evaluating  
14:35:37 14 and bringing to the attention of the Nuclear Regulatory  
14:35:45 15 Commission any information or data that could impact on the  
14:35:53 16 proper operation of a nuclear power plant here in the United  
14:35:59 17 States; is that correct?

14:36:00 18 A. Yes, I believe so.

19 Q. And therefore it is in a receiving mode, that kind of  
20 information from all sources within the commission; isn't that  
21 correct?

14:36:24 22 A. It's in receipt of information that's provided to it,  
23 yes, that would be correct.

14:36:36 24 Q. You have in the Nuclear Regulatory Commission an  
14:36:43 25 inspectorship -- that will be my word -- isn't that right?

1 A. Resident inspectors.

14:36:48 2 Q. Resident inspectors who are part of a region; is that

14:36:58 3 correct?

14:36:58 4 A. Yes.

5 Q. Then that region -- there are a number of regions in the

6 United States, and all that activity ultimately ends up back at

14:37:07 7 headquarters; is that correct? That would be the flow of their

8 actions?

9 A. Not all information, no.

10 Q. No, not all information, but important information;

11 isn't that correct?

14:37:17 12 A. Presumably, that's the expectation.

13 Q. We're not talking about just a dump, but we're talking

14 about some important information, right, information that

15 impacts the proper operation of a facility?

14:37:30 16 A. Yes.

17 Q. Because that's what the resident inspector does, doesn't

14:37:36 18 he?

19 A. Yes.

14:37:37 20 Q. The resident inspector is an employee of the Nuclear

14:37:44 21 Regulatory Commission who actually has a responsibility to a

14:37:50 22 specific plant or power station, whatever they call it, right?

23 A. Correct.

14:37:55 24 Q. So Davis-Besse has a resident inspector, correct?

25 A. I believe two, actually.

1 Q. They have two. And the resident inspector has the  
14:38:09 2 power and the right to have information or receive information  
14:38:20 3 at the plant; isn't that correct?

14:38:23 4 A. I believe that's correct.

14:38:33 5 Q. As a matter of fact, they have access to every Condition  
14:38:47 6 Report that is filed at the plant or by the plant; isn't that  
7 correct?

8 A. I believe they have access to a lot of information at  
9 the plant, that's correct.

10 Q. I'm talking about something called a CR; is that right?

14:39:03 11 A. That's my understanding, yes.

14:39:05 12 Q. And indeed, CR might be the more updated term for  
14:39:12 13 something that used to be called a Potential Condition Adverse  
14:39:17 14 to Quality Report; isn't that correct?

14:39:22 15 A. I'm not familiar with the first term.

14:39:27 16 Q. I think we ought to mark the moment that I know a term  
17 that you don't.

14:39:33 18 So let's stay with CR. Now, these Condition  
14:39:40 19 Reports are made available to the resident inspector. And if  
20 the resident inspector sees something that is significant, then  
14:39:54 21 he'll act on it by transmitting that information forward.  
14:39:57 22 That's what he's supposed to do; isn't that right?

23 A. That would be my understanding, yes.

14:40:09 24 Q. And the NRC and then the Office of Nuclear Reactor  
14:40:21 25 Regulation within the NRC rely on the information provided by

14:40:27 1 the resident inspector through the region offices; isn't that  
2 right?

14:40:31 3 A. They perform the verification mode that we use to  
14:40:36 4 regulate, that's correct.

14:40:38 5 Q. Now, I don't have the government exhibit of that  
6 photograph.

14:40:49 7 MR. POOLE: Exhibit 12, part of Exhibit 12.

14:42:05 8 MR. HIBEY: These are four pages of photographs  
9 that are out of Government's Exhibit 12. The DOJ number, the  
10 last digits are 8951 through 8954.

14:42:30 11 BY MR. HIBEY:

14:42:30 12 Q. Let the record reflect I'm putting these in front of  
13 you. Dr. Hiser, on direct examination when you were talking  
14 about photos that subsequently came out, these are the photos  
15 you're talking about; is that correct?

14:42:43 16 A. That's correct, yes.

14:42:54 17 Q. You wished your office had asked the region and the  
14:43:02 18 resident inspectors about Davis-Besse; isn't that true?

14:43:08 19 A. I think we could have asked them, that's correct.

20 Q. I know you could have asked them. The question is, you  
14:43:17 21 wish you could -- you wish you did ask them; isn't that correct?

14:43:21 22 A. With -- yeah, I think that would have been a prudent  
14:43:26 23 move, yes.

14:43:28 24 Q. But you didn't?

14:43:30 25 A. That's correct.

14:43:32 1 Q. Indeed, no one in NRR or elsewhere in the NRC contacted  
2 the resident inspector to receive feedback regarding the  
3 conditions at Davis-Besse on this subject?  
4 A. We did not feel that verification was necessary.

14:43:56 5 Q. Are you telling us you affirmatively chose not to ask  
6 the resident inspector about whether the information that was  
14:44:02 7 coming to you was any good?  
14:44:08 8 A. No, we did not consciously make a decision not to ask  
9 the resident inspector. It just was not part of the process we  
10 were using to review the information that was provided by the  
14:44:18 11 licensee.  
14:44:19 12 Q. All right. So it's a process you chose not to use.  
13 Isn't it a fact, sir, that those photographs -- first of all,  
14 those are the photographs that inflamed you?  
14:44:36 15 A. I did not get inflamed by any of this.

14:44:39 16 Q. Those are the photographs that you wished you had seen?  
17 A. I wish I had seen these photographs, that's correct.

18 Q. Isn't it a fact, sir, those photographs were in the  
19 hands of the resident inspector of the Nuclear Regulatory  
14:44:56 20 Commission stationed or in charge of Davis-Besse?  
14:44:59 21 A. I have no direct knowledge of that, no.

14:45:02 22 Q. You don't know that?  
23 A. No.

14:45:06 24 Q. Is that information that you're hearing here today for  
25 the first time?

1 A. No, I have heard -- heard hearsay about that before,  
14:45:14 2 yes.

14:45:26 3 Q. Assume for the moment that the resident inspector had  
4 the photo. Doesn't the fact that the red photo existed raise  
5 doubts about your certitude that the plant would have been shut  
6 down immediately?

7 A. No.

14:45:44 8 Q. What you would have done would be pure speculation;  
14:45:49 9 isn't that correct?

10 A. What?

11 Q. What you would have done relative to those pictures --

12 A. No.

13 Q. -- pure speculation?

14 A. No, I do not believe that.

15 Q. All right. I put the question to you: Do you know  
16 what you would have done if you had been shown the red photo?

17 A. I would have shown this to our upper management, and my  
14:46:06 18 expectation is that Davis-Besse would have been shut down  
14:46:09 19 certainly by the end of the year. It may have been shut down  
14:46:12 20 immediately upon presentation of this. What these show is an  
14:46:23 21 extremely -- well, I guess on one hand, disgusting situation.

14:46:52 22 Q. Do you recall that on August 20, 2002, you were  
23 interviewed by the Office of the Inspector General?

14:47:27 24 A. That sounds correct.

14:47:30 25 Q. And were you not asked this question --

1 MR. POOLE: Request a page number.

14:48:03 2 MR. HIBEY: Forgive me. I can't read the page

14:48:06 3 number. I'll give you the DOJ number, 017701.

14:48:13 4 MR. POOLE: Counsel, may I view your copy? Mine

5 doesn't have DOJ numbers.

14:51:53 6 MR. HIBEY: Now that we've taken such pains to get

14:51:59 7 ourselves all on the same page, I want to ask you another

8 question instead, and then I'll follow with that.

14:53:06 9 BY MR. HIBEY:

10 Q. With respect to the photographs that you have before

14:53:22 11 you, do you agree, is it your testimony that if the NRC had seen

14:53:33 12 those photographs, it would have set off large alarm bells

13 anywhere in the NRC?

14 A. I would hope that it would do that. Obviously it did

15 not.

14:53:47 16 Q. So it did not?

14:53:49 17 A. Obviously if a resident inspector had access to it and

14:53:54 18 did not forward the information or take action.

14:53:57 19 Q. But I'm asking you now as a person who's been deceived

20 sitting in this stand today, you would say, would you not, that

14:54:13 21 if you had seen these photographs, that would have set off large

14:54:19 22 bells anywhere in the NRC?

14:54:23 23 MR. POOLE: Objection. That question's been asked

14:54:26 24 and answered.

14:54:27 25 MR. HIBEY: He's not answered it.

1 THE COURT: Do you want me to read back your  
2 question, and I'll ask you if you wish to rephrase it.

3 The question was: As a person who's been deceived  
4 sitting in the stand today, you would say, would you not, that  
14:54:44 5 if you had seen these photographs, that would have set off large  
14:54:47 6 bells anywhere in the NRC? That's a non-sequitur. If he had  
7 seen.

8 Do you mean if those in the NRC --

14:54:57 9 MR. HIBEY: That's correct.

10 THE COURT: Would you rephrase your question?

11 MR. HIBEY: I would.

14:55:01 12 BY MR. HIBEY:

14:55:01 13 Q. If anyone in the NRC had seen those photographs, it is  
14 your testimony, is it not, that that would have set off large  
14:55:13 15 bells anywhere in the NRC?

16 MR. POOLE: Same objection.

17 THE COURT: Overruled. One more time.

14:55:23 18 BY MR. HIBEY:

14:55:23 19 Q. I'm sorry.

14:55:25 20 A. No, I don't believe that it would set off alarm bells  
21 necessarily in all portions of the NRC.

22 Q. Now, you gave testimony, did you not, before the grand  
23 jury on April 28, 2004; isn't that correct?

14:55:41 24 A. I did give testimony April 28, 2004, that's correct.

25 Q. And on page 72 into 73, Counsel.

1                   Your answer, and I'm prepared to read a portion of  
14:55:59 2   it which begins with a paragraph because it was a lengthy  
3   answer.

14:56:04 4                   And one other.    You know, we became aware of other  
5   information not only from the videos but in the Davis-Besse  
14:56:12 6   Cause Report.    They have a photograph of this portion of the  
7   head, the flange area, and I believe the 2000 inspection that  
8   shows red leakage coming out of these nozzles; you know, clearly  
14:56:35 9   indicative of a corrosion event going on.    Never saw that until  
14:56:43 10   the Root Cause Report.    If we had seen that, I mean, that would  
11   have set off large bells anywhere in the NRC.

12                   That was your testimony before the grand jury;  
13   isn't that correct?

14:56:56 14           A.   That was my testimony to the grand jury, that's correct.

14:57:01 15           Q.   Now, sir, this is all speculation on your part, isn't  
16   it?

14:57:19 17           A.   Clearly it has not happened, so yes, it is speculation.  
14:57:24 18   But I believe that, for example, if this information had been  
14:57:28 19   obvious to the reviewers, then it clearly would have been acted  
14:57:34 20   upon.

14:57:41 21           Q.   Let me ask you this:   If you would have been shown  
14:57:55 22   photos of the closure flange area of the vessel head with that  
23   reddish orange discoloration, do you believe that would have  
24   caused you to take any different actions than you did during the  
25   fall 2001 review process?

14:58:16 1 A. Yes.

14:58:19 2 Q. Now, what would have happened?

14:58:24 3 A. What would have happened? My actions, I think, would  
4 have been elevated very rapidly up the management chain, and I  
5 believe the NRC would have acted more promptly to cause a  
6 shutdown of the plant.

14:58:39 7 Q. Now, I ask you, sir, you're speculating; are you not?

8 A. That is correct. That's my reasoned judgment from 17  
9 and a half years' experience with the NRC. That's correct.

10 Q. You believe you would have pushed for an immediate  
11 shutdown; is that right?

14:58:55 12 A. That is correct.

14:58:58 13 Q. And if you didn't have the benefit of hindsight, you  
14:59:07 14 still would have taken fairly strong actions, you believe?

14:59:10 15 A. Yes, I would have.

16 Q. Is that right?

14:59:12 17 A. Absolutely.

14:59:13 18 Q. Because there was a problem at the top of the head?

19 A. Those photographs make that obvious, I think, to  
14:59:20 20 anybody.

21 Q. But, you know, sir, is it not the case that this is  
22 really speculation and nothing is certain?

14:59:27 23 A. Nothing is certain, that is correct. So yes, it is  
14:59:31 24 speculation.

25 Q. And it is speculation?

1 A. It's based on engineering judgment and my background and  
14:59:36 2 experience. That's correct.

14:59:37 3 Q. But when you gave your testimony on August 20 of '02  
4 before the Office of the Inspector General, isn't this what you  
5 said: I believe we would have pushed for an immediate shutdown  
6 of Davis-Besse. I think, you know, in retrospect looking at  
15:00:00 7 that one photograph in particular, it's obvious there's a  
8 problem. Hopefully, if -- you know, if we didn't have the  
15:00:11 9 benefit of hindsight, we still would have taken fairly strong  
10 actions because it does appear obvious, you know, that there's a  
11 problem on the top of the head that required an immediate  
15:00:23 12 response. But, you know, again, that's really speculation.

15:00:30 13 A. Uh-huh.

14 Q. And hoping that we would have had a correct  
15:00:34 15 interpretation of the photo, but nothing is certain.

15:00:43 16 A. Correct.

15:00:50 17 MR. HIBEY: Your Honor, if you indulge me, I may be  
18 at the end of this. I'd like to confer with my colleagues.

19 THE COURT: Please do so.

15:01:20 20 (Discussion had off the record.)

15:01:21 21 MR. HIBEY: No further questions, Your Honor.

15:01:24 22 THE COURT: Mr. Gordon, cross.

15:01:30 23 - - -

15:01:30 24 ALLEN HISER, PH.D., CROSS-EXAMINATION

25 BY MR. GORDON:

1 Q. Good afternoon, Dr. Hiser. I'm Dennis Gordon; I'm  
2 co-counsel for Rod Cook. I know you've had a long day. I'll  
15:02:06 3 try to be very brief.

15:02:09 4 You've discussed both with Mr. Poole and with Mr.  
5 Hibey a series of meetings and interactions you had with what  
6 you generally refer to as the licensee over the course of the  
7 fall of 2001, correct?

8 A. That's correct.

9 Q. And you talked about specifically a meeting on October  
15:02:29 10 11 at which the commissioner's technical assistants were  
15:02:35 11 briefed?

15:02:36 12 A. Yes.

13 Q. And a public meeting on October 24 at which you were  
15:02:39 14 present?

15 A. That's correct.

16 Q. And a meeting with -- a private informal meeting with  
17 Mr. Geisen and the videotapes on November 8th?

15:02:47 18 A. That's correct.

15:02:48 19 Q. And then there was a public meeting on November 14?

20 A. Correct.

21 Q. And a public meeting on November 28?

22 A. That's correct.

15:02:55 23 Q. And I am correct, sir, am I not, that Rod Cook was not  
24 present at any of those?

25 A. I don't believe that he was there, no.

15:03:03 1 Q. In fact, I believe it's the case, isn't it, Dr. Hiser,  
2 that until early in 2002, you didn't know Mr. Cook?

15:03:12 3 A. I believe that's correct.

15:03:15 4 MR. GORDON: Thank you. That's all I have, Your  
15:03:18 5 Honor.

15:03:18 6 THE COURT: Redirect?

15:03:22 7 MR. POOLE: May I suggest this is an appropriate  
15:03:24 8 moment for the afternoon recess?

15:03:26 9 THE COURT: I was waiting, on behalf of the jury  
10 only. Ladies and gentlemen, we'll take our afternoon break at  
11 this time for approximately 15 minutes. Please remember, as  
12 always, do not discuss the case among yourselves, nor with  
15:03:42 13 anyone else, nor permit anyone else to discussion it with you,  
14 and do not read or listen to anything or watch anything touching  
15 on this case in any way. And please do not make up your mind  
16 on the ultimate issues you will be asked to decide at the end of  
15:03:57 17 the case. Enjoy your rest.

15:22:47 18 (Recess taken).

15:22:50 19 THE COURT: Redirect, please.

20 MR. POOLE: I think this will be pretty brief.

15:23:04 21 THE COURT: I'm sorry. We do need to have a laugh  
15:23:08 22 every now and then. Anyone that feels they've had too much of  
23 a strain sitting too long, give me a signal. We'll all twist or  
24 something.

15:23:21 25 - - -

15:23:21

1

ALLEN HISER, PH.D., REDIRECT EXAMINATION

15:23:22

2

BY MR. POOLE:

15:23:22

3

Q. Dr. Hiser, do you remember asking questions about the

15:23:27

4

slides from the technical assistant's briefing?

5

A. Yes.

6

Q. That was about 87. And I'm going to show you the page

7

that Mr. Hibey referred to, the heading is Facts.

8

MR. POOLE: And, Your Honor, I'd like to display

9

that to the jury. I'm guessing they have it.

10

THE COURT: That has been admitted?

15:23:49

11

MR. POOLE: Well, we've offered it.

15:23:52

12

THE CLERK: It's been admitted.

15:23:55

13

THE COURT: It was admitted.

15:24:05

14

BY MR. POOLE:

15:24:05

15

Q. Do you remember answering -- well, on direct you were

15:24:09

16

asked a question about penetrations being verified free from

15:24:13

17

popcorn-type deposits?

18

A. Yes.

15:24:16

19

Q. And the second bullet point following that says: Plant

20

specific finite element analysis shows that 65 out of 69 will

21

open up sufficiently to provide a visual indication.

15:24:35

22

A. Yes.

15:24:40

23

Q. Would it affect your analysis -- would it have affected

24

your analysis if you knew at that time that, in fact, all were

25

capable of opening up to provide an indication?

15:24:56 1 A. It may have had some impact. The fact that four could  
2 not be demonstrated to open up would have caused us to be a  
3 little more interested in what was going on around those  
15:25:11 4 nozzles.

15:25:12 5 Q. Did anybody ever tell you that, in fact, they were all  
6 capable of opening up?

15:25:17 7 A. We were never told that the -- that -- analytically that  
15:25:24 8 they could demonstrate that.

15:25:36 9 Q. You were asked some questions about the resident  
15:25:41 10 inspector?

11 A. Yes.

15:25:45 12 Q. The jury's already heard a bit about this but what is  
13 the resident inspector's role?

15:25:50 14 A. The resident inspector is sort of the NRC's eyes and  
15:25:54 15 ears on the site with the maybe up to 1,000 licensee employees.  
15:26:00 16 Their job is to monitor sort of what goes on around the whole  
15:26:04 17 plant, sort of verification mode more than anything else.

15:26:09 18 Q. And are there specified activities that they're required  
19 to do?

15:26:13 20 A. Yes. My understanding is that they have a fairly  
15:26:17 21 structured role that they implement each day at the plant.

15:26:24 22 Q. And do they have much time left over for reviewing  
15:26:33 23 Condition Reports?

15:26:34 24 MR. HIBEY: Objection. That's a leading question.

25 Q. Do you know?

15:26:39 1 THE COURT: Overruled.

15:26:42 2 Q. All right. Do you know if they have much time left  
3 over for reviewing Condition Reports?

4 A. My understanding is their review of Condition Reports  
5 and things like that is a part of their normal structured work,  
15:26:54 6 and clearly it's with -- I don't know, 1,000 or more than 1,000  
7 Condition Reports at a plant, they're not going to review every  
15:27:04 8 single Condition Report. A lot of the things that we do --  
9 that the NRC overall does in its verification mode is to do an  
15:27:13 10 audit of certain samples of Condition Reports, as an example,  
15:27:18 11 just to ensure that the licensee is following the appropriate  
15:27:23 12 processes and procedures.

15:27:32 13 MR. POOLE: Your Honor, there was reference to the  
15:27:34 14 Condition Report, which is Government's Exhibit 12, on  
15:27:37 15 cross-examination. Two witnesses have alluded to it now. We  
16 would offer Government's Exhibit 12 into evidence at this time.  
15:27:45 17 That's the Condition Report attaching the photograph that we've  
15:27:48 18 now twice displayed to the jury.

15:27:54 19 THE COURT: I believe there was reference to it,  
20 but the only utilization was four of the photographs.

21 MR. HIBEY: Exactly, there was no reference to  
22 anything else. We're just trying to find the exhibit. I was  
15:28:07 23 advised --

24 THE COURT: I don't believe there was any  
25 questioning, Mr. Poole, of the witness other than on the issue

1 of the photographs.

15:28:14 2 MR. HIBEY: Exactly.

15:28:16 3 MR. POOLE: My recollection is the same.

15:28:22 4 THE COURT: Let me look and see. Unless there's  
15:28:32 5 an agreement, we'll have to wait for someone who can identify  
15:28:36 6 it.

7 MR. POOLE: Yes, Your Honor.

15:28:43 8 BY MR. POOLE:

15:28:44 9 Q. Dr. Hiser, do you recall being asked whether you knew if  
15:28:48 10 Defendant Geisen was trying to steer you away from the 2000  
15:28:52 11 video?

12 A. Yes.

15:28:54 13 Q. And your answer was what?

15:28:58 14 A. It wasn't -- it wasn't clear to me on November 8 that he  
15:29:06 15 was trying to steer us away from viewing the video. He did  
16 recommend that we not see it. Within the context of what was  
17 going on that day, I mean, we took his recommendation.

15:29:21 18 Q. Now, if you knew back -- well, if you knew that in the  
15:29:30 19 year 2000 the defendant, Dave Geisen, saw the Condition Report  
15:29:38 20 that attached the red photograph, would that change your view  
15:29:43 21 about whether he would steer you away from the 2000 video?

15:29:47 22 MR. HIBEY: Objection, Your Honor. That calls for  
15:29:51 23 speculation. It's beyond the scope of cross.

24 THE COURT: I think he can only speculate on his  
25 own actions or the actions of the people with whom he is

15:30:00 1 familiar, which he has done with respect to the reaction of the  
15:30:04 2 staff with whom he is totally familiar. But this goes beyond  
15:30:08 3 that scope. I'll sustain the objection.

15:30:36 4 BY MR. POOLE:

15:30:36 5 Q. Mr. Hiser, do you know what a mode restraint is?

15:30:40 6 A. Mode restraint? I'm not familiar with the phrase.

15:30:45 7 Q. Well, you testified that it was your understanding that  
15:30:57 8 Defendant Andrew Siemaszko was responsible for cleaning and  
15:31:03 9 inspecting the head in 2000?

15:31:05 10 A. That's my understanding, yes.

15:31:13 11 Q. You also testified that you didn't know of a reason why  
15:31:19 12 Defendant Geisen would steer you away from the 2000 video?

15:31:23 13 A. I believe that's correct.

15:31:26 14 Q. If you knew that Defendant Geisen signed off on --

15:31:31 15 MR. HIBEY: Objection. That's a leading question,  
15:31:37 16 and it's beyond the scope.

17 MR. POOLE: Your Honor, what I'm doing is  
15:31:41 18 presenting to the witness pieces of evidence that we expect to  
19 be presented through other witnesses later in the trial that  
15:31:48 20 relate to his answers on cross-examination.

15:31:51 21 THE COURT: But you can't get those answers in yet.  
22 If it had been previously testified, then it would be already  
23 before the Court and the jury. But at this juncture it is not.

15:32:08 24 MR. POOLE: All right. We'll move on.

15:32:28 25 Your Honor, redirect is brief. We're done. Thank

15:32:32 1 you.

15:32:32 2 THE COURT: Thank you. You may step down. You're  
15:32:41 3 free to remain in the courtroom if you wish.

15:33:52 4 MR. POOLE: Your Honor, may I beg the Court's  
15:33:54 5 indulgence to recall Mr. Hiser and ask one more question?

6 THE COURT: He's from out of town. Of course.

15:34:11 7 MR. POOLE: Mr. Hiser -- one more narrow line of  
8 questioning, Your Honor.

15:34:19 9 THE COURT: You still remain under oath, Dr. Hiser.

15:34:23 10 THE WITNESS: Okay.

15:34:26 11 BY MR. POOLE:

15:34:27 12 Q. Do you remember being asked about the reaction of the  
13 resident inspector to the red photo?

15:34:33 14 A. Yes.

15:34:35 15 Q. Now, at the time the red photo was taken, that was at  
16 the time of the 2000 refueling outage; is that right?

17 A. That's my understanding, yes, it would have been  
18 before -- at the very beginning of the outage.

15:34:52 19 Q. And the bulletin was written in August of 2001; is that  
15:34:56 20 correct?

15:34:56 21 A. Yes.

15:34:57 22 Q. Was the state of knowledge in the NRC in April 2000,  
23 when the resident inspector allegedly received the photo, the  
15:35:08 24 same as it was in August of 2001 when the bulletin was  
15:35:13 25 published?

15:35:14 1 MR. HIBEY: I have to object, Your Honor. I don't  
15:35:16 2 know how he can testify to that. He can only testify to what  
3 he knows.

15:35:26 4 BY MR. POOLE:

15:35:26 5 Q. Do you know whether the state of knowledge at the NRC  
6 and in the industry about nozzle cracking was the same in April  
15:35:33 7 2000 as it was at the time of the bulletin, August 2001? Do  
8 you know the answer to that question?

9 A. No, the state of the knowledge had clearly progressed  
15:35:45 10 quite a bit from April 2000 to August 2001. There were a lot  
11 of sensitivities that we had in August 2001 that just was not  
12 the awareness of in April, 2000.

15:35:58 13 MR. POOLE: Thank you. That's all we have.

15:36:06 14 MR. HIBEY: I'm not going to use the word brief.

15 THE COURT: Consistent with performance.

16 MR. HIBEY: But I will be.

15:36:15 17 - - -

15:36:15 18 ALLEN HISER, PH.D., RE-CROSS-EXAMINATION

19 BY MR. HIBEY:

20 Q. Dr. Hiser, the question you just answered about the  
21 state of knowledge at the NRC and in the industry applies to  
22 everyone in the industry; isn't that correct?

15:36:27 23 A. I believe that would apply to the state of knowledge  
24 overall.

25 Q. And that industry includes personnel at Davis-Besse?

15:36:38 1 A. Yes, it does.

15:36:40 2 MR. HIBEY: No other questions.

15:36:42 3 THE COURT: Thank you. Now you may step down, and  
4 you are released as a witness.

15:38:32 5 (The witness was sworn by the clerk.)

15:38:34 6 - - -

15:38:34 7 DALE MILLER, DIRECT EXAMINATION

8 BY MR. BALLANTINE:

9 Q. Good afternoon, sir. Would you'll please state your  
15:38:37 10 name and spell your last name for the court reporter.

11 A. My name is Dale Miller, M-i-l-l-e-r.

15:38:43 12 Q. And, Mr. Miller, are you retired now?

13 A. I'm retired.

15:38:47 14 Q. Where have you worked in the past?

15:38:50 15 A. I started out my career at Toledo Edison at the Bay  
16 Shore facility plant. I worked at Toledo Edison Centerior  
15:39:04 17 FirstEnergy Davis-Besse plant. I've also worked at Perry  
15:39:08 18 nuclear plant, and also Furman nuclear plant.

19 Q. What's your educational background for doing the work  
20 that you did?

15:39:17 21 A. I have a bachelor of science in mechanical engineering  
22 degree.

15:39:22 23 Q. And what kind of work did you do? Give us just a brief  
15:39:27 24 overview of your work history in those places.

15:39:30 25 A. At Bay Shore I worked in what was called the results

1 department. It's kind of a plant efficiency-type department.

15:39:38 2 At Davis-Besse I started out writing procedures before the plant  
15:39:45 3 started up, involved in pre-startup testing. I was in the  
15:39:51 4 Operations Department for a number of years. I spent about  
5 eight years in Quality Assurance. From, I believe, about 1993  
6 until 2002 I was in Regulatory Affairs.

7 Q. And after you were done working at Davis-Besse, was that  
15:40:11 8 when you went to Perry?

15:40:13 9 A. Yes.

10 Q. What were the circumstances that you left Davis-Besse?

15:40:16 11 A. In the fall of 2002 basically I was disciplined because  
12 of the Davis-Besse head event; they gave me an option of  
13 transferring to Perry to work as a staff person in Regulatory  
15:40:32 14 Affairs, or take a severance, and I chose to go to Perry.

15 Q. And subsequent to that did the NRC take any action  
16 against you with respect to the Davis-Besse head event?

15:40:45 17 A. In January of 2006 I received an order from the NRC  
18 which banned me from the nuclear industry for five years. I  
15:41:01 19 requested a hearing, went through the process through the Time  
20 an Safety Licensing Board. I eventually went through  
15:41:11 21 alternative dispute resolution in about September of -- I'll get  
22 the year right here -- 2005, and -- no, it would have been 2006.  
15:41:30 23 Sorry. But in the fall of 2006. As a result of that  
24 proceeding the results of that was that the proceeding was  
15:41:40 25 terminated and the proceedings were dismissed against me, and I

1 was basically reinstated into the nuclear industry as not a  
15:41:51 2 threat to the health and safety of the public.

3 Q. What was the original basis of the order that you  
15:41:57 4 contested?

5 A. Basically that I had knowledge of boric acid on the head  
15:42:03 6 in the fall of 2001. And they contended that, you know, I knew  
7 about that situation and as a result was not trustworthy to work  
15:42:19 8 in the nuclear industry.

9 Q. And you say you contested it, and the order was  
10 withdrawn?

11 A. The order was modified and words were -- the controversy  
15:42:24 12 against me was terminated, and the proceedings were dismissed.

13 Q. Prior to that order, did you have contact with the  
15:42:45 14 Nuclear Regulatory Commission's Office of Investigation with  
15:42:48 15 respect to this case?

16 A. Yes.

17 Q. What was that contact?

18 A. In the fall of 2002 I was interviewed by the Office of  
15:43:00 19 Investigations.

15:43:03 20 MR. HIBEY: Excuse me, Your Honor. I object on  
15:43:07 21 the grounds of relevance.

15:43:10 22 THE COURT: Overruled.

15:43:13 23 BY MR. BALLANTINE:

15:43:13 24 Q. I'm sorry. Did you complete your answer, Mr. Miller?

25 A. Yes.

1 Q. And did you ever meet with the government prosecutors in  
2 this case?

15:43:21

3 A. Yes.

4 Q. And what were the circumstances of that meeting?

15:43:32

5 A. I believe it was in 2004. I submitted to a proffer  
6 session in Cleveland, was interviewed by yourself, Mr. Poole,  
7 and Mr. Stickan. And basically I was on a -- basically a Queen  
8 for a Day-type immunity arrangement, not really immunity, but  
9 basically I was told I sign an agreement that basically said

15:44:00

10 that what I said there that day would not be used against me.  
11 But if anything came up relative to evidence that further  
12 investigation could have been -- could have been used against me  
13 that panned out.

14 Q. Was there any other agreement between you and the  
15 government?

15:44:20

16 A. No.

17 Q. I'd like to turn now to the period of time that you  
18 worked in Regulatory Affairs at Davis-Besse.

19 A. Okay.

20 Q. Did you begin working in Regulatory Affairs about 1994?

21 A. Approximately that time frame, yes. I don't remember  
22 the date exactly.

15:44:43

23 Q. What was your title when you first started at Regulatory  
24 Affairs?

15:44:48

25 A. I believe when I first started I was a senior engineer,

15:44:52 1 licensing, or something like that.

2 Q. Would you explain to the jury what someone who works in  
3 Regulatory Affairs does?

4 A. I worked in the Compliance Unit. And in the Compliance  
15:45:05 5 Unit our job was to interface with the portion of the NRC that  
15:45:11 6 was out of the regional offices, basically in Chicago, and we  
7 worked -- Compliance Unit performed an interface with the NRC,  
15:45:23 8 which was on a day-to-day basis type thing. We would respond to  
9 questions that the resident inspector might have with regard to  
10 things that he would see in the plant. We would not necessarily  
11 respond to them; we would perform a liaison function where we  
12 would make sure that the right person in the plant staff was  
15:45:46 13 available to talk to the resident inspectors or other inspectors  
15:45:52 14 that came to the plant.

15 The NRC does periodic inspections on the plant, and  
16 it was the Compliance Unit's job to help coordinate those  
15:46:00 17 inspections, make sure the inspectors had the right material  
18 available to them, had the right people available to them to  
19 answer questions.

15:46:12 20 Q. How long did you work in that capacity? How long did  
21 you work in that capacity?

22 A. I was in the Compliance Unit up through fall of 2002.

15:46:22 23 Q. So essentially the same job throughout that period that  
24 you were with Regulatory Affairs?

15:46:28 25 A. Yes. I was supervisor of the Compliance Unit for the

15:46:32 1 last 22 months or so that I was there.

15:46:37 2 Q. If I could direct your attention to the 2000 time frame,  
15:46:41 3 something you said that raised a question in my mind which is:  
15:46:45 4 What's the status of Condition Reports with respect to the  
5 resident inspectors?

15:46:51 6 A. The resident inspector would look at Condition Reports  
15:46:56 7 on a daily basis, as would we in the Compliance Unit. The  
15:47:02 8 Compliance Unit would be responsible for assessing reportability  
9 of any of the conditions that came up in the plant to see if it  
10 was reportable to the Nuclear Regulatory Commission.

15:47:12 11 Q. And let me ask you this: Are you familiar with a  
12 photograph taken at the 2000 outage which showed red boric acid  
15:47:23 13 coming down through the weep holes and ending up on the head  
14 flange for the reactor vessel head at Davis-Besse?

15 A. I've seen it a number of times from the Augmented  
15:47:38 16 Inspection Team time frame in 2002. I have never seen it  
17 before that.

15:47:44 18 Q. In the normal course of things, would that have gone  
19 through the Compliance Unit?

20 A. No, not necessarily, unless there was a Condition Report  
15:47:55 21 that was written that would reference it. And I don't recall  
15:47:58 22 anything along that line.

15:48:08 23 Q. I now want to ask you about the process in regulatory  
24 affairs in preparing communications with the NRC. Have you  
25 ever prepared a communication with either the regional

15:48:20 1 headquarters or the national headquarters of the NRC?

2 A. Yes.

15:48:24 3 Q. Is that -- was that a formal process at Davis-Besse  
15:48:28 4 during the time that you worked for Regulatory Affairs?

5 A. Yes.

6 Q. Why is that?

15:48:34 7 A. It corresponds with the NRC, was considered very  
8 important. There was a procedure that Davis-Besse had that was  
15:48:56 9 in place to, I'll say, govern the preparation and review and  
10 approval of the correspondence before it went to the NRC.

15:49:09 11 Q. So when you would prepare correspondence -- let me ask  
12 it another way. Can you give the jury an example of  
15:49:17 13 correspondence that you might have prepared to go to the NRC?

14 A. Correspondence I might have worked on during my time  
15 with the regulatory affairs would have been the licensee event  
16 report. In other words, one of those Condition Reports that  
17 was written by the plant was determined to be reportable, and  
15:49:36 18 there's reporting requirements that the NRC has that we would  
19 have to satisfy, and that included a written report that would  
20 have to be submitted within a certain time frame.

15:49:48 21 Q. And what would you do when you got an assignment like  
22 that?

23 A. Basically the Condition Report process would provide for  
15:50:01 24 a root cause determination being completed for the condition.  
15:50:08 25 From that root cause we would then formulate the report that

1 would go to the NRC.

15:50:13 2 Q. And would you draft something?

15:50:19 3 A. Most of the time we would use the Condition Report as  
15:50:23 4 the basis for, you know, the licensee event report. A lot of  
5 times it would be verbatim pretty much out of the Root Cause  
6 Reports as far as root causes or corrective actions.

15:50:36 7 Q. Was there a particular format for communications with  
8 the NRC?

15:50:40 9 A. Yes. Licensee event report data specified that.

10 Q. So would you be responsible for, in this example,  
15:50:51 11 putting the findings of a root cause analysis into the format of  
15:50:56 12 a licensee event report?

15:50:59 13 A. Yes.

15:51:03 14 Q. You have an engineering degree, I believe you've already  
15 testified, a bachelor's in -- is it mechanical engineering?

16 A. Yes.

17 Q. Why is it in -- why do you think that engineers are  
15:51:18 18 employed in Regulatory Affairs?

15:51:20 19 A. The nuclear industry is a very technical industry. The  
20 plants are very complex and complicated. There's a lot of  
15:51:30 21 engineering that goes into them and it sometimes takes an  
15:51:37 22 engineering background to understand what's going on.

15:51:41 23 Q. Once you put information into this -- into the format  
24 for communication with the NRC, what would you do next?

15:51:51 25 A. Well, once the report is formulated, it would be

15:51:59 1 circulated for review. It would go back to the people,  
15:52:04 2 certainly, that prepared the Root Cause Report. It would be  
15:52:09 3 commented on, comments would get resolved between any of the  
15:52:16 4 parties that were involved. It would eventually go through an  
5 approval process and be submitted to the NRC.

15:52:24 6 Q. When you were the initiator or the drafter of a  
7 communication with the NRC and there were comments that were in  
15:52:32 8 conflict or something that had to be resolved, who  
15:52:37 9 would shepherd that resolution?

15:52:38 10 A. Usually it was a collective effort between whoever the  
15:52:46 11 cognizant person on the plant staff would be would be  
12 responsible for the Root Cause Report. It would be worked out  
13 with the Regulatory Affairs person. Sometimes you might have to  
14 get other management involved, other resources involved to come  
15 to a resolution.

15:53:16 16 Q. All right. Now I want to ask you about the spring of  
15:53:23 17 2001 time frame. Did there come a time during that time frame  
18 that the Regulatory Affairs group brought on a contractor?

15:53:35 19 A. In that time frame, yes, there was a contractor that was  
20 brought on board.

15:53:40 21 Q. Who was that?

22 A. Rod Cook.

23 Q. Do you see Mr. Cook here in the courtroom today?

15:53:46 24 MR. CONROY: Stipulate, Your Honor.

25 THE WITNESS: Yes, behind the monitor there.

15:53:50 1 BY MR. BALLANTINE:

15:53:50 2 Q. And what were the circumstances that Mr. Cook was  
3 brought into Regulatory Affairs?

4 A. As near as I can recall, we had a backlog of work, and  
5 we were looking for staff augmentation. I believe there was  
15:54:09 6 also some ASME, American Society of Mechanical Engineers, relief  
15:54:15 7 requests that the plant wanted to be submitted to the NRC, and  
8 he was brought on to help out with those items.

9 Q. Did you supervise Mr. Cook at all --

10 A. Yes.

15:54:27 11 Q. -- when he came on board?

12 Did you have any understanding of what his  
13 reputation was?

15:54:35 14 A. I understand that he had a good reputation. He had a  
15 lot of experience in Regulatory Affairs and in nuclear plants.

15:54:54 16 Q. Moving ahead to the summer of 2001 -- let me ask it this  
17 way: When did you first become aware of a problem related to  
18 control rod drive mechanisms at pressurized reactor nozzles?

15:55:09 19 A. I really didn't become involved in that issue until  
20 about August 17 of 2001. At that time I was asked to do a  
21 bulletin -- around 2001 a response was being prepared. I was  
22 asked to help out by contacting some of the other utilities that  
23 were also responding to the bulletin to find out how they were  
24 responding, what types of inspections they were planning,  
25 basically just find out how they were responding to the

15:55:51 1 bulletin.

15:55:52 2 Q. Who was organizing the bulletin response effort at that  
15:55:56 3 time?

15:55:57 4 A. At that time -- I'm not exactly clear today who was  
15:56:04 5 organizing the bulletin response. I was not involved in the  
15:56:07 6 bulletin response until that time frame.

15:56:12 7 Q. Did you -- well, as time went by in the bulletin  
8 response process, did you come to understand who was working on  
9 the bulletin response?

15:56:22 10 A. Not entirely, no.

15:56:24 11 Q. Was Rod Cook working on the bulletin response?

12 A. Yes.

13 Q. What was his role?

14 A. He was in Regulatory Affairs, and he was working on the  
15 bulletin response.

16 Q. Was his role the role that you describe in the example  
17 you gave the jury earlier for yourself?

15:56:41 18 A. I'm not -- I wasn't involved in the initial bulletin  
15:56:47 19 preparation. I wasn't exactly sure. When I got involved, I  
15:56:52 20 got involved with the utility group. I know he was working on  
21 the response. He did provide me a draft so I could try to  
22 figure out what was happening so I could talk to the Utility  
15:57:07 23 Group when I got involved.

24 Q. Did you provide comments back to Mr. Cook on that draft,  
15:57:13 25 or on a draft?

1 A. I believe I did provide -- there was one draft early on  
2 that I had some questions on. I don't know how many more  
15:57:27 3 comments I would have provided. I don't recall any other  
15:57:30 4 particular comments that I provided on the bulletin response.

5 Q. But your comments at that time went back to Mr. Cook?

15:57:37 6 A. Yes.

15:57:53 7 Q. All right. At this point I'm going to ask you to have a  
8 look at a document that's been marked as Government's Exhibit  
15:58:14 9 59. Mr. Miller, could you have a look at that document,  
15:58:17 10 please, and tell us what it is?

15:58:21 11 A. This document is the NRC letters review and approval  
12 report, response to summary is response to NRC Bulletin 2001  
15:58:35 13 Circumferential Cracking of Reactor Pressure Vessel Head  
15:58:42 14 Penetration Nozzles.

15:58:45 15 Q. Does your signature or your initials appear anywhere in  
15:58:50 16 that document?

17 A. Yes.

15:58:52 18 Q. And are you aware of what this kind of document is used  
19 for?

20 A. Yes. This is the method that's used to circulate a  
15:59:07 21 letter for review and approval before it's submitted to the NRC.

15:59:12 22 MR. BALLANTINE: Your Honor, at this time I'd like  
23 to move to admit Government's Exhibit 59 and publish it to the  
15:59:18 24 jury.

15:59:20 25 THE COURT: No objections?

15:59:22

1

MR. CONROY: No objection.

2

THE COURT: The Court will admit Government's

15:59:27

3

Exhibit 59 and publish the exhibit to the jury.

15:59:27

4

BY MR. BALLANTINE:

15:59:41

5

15:59:41

6

Q. I'm going to magnify the top section of this document.

7

Can you see it there on your monitor, Mr. Miller?

15:59:49

8

A. Yes.

15:59:50

9

Q. I believe you read the summary, and in the top right

15:59:54

10

corner does it indicate a serial number?

11

A. Serial number 2731.

16:00:00

12

Q. And is there a block there, I think it's Block 8,

16:00:05

13

indicating who the document is prepared by?

16:00:10

14

A. Yes, Block 8 prepared by Rod Cook.

16:00:15

15

Q. And in your experience, what is the role of the person

16

who's in Block 8?

17

A. That's the person that is preparing this review and

16:00:25

18

approval report.

16:00:26

19

Q. And I'm going to magnify another section further down in

20

the document in the review and approval block. It's block 14.

21

At the top does that indicate that Mr. Cook is the cognizant

16:00:39

22

Regulatory Affairs individual?

23

A. Yes.

24

Q. Is that a different role than the role of the preparer?

16:00:44

25

A. Well, Block 8 basically just says that he made out this

1 form. Block 14 specifies him as the cognizant Regulatory  
2 Affairs person; in other words, he's the person that's working  
3 on this response for Regulatory Affairs.

16:01:05 4 Q. What does it mean to initial in Block 14?

16:01:13 5 A. The initials themselves, the next page, the back side of  
6 that form, Block 14 had instructions for review and approval.

16:01:28 7 Q. Have I magnified that block for the jury?

8 A. Yes. That's the block.

16:01:34 9 Q. Would you mind reading it to the jury, please?

10 A. Initiate checks and enters the desired reviewers. The  
11 technical accuracy of the response to the NRC is the  
12 responsibility of the director and management individual  
13 assigned the action.

16:01:56 14 Q. Can you find the director or management individual  
15 assigned the action, this review and approval report?

16:02:20 16 A. They're back on the later page, there are three  
17 directors listed: Director of Work Management, Director of  
18 Technical Services, Director of Nuclear Services.

16:02:42 19 Q. Have I highlighted that block?

16:02:50 20 A. That's actually a later page.

16:02:52 21 Q. I'm sorry?

16:02:54 22 A. Than I was looking at.

16:02:56 23 Q. Why don't you go ahead and tell us by the Bates number,  
24 one of the numbers at the bottom right of the page you're  
25 looking at, and I'll pull that page up.

1 A. NRC 027-1694.

16:03:24 2 Q. I'm going to put that page up on the monitor for the  
3 jurors.

16:03:29 4 A. Yes, that's the page.

5 Q. And I think I interrupted you. You indicated three  
6 directors?

16:03:36 7 A. Yes. There's three directors listed there: Director  
16:03:40 8 of Work Management, J. Messina; Director of Technical Service,  
9 S. P. Moffitt; Director of Nuclear Services, L. W. Worley.

10 Q. Was the later page that I guess I had up before, does  
11 that show that same block, but --

16:03:59 12 MR. CONROY: Can we have a number?

16:04:03 13 MR. BALLANTINE: Of course.

16:04:04 14 A. Yes, that first page had the initials for J. Messina,  
16:04:10 15 NRC Bates numbered NRC0271696, has initials for S. P. Moffitt  
16:04:21 16 and L. W. Worley.

16:04:28 17 BY MR. BALLANTINE:

16:04:28 18 Q. The initials for S. P. Moffitt, does it indicate someone  
19 had signed on behalf of Mr. Moffitt?

20 A. It appears, yes.

21 Q. Do you recognize those initials?

16:04:39 22 A. It looks like D.C.G. or S.P.M.

16:04:45 23 Q. Do you recognize who D.C.G. would stand for?

16:04:49 24 A. I believe that would be David Geisen.

16:04:53 25 Q. Do you see Mr. Geisen here in the courtroom today?

1 A. Yes.

2 Q. Could you point him out?

16:05:02 3 MR. HIBEY: Stipulate.

4 BY MR. BALLANTINE:

5 Q. Mr. Geisen is standing at counsel table?

16:05:06 6 A. Yes.

7 Q. Does Mr. Geisen appear elsewhere in the review and

16:05:10 8 approval box on the same page, in 027-1696?

9 A. Yes. He is also on 027-1696 in the first line as

16:05:27 10 Design Engineering Manager.

16:05:31 11 Q. So returning now to the back side of the first page or

12 the second -- the back side of this document in Block 14, in

13 this case, who are the director and management individuals

14 responsible for the technical accuracy of serial letter 2731?

16:06:01 15 A. Well, anybody that would sign off in Block 14 would fall

16:06:05 16 into that category for whatever part of it they had cognizance

16:06:14 17 of.

18 Q. And you signed off. Can you indicate which page you

16:06:19 19 signed off on this document for?

20 A. That was on the first page, NRC 027-1692.

16:06:32 21 Q. I'm going to highlight this part of the page as well.

16:06:40 22 It indicates that you're the supervisor of Davis-Besse

23 compliance?

16:06:44 24 A. Yes.

25 Q. Those are your initials?

1 A. Yes.

2 Q. What were the circumstances where you initialed this  
16:06:49 3 review and approval report?

16:06:51 4 A. I initialed after the technical people had signed off.

5 Q. Who are the technical people?

16:07:03 6 A. Other -- there's other responsibility engineers listed  
7 there on the first page: Prason Goyal, Dale Miller. There's  
16:07:22 8 others that are listed there. It says: See attached. Their  
16:07:26 9 initials would appear on subsequent pages.

16:07:42 10 Q. Was David Geisen involved in preparing serial letter  
16:07:48 11 2731?

12 A. I don't know.

16:07:54 13 Q. What was your understanding of what this serial letter  
14 was supposed to communicate to the NRC?

16:08:01 15 A. It was the response.

16:08:02 16 Q. Actually, let me back up. We're talking about the --  
17 I'm sorry to interrupt. We're talking about this review and  
18 approval report. What did this cover?

16:08:13 19 A. This covered the response to Bulletin 2001-01.

16:08:20 20 MR. BALLANTINE: I believe it's already been  
16:08:22 21 admitted into evidence as Government's Exhibit 60, serial letter  
16:08:25 22 2731. Your Honor, may I publish that to the jury?

23 THE COURT: Yes.

16:08:33 24 BY MR. BALLANTINE:

16:08:33 25 Q. Is that the document you're referring to?

16:08:35 1 A. Yes. That's the first page.

16:08:47 2 Q. Well, what was it that this serial letter 2731 was to  
3 communicate to the NRC? What was it about?

16:08:51 4 A. The bulletin had several different sections, requested  
16:08:57 5 information from Davis-Besse, and this response was to answer  
16:09:06 6 those questions.

16:09:07 7 Q. After the response was filed, did anybody at Davis-Besse  
8 have an expectation of more interaction with the NRC about this  
9 that you know of?

16:09:28 10 A. I don't know of any other future expectations as a  
11 result of filing this response other than satisfying whatever  
12 commitments we made in the response.

16:09:30 13 Q. Was there any more interaction with the NRC on this  
16:09:34 14 topic?

16:09:35 15 A. Yes.

16:09:35 16 Q. What was the next event that sticks out in your mind  
17 with respect to that?

16:09:40 18 A. The next event that sticks out was, I believe, in early  
19 October there was additional conversation with the NRC wanting  
16:09:53 20 additional information with regard to the bulletin response.

16:09:57 21 Q. Were you called at home on September 28 about this  
16:10:00 22 issue?

16:10:01 23 A. I may have been. I don't recall exactly.

16:10:04 24 Q. In early October, what was that event? What was the  
25 event you're referring to?

16:10:16 1 A. The NRC wanted additional information. There was a  
16:10:21 2 teleconference that was to be held on October 3, I believe.  
16:10:28 3 Q. Were you involved in that teleconference?  
4 A. Yes.  
5 Q. What was your involvement?  
16:10:33 6 A. I was part of the telephone conference. I really  
7 didn't have any direct involvement with the material that was  
8 being presented. I was there. I took some notes.  
16:10:46 9 Q. And were you involved in a meeting to prepare for that  
16:10:51 10 teleconference?  
11 A. Yes.  
12 Q. Did you -- what can you tell us about the meeting to  
16:10:57 13 prepare for that teleconference?  
14 A. I recall very little about the preparation of the  
16:11:04 15 telephone conference, you know, the meeting itself. I don't  
16 have any recollection of what went on. I did take notes.  
17 That's the only thing that I would really understand.  
16:11:18 18 Q. Mr. Miller, I'm handing you what's been marked as  
16:11:22 19 Government's Exhibit 72 and ask you to take a look at that and  
16:11:25 20 identify it if you can.  
16:11:28 21 A. These are my notes from the October 2 telecon. prep  
16:11:35 22 meeting at 1330 hours, or 1:30 in the afternoon.  
16:11:40 23 Q. Take a few moments to look over those notes, and let me  
16:11:44 24 know if that refreshes your memory of that meeting.  
16:11:47 25 A. The only thing that -- I don't have a specific

16:11:53 1 recollection other than what I have written here.

2 Q. Tell us about the circumstances where you were taking  
3 those notes. Did you take them at the meeting?

16:12:00 4 A. Yes.

5 Q. Were you being accurate when you took notes?

16:12:05 6 A. As far as I can tell, I can recall. I don't recall  
16:12:09 7 specific -- I tried to be accurate, yes.

8 Q. You don't remember the meeting?

9 A. No.

10 Q. But at this time, I mean, is it your practice to take  
16:12:18 11 accurate notes?

16:12:19 12 A. Yes.

16:12:23 13 MR. BALLANTINE: At this time, Your Honor, I'd like  
14 to move Government's Exhibit 72 into evidence as past  
16:12:28 15 recollection recorded.

16:12:30 16 MR. HIBEY: What is it, past recollection recorded?

16:12:43 17 MR. BALLANTINE: We can turn off the --

18 MR. CONROY: I'm sorry, just as a housekeeping  
19 matter, aren't there two pages to this?

16:12:53 20 MR. BALLANTINE: Do you have two pages there?

16:12:55 21 THE WITNESS: I have two pages, yes.

22 MR. CONROY: We only got one.

16:13:41 23 (Discussion had off the record.)

16:13:55 24 MR. HIBEY: Sidebar?

16:14:08 25 (Discussion had off the record.)

16:15:28 1 THE COURT: I'll admit them. I assume there is no  
2 objection?

3 MR. HIBEY: No objection.

4 THE COURT: Very good.

16:15:39 5 MR. BALLANTINE: At this point, Your Honor, I can  
6 move on, or I can ask Mr. Miller to read the notes into the  
7 record. They're now part of the case. I don't -- at this  
8 point he doesn't -- my understanding is he doesn't have a  
16:15:52 9 recollection of those events. I'm happy to move on.

10 THE COURT: Move on. They'll be available to the  
16:15:58 11 jury.

12 BY MR. BALLANTINE:

13 Q. Was there a follow-up meeting after the October 2  
14 meeting?

15 A. There's a meeting the next day on October 3. That's  
16 when the teleconference occurred.

16:16:13 17 Q. Can you tell the jurors about that meeting? Can you  
18 tell the jurors anything about that meeting?

16:16:20 19 A. Again, I believe I took notes for that teleconference.  
20 The only recollection I would have would be through those notes.

16:16:34 21 Q. Mr. Miller, I'm handing you a document that's been  
16:16:37 22 marked as Government's Exhibit 78 and ask you to take a look at  
23 it. Are those your notes?

24 A. Yes.

25 Q. And take a look at them. Do they refresh your

16:16:51 1 recollection of that meeting?

16:16:53 2 A. Nothing other than what is written down here. I don't  
3 recall the meeting other than what's recorded in these notes.

16:17:01 4 Q. Let me ask you those questions I asked before. Did you  
16:17:05 5 take those notes close in time to the meeting that you attended?

6 A. Yes, they were taken during the meeting.

7 Q. And did you take accurate notes?

16:17:13 8 A. As best I could.

16:17:18 9 MR. BALLANTINE: Your Honor, the government would  
10 move to have Government's Exhibit 78 admitted into evidence.

16:17:29 11 MR. HIBEY: 78 or 79?

16:17:33 12 THE COURT: 78.

16:17:37 13 MR. HIBEY: No objection.

16:17:40 14 THE COURT: There being no objection, they'll be  
15 admitted.

16:17:45 16 MR. BALLANTINE: Your Honor, at this time I'd ask to  
16:17:48 17 publish just the first page of these notes for the jury to have  
18 a look at.

19 THE COURT: Very good.

16:18:08 20 BY MR. BALLANTINE:

16:18:08 21 Q. Mr. Miller, could you just read for the jury and  
22 interpret for them these notes at the top of this page, the  
23 first page of Government's Exhibit 78?

16:18:19 24 A. Date is October 3. NRC telecon. at 9:30 a.m. The name  
25 of Al Hiser is there. Response inspection last outage,

16:18:38 1 coverage not clear. The initials D.C.G. Line says 100 percent  
16:18:48 2 inspection of head. Some areas precluded from inspection due  
3 to flange leakage. Definite signs of boron flow from leakage.  
16:18:59 4 Videotaped review 12, 11, and 10 RFO videos.

16:19:08 5 Then I have Al Hiser again, want nozzle-by-nozzle  
16:19:16 6 summary. And David Geisen, cleaning mechanical 11 RFO with  
7 water and 12 RFO.

16:19:31 8 Q. That's as far as I would ask you to go at this point.  
9 And I think you mentioned the initials D.C.G. are for whom?

10 A. David Geisen.

16:19:48 11 Q. You don't have much of a memory of this meeting. Do  
12 you remember what happened after that, what your role was as a  
16:19:55 13 supervisor of Regulatory Affairs with respect to the nozzle  
14 cracking issue?

15 A. I don't really recall what went on past that. I know  
16 there was some more submittals that were sent to the NRC to  
17 answer their questions.

16:20:08 18 Q. Were you continuing to be involved in communicating with  
19 other utilities?

20 A. Yes.

16:20:19 21 Q. And was Mr. Geisen involved in that?

16:20:22 22 A. I don't recall.

16:20:25 23 Q. I want to hand you what has been marked for  
24 identification as Government's Exhibit 153 and ask how -- I  
25 haven't introduced -- this is Lois Tuttle. She's a paralegal

1 on our side that keeps things running. This is Special Agent  
16:20:43 2 Joseph Ulie.

16:21:06 3 Mr. Miller, could you have a look at those?

16:21:06 4 A. (Complied.)

16:21:50 5 Q. Mr. Miller, does that refresh your recollection of the  
6 work that you were doing during the subsequent hearing after the  
7 first bulletin response went out and the NRC came back and asked  
8 for more information?

16:22:03 9 A. I probably coordinated this call.

10 Q. Are there subsequent calls on the subsequent page --  
11 subsequent calls indicated on the subsequent pages of Exhibit  
12 153?

16:22:14 13 A. Yeah, this first group call was October 8. There's  
14 another call that was made on October 15, another call on  
15 October 15, a third call on October 15. Then there's another  
16 call on October 22.

16:22:41 17 Q. Do you have a sort of general memory of making those  
18 kind of calls during this period?

16:22:48 19 A. I have a general memory, but no specific recollections  
16:22:51 20 other than what's in these notes.

21 Q. What was the purpose of those calls?

22 A. Again, just to find out from the other utilities what  
23 was going on at their plants.

24 Q. Was David Geisen involved?

16:23:10 25 A. I see his initials on this first page. That would imply

1 to me that he was there for that call.

2 Q. Can you look at the other calls?

16:23:48 3 A. I see his initials on Bates number DOJ 001-1147, which  
4 is the fourth page here.

16:24:01 5 Q. So was Mr. Geisen participating on some of these calls  
16:24:06 6 at least to other utilities to find out what their position was  
16:24:10 7 with respect to the bulletin?

16:24:11 8 A. He may have been, or else maybe that was something being  
16:24:17 9 communicated that was within his knowledge. I don't know.

16:24:31 10 Q. Mr. Miller, what was the next serial letter that was  
16:24:35 11 submitted to the NRC?

16:24:36 12 A. I don't recall the number.

13 Q. Was it 2735?

14 A. It could have been.

16:24:41 15 Q. I'm going to hand you another exhibit that's been marked  
16 as Government's Exhibit 104 and ask you if you recognize this?

16:24:58 17 A. Government's Exhibit 104 is the NRC Letters - Review and  
18 Approval Report, serial letter 2735.

16:25:12 19 THE COURT: Mr. Ballantine, was that 104 or 105?

16:25:19 20 MR. BALLANTINE: I thought I said 104, but whatever  
16:25:23 21 we have on the sticker I think should be correct.

16:25:28 22 THE COURT: 105 has been admitted, which is serial  
23 2735.

16:25:33 24 BY MR. BALLANTINE:

16:25:33 25 Q. Mr. Miller, what's marked on this?

1 A. This says Government's Exhibit 104.

16:25:43 2 Q. Mr. Miller, do you recognize this document?

16:25:48 3 A. Yes.

4 Q. And does your signature or your initials appear on it?

16:25:52 5 A. Yes.

16:25:58 6 Q. And it's the same kind of document you've already  
7 testified to?

8 A. Yes.

16:26:03 9 Q. Are these review and approval reports, are they  
16:26:07 10 sometimes referred to by the color of the paper that they're  
16:26:10 11 produced on?

12 A. Yes.

16:26:11 13 Q. Do communications with NRC headquarters usually go out  
14 under a green piece of paper? Let me ask you this: Have you  
15 ever heard of this kind of document referred to as a greensheet?

16 A. Yes.

17 MR. BALLANTINE: Your Honor, I'd ask to admit --  
18 move to admit Government's Exhibit 104.

16:26:30 19 MR. HIBEY: No objection.

16:26:35 20 THE COURT: There being no objection, the Court  
21 will admit Government's Exhibit 104.

16:26:49 22 BY MR. BALLANTINE:

16:26:49 23 Q. Let me ask you, who are the first two people who appear  
24 on Government's Exhibit 104 in the review and approval block?

16:26:58 25 A. In Block 14?

1 Q. I'm sorry, the first three people. Yes, in block 14.

2 A. Cognizant individual, R. M. Cook; responsible  
3 supervisor, D. L. Miller.

16:27:23 4 Q. What appears after that?

5 A. Again, please?

16:27:26 6 Q. Pardon me?

7 A. What was that?

8 Q. Who appears in the next line down?

16:27:30 9 A. The next line down, the responsible manager, D. Geisen.

16:27:42 10 MR. BALLANTINE: May I publish this to the jury?

16:27:45 11 THE COURT: Yes. It's been admitted.

16:28:01 12 BY MR. BALLANTINE:

16:28:01 13 Q. Have I magnified the relevant block, Mr. Miller?

14 A. Yes.

16:28:10 15 Q. Let me ask you this: Do you notice anything unusual  
16 about the date block on this greensheet?

16:28:30 17 A. All the dates are the same date.

16:28:32 18 Q. Why is that unusual?

16:28:38 19 A. Normally it would take more than one day to get review  
20 and approval of a document.

21 Q. Do you remember the circumstances where review and  
16:28:48 22 approval of this document was obtained?

16:28:52 23 A. I don't recall exactly how this was all done. I don't  
24 have any recollection of that.

25 Q. Do you remember whether or not the response to the

16:29:05 1 Bulletin 2001-01 was a somewhat high pressure situation within  
2 Davis-Besse?

16:29:14 3 A. It was a bulletin response. Every bulletin is  
16:29:20 4 important. I don't know if I'd characterize it as being any  
5 more high pressure than any other bulletin response that was  
6 made to the NRC.

7 Q. Were there implications with respect to this bulletin  
8 response about whether or not the facility would have to shut  
9 down by the end of 2001?

10 A. The bulletin did request that plants shut down and  
16:29:45 11 perform inspections by the end of the year.

16:29:48 12 Q. And was that -- did that generate its own pressure on  
13 top of what a normal bulletin response has?

16:30:00 14 A. I don't know. I can't characterize it as pressure, per  
15 se.

16 Q. Was it important to keep the plant running?

16:30:09 17 A. There was a desire to keep the plant running.

16:30:13 18 Q. And was that something that was understood by everyone  
16:30:17 19 who's working on this team?

16:30:19 20 MR. HIBEY: Objection. Your Honor, he's leading  
21 the witness.

16:30:22 22 MR. CONROY: Objection.

23 THE COURT: Sustained.

16:30:28 24 BY MR. BALLANTINE:

16:30:28 25 Q. What's your understanding of the consequences of an

16:30:31 1 early shutdown, unexpected shutdown?

16:30:35 2 A. If you have an unexpected shutdown in a utility,

16:30:44 3 FirstEnergy would have to buy replacement power. There's also

16:30:51 4 ramifications in the budget if the shutdown had not been

16:30:56 5 budgeted for.

16:30:57 6 Q. Do you have a sense in round figures what those costs

7 would have been in 2001?

8 A. No, not really.

9 Q. Significant?

16:31:08 10 A. It would be significant. It would be large.

16:31:13 11 Q. Six figures?

16:31:16 12 MR. CONROY: Again -- withdraw that.

16:31:21 13 A. Go ahead?

14 THE COURT: Yes. You can answer.

16:31:24 15 A. Yeah, it would be somewhere in the six figures.

16 BY MR. BALLANTINE:

17 Q. Six figures per --

16:31:30 18 A. It just depended on how long the shutdown was: a day; a

16:31:36 19 week; a month. It would increase.

20 Q. The cost would increase?

21 A. Yes, the cost would increase.

16:31:53 22 Q. All right. Mr. Miller, I'm going to hand you up two

16:31:57 23 exhibits, Government's Exhibit 112 and 114, ask you to have a

16:32:01 24 look at those.

16:32:34 25 Let's look at Government's Exhibit 112. Do you

16:32:37 1 recognize that document?

16:32:38 2 A. Yes.

3 Q. What is it?

16:32:40 4 A. It is NRC Letters - Review and Approval Report, serial  
16:32:49 5 letter 2744.

16:32:55 6 Q. Similar to the documents that we've been looking at up  
16:32:59 7 until now? It's a greensheet?

8 A. Yes.

9 Q. Did you sign it?

16:33:02 10 A. Yes.

11 Q. And it operates in the same way as these other  
12 greensheets we've been talking about?

13 A. Yes.

14 MR. BALLANTINE: Your Honor, I'd move to admit  
15 Government's Exhibit 112.

16:33:22 16 THE COURT: Hearing no objection, it will be  
17 admitted.

16:33:28 18 BY MR. BALLANTINE:

16:33:28 19 Q. Mr. Miller, have you had an opportunity to look at the  
20 second exhibit I handed up there? I believe it's --

16:33:35 21 A. Yes.

16:33:37 22 Q. I'm sorry, which exhibit number does that bear?

23 A. Government's Exhibit 114.

16:33:46 24 Q. Let me ask you the same questions about that. Do you  
25 recognize that document to be a greensheet?

1 A. Yes.

2 Q. And it serves the same function as a review and approval  
16:33:55 3 report for communication with the NRC?

4 A. Yes.

5 Q. In this case is that communication serial letter 2745?

16:34:04 6 A. Yes.

16:34:08 7 MR. BALLANTINE: Your Honor, on that basis I'd move  
8 to admit Government's Exhibit 114.

16:34:14 9 MR. HIBEY: No objection.

10 THE COURT: It will be admitted without objection.

16:34:25 11 MR. BALLANTINE: Mr. Miller, thank you. I have no  
16:34:28 12 further questions.

16:34:37 13 - - -

16:34:37 14 DALE MILLER, CROSS-EXAMINATION

16:34:39 15 BY MR. HIBEY:

16:34:39 16 Q. Good afternoon, Mr. Miller. Could I direct your  
16:34:59 17 attention to Government's Exhibit 78, which you have in front of  
18 you. Those are notes that you took for the preparation of  
19 the -- notes you took on October 2?

16:35:20 20 A. Government's Exhibit 78 I have here is the NRC telecon.  
16:35:24 21 on October 3.

16:35:30 22 THE COURT: That's 78.

16:35:33 23 MR. HIBEY: Then I have the wrong numbering. I  
24 need some help.

25 BY MR. HIBEY:

1 Q. I'd like you to look at the 10-2, notes. I'm going to  
2 take a look at them with you just to be able to identify the  
3 number.

16:35:49 4 72. I had them switched.

16:35:52 5 THE COURT: 72?

16:35:55 6 MR. HIBEY: That's right.

16:35:59 7 BY MR. HIBEY:

16:35:59 8 Q. Part of your practice in a meeting such as this is you  
16:36:07 9 list the initials of the people who were in attendance at that  
10 meeting; is that correct?

11 A. Yes.

16:36:15 12 Q. Can you identify the specific initials for each one of  
13 the attendees at that meeting?

14 A. Yes, I could.

15 Q. Would you do that for us?

16 A. Okay. This is the October 2 telecon. prep meeting?

17 Q. Yes.

18 A. First initials are L. W. W., that's Lonnie Worley.

16:36:38 19 Next initials are D. R. W., Dale Wuokko. Next initials, D. H.

16:36:45 20 L., are David Lockwood. Next initials are D. L. M., Dale

21 Miller. Next, Mark McLaughlin, that's M. M. Next initials, P.

16:36:59 22 G., are Prasoon Goyal. Next initials, D. C. G., Dave Geisen.

23 Next initials, R. M. C., Rod Cook. Next initials, S. P. M.,

24 Steve Moffitt. Next initials, G. G. C., Guy Campbell. The

16:37:23 25 last initials are S. C.; I believe that's Scott Cokely

1 (phonetically).

2 MR. HIBEY: Thank you. No further questions.

3 THE COURT: Thank you. Mr. Conroy.

16:37:38

4

- - -

16:37:41

5

DALE MILLER, CROSS-EXAMINATION

16:37:42

6

BY MR. CONROY:

16:37:42

7

Q. Mr. Miller, John Conroy. You, in fact, do know Mr. Cook, don't you?

8

A. Yes.

16:37:57

10

Q. That's a start. And you have known him for a number of years; is that right?

16:38:06

11

16:38:08

12

A. I believe the first time I met him may have been in 1985 or 1986 time frame.

13

Q. And you have worked together in the past?

16:38:17

15

A. I don't recall working with him specifically on anything until he worked in Regulatory Affairs in the 2001 time frame.

16:38:21

16

17

Q. And he came to Davis-Besse pursuant to a purchase order contract that your name was on; is that correct?

18

16:38:36

19

A. I don't recall. I'd have to see the contract.

16:38:44

20

Q. Well, let's just assume that that's a fair statement, and we'll deal with it. As a trained engineer in Regulatory

16:38:47

21

16:38:54

22

Affairs, you are aware, are you not, that the correspondence

16:38:59

23

with the Nuclear Regulatory Commission has to be complete and

16:39:03

24

accurate?

25

A. Yes.

1 Q. And you know that Rod Cook knew that as well, don't you?

2 A. I believe he knew that.

3 Q. And you knew pretty much everybody in the plant was  
4 aware of that; isn't that true?

16:39:13 5 A. I'd have to say that people that were involved with  
16:39:18 6 correspondence would know that, but there were several people in  
16:39:21 7 the plant that didn't work --

8 Q. Other engineers?

9 A. Other engineers, if they were involved with  
16:39:28 10 correspondence, yes.

16:39:32 11 Q. Are you aware as to whether or not as part of the  
12 standard training for people coming to work at Davis-Besse to be  
13 explained that it is necessary when communicating with the NRC  
16:39:45 14 to be complete and accurate?

16:39:48 15 A. I don't recall specific training.

16 Q. You don't know whether the plant had such training?

17 A. They had orientation training; I just don't remember  
18 exactly what was involved in that area. Don't recall that.

16:40:06 19 Q. When Mr. Cook was hired, he wasn't hired in 2001 because  
20 of any upcoming bulletin response, was he?

16:40:17 21 A. No.

16:40:18 22 Q. He was hired as a staff augmentation engineer?

23 A. Yes.

24 Q. And got thrown into the breach, if you will, in August  
25 when the response was necessary to the bulletin; isn't that

1 right?

2 A. That's my understanding, yes.

16:40:37 3 Q. And you reviewed the draft responses to the bulletin?

16:40:43 4 A. Can you repeat that, please?

16:40:45 5 Q. You reviewed the draft responses to the bulletin that  
6 came out beginning in August?

7 A. Not all of them.

16:40:52 8 Q. But some of them?

16:40:53 9 A. Some. I don't recall exactly what all I reviewed.

10 Q. The response included a great deal more than simply  
16:41:02 11 responding to questions about past inspections; did it not?

16:41:09 12 A. There were other sections of the bulletin response.

16:41:12 13 Q. It was a long response; is that right?

14 A. Yes.

16:41:15 15 Q. It had attachments to it?

16:41:18 16 A. As I recall, yes.

17 Q. And charts?

16:41:22 18 A. I don't recall the specific charts without seeing the  
19 document.

16:41:27 20 Q. The document in its entirety was being pulled together,  
21 if you will, by Mr. Cook; is that right?

16:41:37 22 A. That's my understanding, yes.

16:41:45 23 Q. That document required providing information from both  
16:41:50 24 inside and outside the company; did it not?

16:41:54 25 A. Could you say that again, please?

1 Q. You had to gather -- the information that had to be  
16:41:59 2 gathered to respond to the bulletin had to be gathered from  
3 sources both inside and outside the company; did it not?

16:42:08 4 A. I don't recall the specific questions in the bulletin,  
5 all the content, where all the responses came from. I don't  
6 know where all the responses came from.

7 Q. Were you not gathering information from outside the  
8 company?

16:42:22 9 A. Yes.

16:42:23 10 Q. And what information were you gathering from outside the  
11 company was about what the other plants were going to do, wasn't  
12 it?

13 A. That's right.

14 Q. And that had to be given to Mr. Cook to evaluate as  
15 well; did it not?

16 A. It was given to him for information purposes as well as  
16:42:38 17 other people, who I don't recall exactly who it all went to.

16:42:51 18 Q. Now, you've indicated that you signed the greensheets,  
16:42:59 19 which we are now calling greensheets, in response to, for  
20 example, serial number 2731. And with regard to Block 14 and  
21 the instructions on the back page, this is a document that when  
16:43:23 22 you see it in real life has a front side and a back side; is  
23 that right?

24 A. That's correct. Instructions.

25 Q. On the back side of the document in Block 14 it says

1 review and approval?

16:43:38 2 A. Yes.

16:43:42 3 Q. And in the case of the Bulletin 2001-01 response, do you  
4 know who the initiator would be as stated in Block 14?

16:44:01 5 A. Which serial?

16:44:04 6 Q. I'm looking at 2731.

7 A. Okay. Who the initiator would be?

16:44:12 8 Q. It says in Block 14, "Initiator checks out and/or enters  
9 the desired reviewers."

16:44:19 10 A. Yes. That's the initiator of the greensheet. That  
11 would be the individual represented in Block 8.

12 Q. That would be Mr. Cook in this case?

13 A. Yes.

14 Q. And it says then that the technical accuracy of a  
15 response to the NRC is the responsibility of the director and  
16 management individuals assigned the action?

17 A. Yes.

16:44:45 18 Q. Now, the director and management individual assigned the  
19 action in this response was not Regulatory Affairs, was it?

16:44:57 20 A. I don't believe they were, but I don't know exactly who  
21 all were assigned which actions because I wasn't involved in  
22 that at the beginning.

16:45:08 23 Q. But you were involved in it at some point?

24 A. After August 17.

16:45:14 25 Q. And you did sign the greensheet for 2731?

16:45:21 1 A. Yes.

2 Q. As the Supervisor of Compliance?

16:45:24 3 A. Yes. That was my title.

4 Q. Were you, as the Supervisor of Compliance, senior to Mr.

16:45:32 5 Cook in Regulatory Affairs?

16:45:37 6 A. Depends on what you mean by "senior".

16:45:40 7 Q. Were you higher on the corporate ladder?

16:45:43 8 A. Yes.

16:45:46 9 Q. And to your knowledge, were you, as a supervisor in

16:45:54 10 Regulatory Affairs, responsible for the technical accuracy of

11 this document, of serial letter 2731?

16:46:09 12 A. I did not assume responsibility for the technical

16:46:12 13 accuracy of the letter. I didn't have any background in that

14 area.

16:46:17 15 Q. Background in what area, sir?

16 A. In a lot of what the response was about.

17 Q. Who would have had that background?

18 A. Whoever the technical individuals were.

19 Q. Would that be from engineering?

16:46:32 20 A. It could have been.

16:46:34 21 Q. You just don't know?

22 A. I don't know.

16:46:47 23 Q. There is also, sir, a procedure which you have mentioned

24 at Davis-Besse in connection with responding to communications

25 from the NRC.

1 A. Yes.

2 Q. I would like to show you what's marked for  
16:47:00 3 identification as Defense Exhibit -- I'm going to hand you what  
4 has been marked for identification as Defense Exhibit 6 and ask  
5 you if you recognize it as -- do you recognize it?

16:48:12 6 A. Yes.

16:48:13 7 Q. What is it, sir?

16:48:15 8 A. This is a procedure, NG-NS-00804, title is NRC  
16:48:25 9 Communications.

16:48:26 10 Q. Is this the written procedure that governs  
16:48:32 11 communications with the NRC by Davis-Besse?

16:48:40 12 A. It was apparently the one that was in effect according  
16:48:45 13 to the dates that are on it.

16:48:48 14 Q. It was the one that was in effect in 2001?

16:48:54 15 A. I'm not sure. It may have been. Procedures change.

16:49:37 16 MR. BALLANTINE: The government would stipulate  
17 that was the procedure in force in 2001.

18 THE COURT: Very good. Exhibit -- Defendant's  
16:49:46 19 Exhibit 6 has been stipulated by the government to be the  
16:49:49 20 procedure referred to by Counsel as that also in effect in 2001.

16:50:02 21 BY MR. CONROY:

22 Q. I would ask you then, sir, if you would have reference  
16:50:05 23 to Section 6.2 of this procedure.

16:50:12 24 A. Okay.

16:50:15 25 Q. And in Section 6.2.1 it indicates that the lead

16:50:22 1 department responsible for preparation of the docketed  
2 correspondence shall prepare the draft correspondence containing  
3 the required information and a commitment list, verify the  
16:50:39 4 completeness and accuracy of the information and, following the  
5 lead department director's concurrence, provide this draft to  
6 Regulatory Affairs.

16:51:05 7 Do you see that, sir?

16:51:07 8 A. Yes.

16:51:10 9 Q. If, in fact, the lead department for the Bulletin  
10 2001-01 response was Engineering, then it would be Engineering's  
16:51:22 11 responsibility, would it not, according to the written  
16:51:25 12 procedures governing communications with the NRC at Davis-Besse,  
13 to verify the completeness and accuracy of the information  
16:51:34 14 contained in that document?

15 A. Yes.

16:51:38 16 Q. And reading Section 6.2.2, it says Regulatory Affairs  
16:51:47 17 shall review the draft correspondence for format, content,  
16:51:55 18 completeness, clarity, and general acceptability, and prepare a  
19 proposed submittal to the NRC.

20 Is that as you remember it, sir?

16:52:06 21 A. Those are the words that are written there.

22 Q. And you believe this is the effective procedure? Well,  
16:52:12 23 sit -- we would have stipulated that it's the effective  
16:52:15 24 procedure. All right. So -- that's all I'm going to have with  
25 that, sir. Thank you.

16:53:03 1 When you signed the greensheet for serial letter  
16:53:11 2 2731 and serial letter 2735, serial letter 2741, serial letter  
16:53:20 3 2744, serial letter 2745, did you believe at that time, at the  
16:53:29 4 time of each document's being forwarded, that they were complete  
5 and accurate documents?

16:53:35 6 A. I believed that they were complete and accurate, yes.

16:53:41 7 Q. Did you think that the reactor pressure vessel head at  
16:53:47 8 Davis-Besse was clean after the 12th refueling outage until such  
16:53:53 9 time as you found out differently in 2002?

16:53:57 10 A. I believed what was written in the responses, whatever  
16:54:02 11 that said.

16:54:31 12 Q. If during the course of collecting information for the  
13 bulletin responses Mr. Cook had difficulty getting information  
16:54:42 14 or getting accurate information, he would have to resolve that  
15 issue before he could pass that document forward; would he not?

16:54:54 16 A. That's generally what should occur.

16:54:57 17 Q. That's the procedure?

18 A. Yes.

16:55:01 19 Q. And there were instances of that occurring during the  
16:55:05 20 preparation, particularly of 2731; were there not?

16:55:09 21 A. I'm not sure what all difficulty Mr. Cook had in  
22 entirety with the response preparation.

16:55:17 23 Q. Do you remember a difficulty arising with regard to how  
16:55:22 24 much of the reactor head could be seen at 12 RFO, whether it was  
16:55:29 25 90 percent or 80 percent?

16:55:31 1 A. There are e-mails that I became aware of -- what time  
2 frame, I don't recall -- that discuss that, yes.

16:55:41 3 Q. But that issue was openly discussed; was it not?

4 A. Not that I recall. I don't recall discussions.

16:55:48 5 Q. There were e-mails about it going around?

6 A. Yes.

16:56:15 7 Q. Were you aware, sir, during the development of any of  
8 the responses to Bulletin 2001-01 of a scheme taking place at  
16:56:34 9 Davis-Besse to misrepresent or conceal any information from the  
10 NRC?

16:56:38 11 A. No.

16:56:42 12 Q. And you don't have any evidence as you sit here today  
16:56:46 13 that Mr. Cook developed such a scheme on his own, do you?

14 A. No.

16:56:58 15 Q. After you sent in -- after 2731 was sent forward, and  
16 I'll tell you the date was September 4 of 2001, you went back to  
16:57:11 17 other tasks in the bulletin; did you not? Well, you did not  
18 have anything more to do with the bulletin response for a while?

16:57:19 19 A. No, I didn't have anything more to do with the bulletin  
16:57:22 20 response.

21 Q. And Mr. Cook went back to other duties as well?

16:57:28 22 A. Yes.

16:57:35 23 Q. And until late September of 2001 when you found out  
16:57:43 24 otherwise, there was really no further concern about Bulletin  
16:57:53 25 2001-01, was there?

16:57:54 1 A. I don't recall any specific concerns, no.

16:58:03 2 Q. As further responses went out later in the year,  
16:58:10 3 particularly in October, do you remember that there was  
16:58:14 4 developing time pressure in getting those documents out?

16:58:20 5 A. One of the responses I recall was moved up a week.  
16:58:29 6 That's all I can remember.

16:58:29 7 Q. You don't remember anything about there being any time  
16:58:32 8 pressure to get them out?

16:58:39 9 A. Not particularly, no, other than that moving of that  
16:58:49 10 date.

16:58:49 11 Q. Response 2735 indicated that the whole head had been  
16:58:54 12 inspected in 1996 except four or five nozzles at the top. At  
16:59:03 13 the time that that document went out, did you believe that?

16:59:03 14 A. Yes. I had no basis to believe other than what was  
16:59:16 15 written there.

16:59:16 16 MR. CONROY: Nothing further, Your Honor.

16:59:16 17 - - -

16:59:16 18 DALE MILLER, REDIRECT EXAMINATION

16:59:29 19 BY MR. BALLANTINE:

16:59:29 20 Q. Mr. Miller, I'm going to ask you a question about  
16:59:57 21 defense -- a few questions about Defendant's Exhibit 6. Could  
16:59:57 22 you turn to page 10 of that document, looking specifically at  
16:59:57 23 Section 6.2.6? If I may, I'll read it. You let us know if I  
16:59:57 24 read it accurately.

16:59:59 25 "Regulatory Affairs and lead department shall

17:00:06 1 resolve any comments received on the proposed submittal.  
17:00:11 2 Disagreements which cannot be resolved shall be elevated to next  
17:00:14 3 level of management for resolution. If this resolution results  
4 in significant changes to the proposed submittal, Regulatory  
5 Affairs shall reroute the proposed submittal repeating steps  
6 6.2.4 through 6.2.6."

17:00:35 7 Did I read that accurately?

8 A. Yes.

17:00:38 9 Q. Can you, I guess, give us sort of a more general  
17:00:44 10 explanation of what that -- what that means to you or meant to  
11 you at the time?

17:00:50 12 A. Basically exactly what it says, if there's issues that  
17:00:55 13 can't be resolved, then you elevate it up the management chain;  
17:01:00 14 you try to achieve resolution.

17:01:03 15 Q. I'd like you to take a look at Government's Exhibit 52.  
16 I'm going to ask you if that's an example of the kind of issue  
17 that would need to be resolved. First I'll ask you if you can  
18 identify the document?

17:01:21 19 MR. CONROY: Can we have a moment to find the  
17:01:25 20 exhibit, Your Honor?

17:01:30 21 THE COURT: 52.

17:02:11 22 BY MR. BALLANTINE:

17:02:11 23 Q. Mr. Miller, do you recognize that document?

24 A. It's an e-mail, printout of an e-mail.

25 Q. Do you appear on the -- in the header to the e-mail?

17:02:25 1 A. I appear as one of the individuals copied on the e-mail.

17:02:32 2 Q. Do you remember receiving the e-mail?

3 A. No.

4 Q. Do you question that you did?

17:02:43 5 A. Yes. I don't recall whether I would have looked at  
6 this e-mail or when I would have opened it or received it.

7 Q. Okay. What I'd like to ask you about is whether it's  
8 the kind of information that this procedure would apply to. So  
9 I'm not asking you whether you remember it at the time, but I  
10 want to ask you, first of all, is it an e-mail that you  
11 received?

12 A. Did I receive it?

17:03:19 13 Q. Yes.

17:03:23 14 A. I don't know. I think so.

17:03:25 15 MR. BALLANTINE: Your Honor, I would move to admit  
16 Government's Exhibit 52.

17:03:35 17 THE COURT: Hearing no objections, Government's  
18 Exhibit 52 will be admitted. It may be published to the jury.

17:03:56 19 BY MR. BALLANTINE:

17:03:56 20 Q. Mr. Miller, if you could have a look at the monitor.  
21 First let me ask you who the e-mail is from?

17:04:27 22 A. The e-mail is from Prasoön Goyal.

17:04:32 23 Q. Who is Mr. Goyal?

17:04:34 24 A. He is an individual in engineering.

25 Q. Who is it to?

1 A. It's to Rodney Cook.

17:04:41 2 Q. And what's the subject of the e-mail?

3 A. Subject is RE: Serial 2731, 8-27-01. That would be the  
4 date for August 27th, Version 1B.

17:05:07 5 Q. Could you just go ahead and read the first line of the  
6 e-mail?

7 A. It says, "I have the following comments."

8 Q. Now, if you take a look at the second comment, the one  
9 that's highlighted on the screen there, and read that to the  
10 jury, please.

17:05:21 10

11 A. "2. Subsequent review of 1998 and 2000 inspection  
12 videotape results. The discussion here gives an impression to  
13 the reader that we were able to look at all the CRDMs. It is  
14 very difficult to look at the CRDMs when there is boric acid  
15 around it. Do we want to reword this?"

17:05:30 12

17:05:39 14

17:05:44 15

16 Q. Is this the kind of comment that the cognizant  
17 Regulatory Affairs person would need to resolve under the policy  
18 that's been put before you as Defendant's Exhibit 6?

17:05:55 18

19 A. It would be something, yes, that would need to be  
20 resolved.

17:06:02 19

17:06:06 20

21 Q. And if there -- if a resolution didn't occur between Mr.  
22 Goyal and Mr. Cook, if they couldn't agree to what the  
23 resolution ought to be, then something would have to be  
24 elevated?

17:06:18 24

25 A. Potentially.

17:06:20 1 Q. Let me ask you this: In your role when you were working  
2 on these kind of -- not on one in particular, but as a cognizant  
17:06:29 3 Regulatory Affairs person, you were working on communications  
4 with the NRC, if you knew that there was information in a letter  
5 that was false, would somebody else's approval of that letter  
17:06:41 6 give you a green light to submit it to the NRC?

17:06:45 7 A. If the information was false?

17:06:47 8 Q. If you thought it was false. If you knew it was false.

17:06:50 9 A. No. It would not go to the NRC.

17:06:53 10 MR. BALLANTINE: Thank you. Your Honor, I have no  
17:06:55 11 further questions.

17:07:02 12 THE COURT: Thank you, sir. You may step down.

17:07:04 13 You're excused.

17:07:14 14 (Discussion had off the record.)

17:07:49 15 THE COURT: Because of the furlough from Thursday  
16 through Monday, I'd like to impose upon you to be here tomorrow  
17 to start court at 8:30. Is that all right?

17:08:07 18 MR. HIBEY: It would be our pleasure to be here.

17:08:11 19 THE COURT: All right. Very good. You've had a  
20 long day, and we thank you for it. Please remember my previous  
17:08:20 21 admonitions to you: Do not discuss this matter among  
22 yourselves, nor with anyone else, nor permit anyone else to  
23 discuss it with you. Please tell those around you as you leave  
17:08:34 24 here and when you arrive at home or elsewhere that you've been  
17:08:39 25 instructed by the judge not to discuss the case until it's all

17:08:44

1 over, and that you took an oath to follow those instructions.

2 Do not read, listen to, or watch anything touching on this case

3 in any way. And do not make up your minds on the ultimate

17:09:00

4 issues which will be yours to determine at the end of the case.

17:09:06

5 Drive safely and enjoy your evening. We'll see you

6 in the morning at 8:30.

7

- - -

8

9

**C E R T I F I C A T E**

10

11 I certify that the foregoing is a correct transcript from the

12 record of proceedings in the above-entitled matter.

13

14

\_\_\_\_\_  
Tracy L. Spore, RMR, CRR

\_\_\_\_\_  
Date

16

17

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19

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23

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25

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