RAS C-220 U.S. NRC Staff Exhibit # 79 UNITED STATES OF 1 in re DAVID GEISEN_ 1 Docket # 1A-05-052 **., 2008 (Tr. p.**<u>825</u> ľΧ 2 NUCLEAR REGULATORY C Date Marked for ID: Date Offered in Ev: 12/8, 2008 (Tr. p. 827 3 Through Witness/Panel: 4 REJECTED WITHDRAWN OFFICE OF INVESTIC Action: ADMITTED 2008 (Tr. p. 821 Date: 14 5 INTERVIEW 6 ----x 7 IN THE MATTER OF: • 8 INTERVIEW OF : Docket No. 9 DAVID C. GEISEN, PE : (not provided) 10 (CLOSED) 11 12 Tuesday, October 29, 2002 13 14 Holiday Inn Express 15 50 Catawba Road, NE 16 Port Clinton, Ohio 17 18 19 The above-entitled interview was conducted at 8:30 a.m. 20 21 **BEFORE**: 22 23 JOSEPH M. ULIE, Senior Special Agent MICHELE JANICKI, Special Agent 24 25 JAMES GAVULA, PE, Senior Reactor Inspector **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.neairgross.com Exhibit 115 TEMPLATE = SECY 028 NRC002-1258 Dogo 1 of 100

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1	APPEARANCES:		
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	On behalf of the Witness:		())
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P-R-O-C-E-E-D-I-N-G-S

SENIOR SPECIAL AGENT ULIE: Today's date is October 29th, 2002, at approximately 8:30 a.m. for the record, this is an interview of Mr. Dave Geisen, last name spelled G-e-i-s-e-n. This interview is being conducted at the Holiday Inn Express and Suites Hotel, located at 50 Northeast Catawba Road, Port Clinton, Ohio.

9 Present at this interview are Jane Penny, last name spelled P-e-n-n-y; James Gavula, last name 10 11 spelled G-a-v-u-l-a, Senior Reactor Inspector for the United States Nuclear Regulatory Commission, Region 3 12 Office; Michele Janicki, last spelled 13 name J-a-n-i-c-k-i; and Joseph M. Ulie, last name spelled 14 15 U-l-i-e, both Special Agents with the United States 16 Nuclear Regulatory Commission, Office of 17 Investigation. As agreed, this interview is being 18 recorded by Court Reporter Scott Gamertsfelder.

19 The subject matter of this interview 20 regards a Nuclear Regulatory Commission fact-finding 21 investigation into the circumstances surrounding the Davis-Besse reactor vessel head degradation problem. 22 Mr. Geisen, if you will, please stand and 23 24 raise your right hand. I'll administer the oath. 25 DAVID C. GEISEN, MBA, ΡE, a witness,

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4 1 called by the Commission, being first duly sworn by the Senior Special Agent, testified and said as 2 follows: 3 SENIOR SPECIAL AGENT ULIE: Mr. Geisen, .4 you understand if you're not truthful during this 5 official Nuclear Regulatory Commission procedure, you 6 7 are subject to potential criminal violation of 8 perjury? 9 MR. GEISEN: I understand that. SENIOR SPECIAL AGENT ULIE: Do you wish 10 11 Miss Penny to be present during the interview? 12 MR. GEISEN: Yes. 13 SENIOR SPECIAL AGENT ULIE: Miss Penny, .14please state your full name, law firm, position, and 1.5reason for your attendance. 16 MS. PENNY: My name is Jane Penny. I'm a 17 partner in the Harrisburg, Pennsylvania, Law Firm of 18 Killian & Gephart. I'm here today to represent Mr. 19 Geisen. 20 SENIOR SPECIAL AGENT ULIE: Thank you. Mr. 21 Geisen, for the record, if you would, state your full 22 name. David Charles Geisen, 23 MR. GEISEN: G-e-i-s-e-n. 24 25 SENIOR SPECIAL AGENT ULIE: What's an **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	address and a telephone number, with area code, that
2	you could be reached?
3	MR. GEISEN: Address is 28195 White Road,
4	Perrysburg, Ohio, 43551; phone number is area code
.5	419, 874-0715.
6	SENIOR SPECIAL AGENT ULIE: Are you
·. 7	currently an employee of FirstEnergy Operating
8	Corporation?
9	MR. GEISEN: No, I'm not.
10	SENIOR SPECIAL AGENT ULIE: Had you been
11	an employee of FirstEnergy?
12	MR. GEISEN: Yes, I was.
13	SENIOR SPECIAL AGENT ULIE: The acronym
14	I'll use is FENOC. I believe you are familiar with
15	that, but just to make it clear on the record, instead
16	of saying the whole title of the company.
17	How long had you been an employee of
18	FENOC?
19	MR. GEISEN: Fourteen years.
20	SENIOR SPECIAL AGENT ULIE: Was all of
21	your employment with FENOC at Davis-Besse?
22	MR. GEISEN: That's correct.
23	SENIOR SPECIAL AGENT ULIE: What positions
24	have you held at Davis-Besse and during what
25	approximate time frames had you held those positions?
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1	MR. GEISEN: I started at Davis-Besse May
2	31st, 1988, immediately following my six-year career
3	in the Navy. I started out as an associate engineer
4	in Mechanical Systems, Systems Engineering. Following
.5	several years in that position, I went into the SRO
6	program. After coming out of the SRO program in 1996,
7	Summer of '96, approximately, in June, July time
8	frame, I ended up being promoted to supervisor of the
9	Electrical Control Systems Group.
10	I held that position until March of 2000,
11	and in March of 2000, I was promoted to the manager of
12	the design engineering organization, which I held that
.13	position until this past spring.
14	SENIOR SPECIAL AGENT ULIE: You said you
15	became the manager of the design organization in March
16	of 2000?
17	MR. GEISEN: That's correct.
18	SENIOR SPECIAL AGENT ULIE: And you held
19	that until when?
20	MR. GEISEN: Until May of 2002. At which
21	point I became project manager for restart issues, and
22	I left the company two weeks ago.
23	SENIOR SPECIAL AGENT ULIE: Do you know
24	the effective date of your separation?
25	MR. GEISEN: The 20th of October.
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1	SENIOR SPECIAL AGENT ULIE: Why are you no
2	longer employed with FENOC?
3	MR. GEISEN: I chose to leave the company.
4	SENIOR SPECIAL AGENT ULIE: Were you
5	offered a transfer before you elected to leave?
6	MR. GEISEN: Yes. I was offered a
7	transfer to the Perry Nuclear Power Plant in Systems
8	Engineering.
9	SENIOR SPECIAL AGENT ULIE: Was the
10	proposed transfer considered a demotion?
11	MR. GEISEN: I was previously demoted in
12	May when I was pulled out of the manager ranks and
13	made a project manager. The movement over to Perry
14	would have been a lateral move from my most recent
15	position as a project manager.
16	SENIOR SPECIAL AGENT ULIE: Was the
17	proposed position that you were offered at Perry a
18	result of management's belief of deficiencies in your
19	performance?
20	MR. GEISEN: The letter that I got stated
21	that the reason for me being moved was that I was in
22	a position to or had the opportunity to find problems
23	but did not. Although they did not find any specific
24	wrongdoing on my behalf, they felt that
25	performance-wise, I could have found it and didn't.
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1	SENIOR SPECIAL AGENT ULIE: Were there any
2	specific deficiencies that were identified to you with
3	your performance?
4	MR. GEISEN: Specifically in the letter,
5	which was the only feedback I've gotten to date, was
6	that they felt that there was information that was
7	presented to the NRC last fall that could have been
8	more detailed, more accurate; and since I was one of
9	the reviewers on the Green Sheet Review, therefore I
10.	had the opportunity and didn't catch it.
11	SENIOR SPECIAL AGENT ULIE: If you could,
12	go into what your background and experience in the
13	nuclear industry separate from what you have already
14	stated about Davis-Besse.
15	MR. GEISEN: I graduated from Marquette
16	University in 1982. I was an ROTC student. I had
17	interviewed with Rick Over in the Fall of 1981, got
18	selected for Navy Nuclear Power Officer Program, did
19	six years in the Navy Nuclear Power Program, qualified
20	as Navy nuclear engineer, and following a two-year
21	stint in shore duty as a recruiting command, I went to
22	Davis-Besse. I did five patrols on board ballistics
2.3	submarines as solely in the engineering department at
24	all times.
25	SENIOR SPECIAL AGENT ULIE: All right.
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1 Did you ever serve on shift as an SRO? 2 Not at Davis-Besse. I did MR. GEISEN: not attain my SRO license. I went into the SRO 3 training program and got an SRO certification and 4 5 moved into the supervisor ranks. There was never an intention by my director at that time, Bob Donnellon, б 7 to put me on shift. He wanted to put me on the 8 supervisor ranks. 9 SENIOR SPECIAL AGENT ULIE: So you received a certification, but not a license? 10 11 Not a license. MR. GEISEN: That is 12 correct. 13 SENIOR SPECIAL AGENT ULIE: Were you involved at all in the AR2 event? 14 15 MR. GEISEN: I was involved from the 16 standpoint I was within the systems organization, 17 participated in a lot of the training and reviews of 1.8 It's hard to say anybody that that. was in 19 engineering at that time was not involved in it since 20 it permeated our entire organization. 21 SENIOR SPECIAL AGENT ULIE: Did you give 22 or receive any training that was related to that 23 event? MR. GEISEN: I received training. We all 24 25 received training. It would have been part of our NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.neairgross.com

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1	engineering continuing support training. I believe
2	there was some training on the root cause as well.
3	SENIOR SPECIAL AGENT ULIE: Do you recall
4	any specifics related to the training or the type of
5	training that it was?
6	MR. GEISEN: Not really. That was quite
7	a while ago.
8	SENIOR SPECIAL AGENT ULIE: Do you know if
9	there was any additional emphasis placed on the
10	reactor vessel head specs during any of the refueling
11	outages based on your knowledge?
12	MR. GEISEN: As a result of the RC2?
13	SENIOR SPECIAL AGENT ULIE: Yes.
14	MR. GEISEN: No. The emphasis I took out
15	of that was that here we were with the first of
16	all, there are a couple of issues with the RC2
17	inspection. The first one was we had some carbon
18	steel bolting material that was used on the bonnet
19	bolting that had gotten substituted and it should have
20	been stainless, and initially we went in and saw that
21	one of the bolts appeared as though one of the nuts
22	was missing off of one of the studs and, in fact, had
23	been completely corroded away, and some of the other
24	studs, although they looked to be intact, when you
25	went and took the appropriate size wrench to place on
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1	them, you could see that they actually had been
2	equally corroded so that they were smaller in size,
3	and it occurred at a very, very short time frame.
4	So the focus of the training was not on
5	specific components, but on how corrosive boric acid
6	can be at that temperature, and we were having
7	specifically training on the curves of how the the
8	corrosion rate curves based on temperature.
9	SENIOR SPECIAL AGENT ULIE: When did you
10	first get involved in the vessel head penetration,
11	nozzle cracking issues?
12	MR. GEISEN: Being elected or being
13	selected to the position of manager of design basis,
14	a collateral duty for that was the B&W Owners Group
15	Steering Committee, and so I was immediately on the
16	steering committee as of March of 2000. Really got
17	involved with the issue of cracking from that aspect
18	through the Oconee cracking and reviewing it at the
19	Owners Group, so I would have to say in the November,
20	December time frame of 2000, when they first had their
21	first inspections.
22	SENIOR SPECIAL AGENT ULIE: Were you
23	trained on the boric acid corrosion control procedure?
24	MR. GEISEN: All engineers are trained on
25	the procedure.
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1	SENIOR SPECIAL AGENT ULIE: Okay. If you
2	take a moment to look at the document I handed you, I
3	believe that it was your exam
4	MR. GEISEN: Yes.
5	SENIOR SPECIAL AGENT ULIE: that you
6	had successfully passed in December of 1999. If you
7	could just confirm on the record after you have a time
8	to go through that, if that in fact is your exam from
9	that boric acid corrosion control training.
10	MR. GEISEN: Based on the cover sheet and
11	that is my handwriting from my name on the cover
12	sheet, I would have to say, yes, this is my exam.
13	SENIOR SPECIAL AGENT ULIE: That was in
14	December of 1999 that you had that training?
15	MR. GEISEN: Correct. It's dated
16	12-15-99.
17	SENIOR SPECIAL AGENT ULIE: With respect
18	to the reactor cooling system unidentified leakage,
19	did you have any involvement in determining the source
20	of the RCS unidentified leakage that had been
.21	occurring during 1999 and subsequently?
22	MR. GEISEN: No, I did not.
23	SENIOR SPECIAL AGENT ULIE: From an
24	engineering standpoint, either design engineering, you
25	wouldn't have gotten involved in that?
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MR. GEISEN: That role was always a job of the Systems Mechanical Group and working with Operations; and, unfortunately, like I said, from 1996 to 2000, I was in the Electrical Controls Systems Group, so no direct involvement. I just see what my fellow supervisors were working on, and then once we got into the design organization, like I said, that role still stayed in the Systems Mechanical Group.

9 SENIOR SPECIAL AGENT ULIE: As far as the 10 containment air cooler fins that they had experienced 11 low flow condition --

MR. GEISEN: That portion of the actual mechanical workings of the coolers and as well as the radiation detectors -- they came in skids -- fell under my purview as a supervisor of Electrical Controls, and our goal -- our focus there was to ensure that those components stay operable.

18 We didn't actually, as part of that, go search for the leakage. That was something that was 19 20 being handled by the RCS -- excuse me -- reactor 21 We all use acronyms coolant system. reactor 22 cooling system, supervisor of the system engineer that 23 owned the reactor cooling system, which would be under Mechanical Systems. Like I said, I didn't have a 24 25 direct involvement, but I did have knowledge that they

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were working on that.

SENIOR SPECIAL AGENT ULIE: Do you recall what the source was believed to be of the low flow condition related to the CAC?

MR. GEISEN: It was believed to be flange leakage of control rod drive mechanisms on the head.

SENIOR SPECIAL AGENT ULIE: Now, is there a specific time period that you recall that the flange leakage was attributed to that?

MR. GEISEN: Well, we had several outages
where we went in and repaired flanges, leaky flanges,
on the control rod drive mechanisms.

Some of that dates all the way back to the early Nineties when we actually started doing a replacement of all the gaskets on those to a new style of gasket, new style of nut capture device on the bottom side.

SENIOR SPECIAL AGENT ULIE: Are you familiar at all with the 1999 mid-cycle outage and the 11RFO, which would have been the Spring of 2000 time frame? Would you have received results of the control rod drive flange inspection activities?

23 MR. GEISEN: I did not directly receive 24 results of that from that outage. Unfortunately, I 25 was preoccupied during that outage.

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SENIOR SPECIAL AGENT ULIE: Just so we are clear, because I mentioned a mid-cycle and also an 11RFO, which one are you referring to?

MR. GEISEN: I'm talking about the mid-cycle outage. During the mid-cycle outage, the purpose of the mid-cycle outage was to prepare reactor cooling pump motors for what we believed we had a high bearing temperature problem, and we were going to go in and rebuild the upper bearing assemblies on the reactor coolant pump motors during that mid-cycle outage which was in the Spring of '99 to prepare for a long run through the hot summer.

Based on the trends we were seeing, we didn't think we would be able to run all four reactor coolant pump motors because of varying temperatures through the remaining of the run cycle, so we opted for a mid-cycle outage to go in and rebuild those.

During my first eight years at the plant, I was the reactor coolant pump system engineer, and so I was -- even though I was supervisor of the Electrical Controls Group at that point, I was drafted to work on the reactor coolant pumps during that outage. So that's why I say I was a little preoccupied with the day-to-day teardown of those bearings and putting them back together.

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1	SENIOR SPECIAL AGENT ULIE: Just to be
2	clear on the record, in your position at the time,
3	would you have received the control rod drive flange
4	inspection results from the '99 mid-cycle outage?
5	MR. GEISEN: I wouldn't have formally
6	routed those.
7	SENIOR SPECIAL AGENT ULIE: Would not?
8	MR. GEISEN: Right, not being in the
9	Electrical Controls Group. That would have been
10	handled within the Systems Mechanical Group.
11	SENIOR SPECIAL AGENT ULIE: Is the same
12	true then of the 11RFO?
13	MR. GEISEN: That's correct. Also, on the
14	11RFO, I guess put in perspective, since I probably
15	have the most in-depth knowledge of the reactor
16	coolant pump systems, of the pumps themselves, pumps
17	and motors, as well as the seals of anybody on site,
18	therefore, even though I had formally turned over that
19	system in'94, every outage since then, with the
20	exception of 10 RFO, when I was in the SRO training
21	program, I was drafted into working on the motors.
22	Even most recently, I was made the restart project
23	manager for the reactor coolant pump motor change-out.
24	So both in 11 and mid-cycle outage, I ended up working
25	on those motors.

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SENIOR SPECIAL AGENT ULIE: Okay. During that same time period, would you have been involved at all in the clogging radiation element filters?

MR. GEISEN: I was involved prior to the mid-cycle outage and following mid-cycle outage because the radiation elements fall under my supervisor group. I ended up getting involved right from that aspect. It was at my organization's, my unit's, job to figure out why these monitors or were having trouble.

11 We had multiple issues going on at the 12 time with them. In addition to the clogging of the 13 filters, we also had a significant problem with moisture in the detectors, and we found that we were 14 15 having more trouble with one of the detectors because 16 the sample point would funnel itself through our cold 17 room where most of our electronics are for control rod 18 drive instrumentation, position indication, all that, 19 and the temperature of that room is much colder, and 20 we were getting a lot of condensing in those lines and that was flooding out those detectors. 21 So we were 22 trying to come up with a fix for that.

We had looked at those filters and we had been getting buildup on those filters, and then following the mid-cycle outage, we started getting

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1	buildup that had rust color on it; and because of my
2	involvement during the mid-cycle outage with the motor
3	work, I was concerned that buildup on there was a
4	result of a problem we created during the mid-cycle
5	with doing magnaflux testing, ultrasonic testing, and
6	mag particle testing of our flywheels. Every time you
7	pull a flywheel off, we have a situation requirement
8	to go and do a full volume metric inspection of those
9	flywheels. They are a two-part flywheel, and there
10	used to be a requirement every five years to go in and
11	do a complete volume metric inspection. Because there
12	are two plates, you can't do it without pulling them
13	off. So we created a situation, every time you pulled
14	it off, you would go in and do mag particles of that.
15	Well, that mag particle dust went
16	everywhere. I specifically had those samples sent down
17	to Southwest Research to see if the magnaflux was the
18	cause of that. They came back and said, no, it was
19	not the result of magnaflux. It appeared as though it
20	was iron corrosion products, most likely from a steam
21	leak because of the way they were configured. At
22	which point, we started looking at is this a factor of
23	do we have a steam leak on our secondary side, do we
24	have a steam leak on our primary side, and there was
25	a desire to focus the look in both D-rings to look at,

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primarily, the east D-ring where the pressurizer is 1 located because it was believed to be a steam space 2 3 leak. SENIOR SPECIAL AGENT ULIE: Were you aware 4 5 at the time of the Sargent & Lundy report? б MR. GEISEN: Sargent & Lundy reviewed it 7 and believed it to be high in the reactor coolant 8 system, which kind of further led us towards the 9 pressurizer, being that it's high up in the D-ring. 10 SENIOR SPECIAL AGENT ULIE: Are you aware of -- first, let me ask, do you know Tom Cobbledick? 11 Tom, yes, I do. MR. GEISEN: 12 SENIOR SPECIAL AGENT ULIE: Were you aware 13 that he had performed a couple of walkdowns himself, 14 15 looking for the source of the unidentified leakage? 16 MR. GEISEN: No, I wasn't, but I wouldn't find that unusual. He was in Operations. 17 18 SENIOR SPECIAL AGENT ULIE: I was just 19 wondering, if there had been any discussions, whether 20 it be at morning meetings, you would have normally 21 attended morning meetings as part of your job? 22 MR. GEISEN: Not until I became a manager 23 in March of 2000. 24 SENIOR SPECIAL AGENT ULIE: Had you heard that he had eliminated potential leakage sources with 25 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	the exception of the head area? Had you ever heard
2	that during that time period, March of 2000?
3	MR. GEISEN: I heard that after the fact.
4	I've heard that since this past spring, but, no, I did
5	not hear that at the time.
6	SPECIAL AGENT JANICKI: When you became a
7	manager, would you have attended those morning
8	meetings, though?
9	MR. GEISEN: Yes. I attended
1.0	approximately maybe four or five morning meetings
11	my first week as manager, which was the week before
12	the outage started, 12RFO started, and then of course
13	then we don't have our morning meetings. It's kind of
14	a different routine, and then those picked up again
15	after that. So from June on, I was a regular attendee
16	of all the morning meetings, from June of 2000 on.
17	SENIOR SPECIAL AGENT ULIE: Our
18	understanding that Mr. Cobbledick had performed one
19	walkdown in the Fall of 2000 and one in the Spring of
20	2001 time frame.
21	MR. GEISEN: Okay.
22	SENIOR SPECIAL AGENT ULIE: Do you have
23	any recollection that you were informed that the leak
24	was not coming from inside, nor outside the D-rings
25	and not from the pressure-operated relief valve, but
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it was coming from the top of the head area? 1 We believed that to be the MR. GEISEN: 2 case because we could not find a leakage when he did 3 our walkdowns of the D-rings, so that's why it led us 4 back to our historic flange leakage that we've had. 5 SENIOR SPECIAL AGENT ULIE: But your 6 7 recollection is, though, you were not informed of the results of either the mid-cycle, the '99 mid-cycle 8 9 outage control rod drive flange results, nor the 11RFO flange results, is that correct? 10 MR. GEISEN: Not during the time that they 11 I had a chance to review everything 12 occurred, no. 13 since this whole thing occurred. SENIOR SPECIAL AGENT ULIE: And that's 14 15 what you are referring to? 16 MR. GEISEN: Right. 17 SENIOR SPECIAL AGENT ULIE: Okay. Any questions, Michele or Jim, on the RCS unidentified 18 leakage or in that area? 19 20 SPECIAL AGENT JANICKI: No. REACTOR INSPECTOR GAVULA: No. 21 SENIOR SPECIAL AGENT ULIE: All right. Is 22 there anything else that you can add on that subject 23 that we didn't mention, but you would just offer on 24 25 that particular subject? NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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MR. GEISEN: No. I've had a chance to go back and look at all of this, and 20/20 hindsight is always wonderful; but looking at it and looking at the whole issue and everything, it strikes me, obviously, now that the rust we were seeing on the filter media, I personally believe that occurred as a result of when the cracks through the nozzle or the J-weld probably went first through wall.

9 My personal belief is that, because that went away, and the only way I could justify that in my 10 11 mind that it went away is that initially we were 12 having a steam cutting-type event as it went through wall, and then as that opened up the crevice, the 13 predominant mechanism would have shifted to corrosion 14 15 versus steam cutting erosion; and so I looked at the data, and I feel that our predominant event started in 16 17 between 11RFO and our mid-cycle outage. I know that's 18 not necessarily way back to '94, but if you look at the leakage time frame, that's when it all started 19 taking off as well. 20

21 SENIOR SPECIAL AGENT ULIE: You mentioned 22 that you were a member of, since you became the 23 manager in March of 2000, on the B&W Owners Group 24 Steering Committee.

MR. GEISEN: That's correct.

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23 SENIOR SPECIAL AGENT ULIE: After Oconee 1 and A&O had identified nozzle cracks, I think you 2 referenced Oconee was about November of 2000 and my 3 understanding is that Arkansas Nuclear 1 --4 5 MR. GEISEN: Theirs wasn't until like --SENIOR SPECIAL AGENT ULIE: 6 February of 7 2001? MR. GEISEN: It was actually a little bit 8 They were in, I believe, the April time frame. .9 later. SENIOR SPECIAL AGENT ULIE: Of 2001? 10 MR. GEISEN: Correct. What we had was the 11 12 first plant -- and I don't remember if it was Oconee 1 or 2 -- but one of the Oconee plants had a leakage 13 that was identified in November, but the real troubled 14 one was the Oconee 3 plant which was inspected in 15 16 January -- January, February time frame -- and they found a 165 degree circumferential crack. 17 That was the first plant to find a 18 19 circumferential crack, and that alarmed all of us 20 because up until that point, axial cracking in the 21 drives was considered by the industry not to be a 22 safety issue from the standpoint that you're not going 23 to get a rod ejection or a nozzle ejection and subsequent control rod ejection as a result of an 24 25 axial crack, but you would a circumferential crack if

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1	it was allowed to grow 260 degrees. So we had a lot
2	of concern over that.
3	Obviously NRC had the same amount of
4	concern because the bulletin was issued to address
5	that circumferential cracking issue.
6	SENIOR SPECIAL AGENT ULIE: In that
7	January, February 2001 time period?
8	MR. GEISEN: Correct.
9	SENIOR SPECIAL AGENT ULIE: What role did
10	you have leading up, then, to FirstEnergy responding
11	to the bulletin? I believe the NRC came out with an
12	Information Notice in April of 2001.
13	MR. GEISEN: That's correct. My role
14	early on was as the liaison with the owners well,
15	I was on the Owners Group liaison with Framatome,
16	which as an owners group, we had diverted all of our
17	spare, notice even spare funding. We cut everything to
18	the bone and diverted millions of dollars over to the
19	supporting development of testing mechanism, tooling
20	mechanism and everything for B&W fleet.
21	Oconee had expended an incredible amount
22	of Dose in trying to do inspections and repairs, and
23	so our focus in Owners Group at that point was coming
24	up with a remote testing and repair mechanism or
25	methodology and the tooling associated with that.
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initially desired -- and we We were putting a full-court press on, because we initially desired to have that available for Arkansas' outage, but we didn't make it. So Arkansas ended up having to do all of theirs manually, but we did have the tooling and everything developed by mid-summer to support the fall outages.

SENIOR SPECIAL AGENT ULIE: What kind of testing methodology was that?

MR. GEISEN: We were trying to go with a 10 remote Eddy current. Up until this point all testing 11 -- a lot of the testing had been developed as a result 12 13 of the cracking issue where they had ID cracking in the nozzles; and we, as an owners group, had created 14 a project and were funding testing at Crystal River, 15 and that testing was to occur in the Fall of 2001, and 16 17 that testing was focusing on ID-initiated cracking. 18 Well, that was suspecting whether we have -- when I 19 say, "we," the B&W plants -- would be susceptible to the same type of cracking, and so we picked Crystal River, and that was going to be a test facility, so to 22 speak.

We would test that plant to say, is there susceptibility, yes or no, of our design to this type That went by the wayside following the of cracking.

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new was. 6 SENIOR SPECIAL AGENT ULIE: I'm going to show you a December 13th, 2000, e-mail that was from 8 Prasoon Goyal to a number of individuals, and you are cc'd on that. It was lessons learned from Oconee and talked about the importance to have a clean head for a good visual inspection, and if the head wasn't clean, the chances of finding the popcorn deposits that were seen at Oconee weren't very good.

a repair and an inspection methodology for what the

Do you recall receiving that?

16 MR. GEISEN: I don't remember seeing it. 17 I don't recall receiving it, but I receive a lot of 18 e-mail, and obviously it was sent to me. So I would have to say yes, I must have received it. 19

20 SENIOR SPECIAL AGENT ULIE: With respect to who was involved from Davis-Besse at the various 21 22 ongoing industry meetings during the 2001 time period on the subject of nozzle cracking, you say you were in 23 the Steering Committee? 24

> MR. GEISEN: Ι was on the Steering

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.1	Committee. Prasoon Goyal was on the Materials
2	Committee that was doing a lot of the research into
3	this, and a lot of the development of the tooling and
4	everything was being orchestrated by Framatome.
5	SENIOR SPECIAL AGENT ULIE: Was that with
6	the Materials Committee or the Steering Committee or
7	all the committees?
8	MR. GEISEN: The actual funding of the
9	testing and tooling was being done by Framatome and we
10	were funding it. I don't believe the Materials
11	Committee was overseeing the actual investment of the
12	tooling, but they were reviewing it, overseeing the
13	methodology for, like, the we had a couple of
14	things going on; the repair methodology, which was to
15	machine away the lower end of the nozzle, up into the
16	head and then put in a new weld in there and then go
17	in and do a water jet I'm trying to think what term
18	we used for that but basically it's a relaxation or
19	a tempering with a water jet, and they were involved
20	with that review.
21	SENIOR SPECIAL AGENT ULIE: Was there

22 anyone else that you are aware of from Davis-Besse 23 involved in Owners Group type of meetings on this subject? 24

> I don't believe it strayed MR. GEISEN:

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1 outside the Materials Group. So I would have to say, not to my recollection. 2 3 SENIOR SPECIAL AGENT ULIE: What about the executive B&W Owners Group Committees? 4 5 MR. GEISEN: Well, the Executive Committee oversees what we were doing, and Guy Campbell was the 6 7 chairman of the Executive Committee meeting. He was my vice president. We were really in the mode of we 8 9 know we have to go do this. We have put all of this funding this way, and we were going to the Executive 10 Committee to get additional funding because we were 11 12 going to cripple all of the other BWOC projects for 13 that year by taking all of these dollars and putting 14 them in. The Executive Committee, eventually, came 15 around and said they would agree to allow us to do this funding, but they wanted us to get out of the 16 tool development business, that that was not the focus 17 18 that the Owners Group should be having. 19 we were receiving some mid-course So 20

20 adjustments in the direction we were going as a 21 Steering Committee; that we were supposed to be really 22 into the research and not the development of tooling 23 and stuff, and we paid a lot of money toward the 24 investment of the tooling.

SENIOR SPECIAL AGENT ULIE: During this

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1	whole time period, April on to the August time frame
2	when the bulletin came out, were there internal
3	Davis-Besse meetings of the technical staff on the
4	subject of the nozzle cracking that were ongoing?
⁻ 5	MR. GEISEN: Not that I'm aware of. I
б	can't think of any. There may have been some that
7	were, but I can't think of any.
8	SENIOR SPECIAL AGENT ULIE: So it was
9	primarily once the bulletin came out, then there was
10	a
11	MR. GEISEN: There was a mad rush.
12	SENIOR SPECIAL AGENT ULIE: collection
13	of the various personnel to come together to respond
14	to the bulletin?
15	MR. GEISEN: That's correct. We knew we
16	had an issue we had to address, but we felt at that
17	time, based upon the age difference between us and
18	Oconee, that we were not in jeopardy and we definitely
19	and I guess, you know, hindsight being 20/20, we
20	had tunnel vision on it because we were focusing on
21	circumferential cracking, and each subsequent
22	inspection that came out that did not find
23	circumferential cracking actually gave us a comfort
24	level because that was the fear; how close are we to
25	Oconee 3.

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Even the bulletin stressed the use of the MRP-44 document from EPRI to determine susceptibility and that was all measured in terms of effective full-power years from Oconee 3 because we at that time were focusing solely on circumferential cracking. Hindsight being wonderful, obviously that was a mistake, and I think that was realized this past spring when we found our issues and we had to issue a new bulletin as an industry.

SENIOR SPECIAL AGENT ULIE: When did you first learn that a visual inspection of the entire head had not been done during the past Davis-Besse reactor vessel head inspections?

MR. GEISEN: Well, that was kind of on an interim process. We started putting together the reviews. What had happened is we had looked at the videos and had made some determination based on those video inspections and that information was put in the initial bulletin response; and then after being approached with, hey, we feel you need to shut down and we weren't sure where that was coming from, we ended up looking at every possible thing, kind of a shotgun approach to our initial response to basically put as much information as we could into a subsequent response.

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At that point, we had put together a let's go nozzle-by-nozzle approach versus just generic looking at videos. Let's go nozzle by nozzle and start doing that review; and when we started doing that, it became apparent to me, at least, that there were several nozzles that -- and it varied from outage to outage -- that you couldn't see.

8 We started building our crack model based 9 on, well, when was the last time we could see that 10 nozzle and applying the crack growth propagation rates 11 >From a nozzle-by-nozzle basis, what was onto that. 12 our probability going to look like for when we would have a problem, and that became the primary focus of 13 14 our whole -- or at least my primary focus for the fall 15 in that as we did these updates and went to present 16 them to the tech staff in D.C. was, what are our 17 results telling us, and then using those as the 18 starting point for each nozzle; what crack growth rate propagation should we put on each of these, and that 19 20 crack growth rate propagation became the primary focus 21 of all meetings, agreeing what's the our on 22 predominant -- what should the industry be using, what's the basis behind that, and we started bringing 23 24 in our experts.

We flew in Dr. Scott from France to talk

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about his model and Dr. Shack from Argon came in. The NRC brought Dr. Shack in and we just kind of sat back and watched these two guys who were on a first-name basis arguing about whose model was more correct than the other one. Very quickly we got to diminishing returns on that whole effort because it got to be a professional disagreement on what the actual model was.

9 The bottom line is, we as an industry did 10 not have enough technical data to come to a concrete, 11 this is what the answer was; but our data that we were 12 using was showing that we would not be susceptible to a circumferential crack of Oconee's magnitude until at least November of 2003.

So a long story short, that's how we started getting involved with this. Let's go nozzle by nozzle and try to really apply this in steps versus just, we have looked at it.

19 SENIOR SPECIAL AGENT ULIE: So with all 2.0 that you said, I kind of get the impression it was 21 during the fall is when you actually learned that 22 there was -- that was the first time that you had 23 learned that the entire head had not been cleaned? MR. GEISEN: That's correct. 24 Ι think 25 there are people that knew that, but I had responded

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* to a Condition Report during 12RFO where we were trying to close out all of these Condition Reports that were on this list of are these or are these not mode restraint issues and was there work that had to be done before we could change modes, and I had identified under that particular CR that, hey, we are going to go clean the head, and that's the work that needs to be done. So the CR no longer needs to be held on a mode restraint list. We need to go clean the head.

I believed that work had been done, and I 11 believed we had flushed it and cleaned the head, and 12 it wasn't until this last fall that I found out, no, 13 in fact that was not the case. 14 I wasn't overly 15 pleased with it, but at the time, it really didn't change the argument that I was putting forward with 16 17 what were the inspection results because all that affected would be my as-found for 13RFO, and I wasn't 18 19 even dealing with that. I was dealing with what was 2.0 the as-found in 10, 11, 12.

So how we left the head coming out of 12 really didn't enter into my argument about crack propagation for the circumferential cracking. So, admittedly, with blinders on, I was focusing on the circumferential cracking. I was trying to answer the

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bulletin as it was written.

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2 SENIOR SPECIAL AGENT ULIE: Since I 3 brought up 12RFO, let me talk about 12RFO for a 4 minute.

First off, had you been informed of the reddish rust or the reddish-brown discoloration leakage that had leaked out of the weep holes at the beginning? It was found during the beginning of 12RFO time frame.

MR. GEISEN: Yes. I actually saw some pictures at that time. I think they were floating around the Outage Central Room.

SENIOR SPECIAL AGENT ULIE: I have one. My understanding, that's a digital photo that was taken around April 6th of 2000, early in the 12RFO.

Does that look familiar?

MR. GEISEN: Yes.

SENIOR SPECIAL AGENT ULIE: Who was it that had told you or how did you find out about that leakage?

MR. GEISEN: I don't think anyone specifically just came up and said, Hey, Dave we have got this leakage.

I think it was more of just staying in tune with what was going on with the outage.

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1	SENIOR SPECIAL AGENT ULIE: Was it based
2	on a walkdown that you did or somebody else
3	MR. GEISEN: No. These were just based on
4	seeing photos from being in the Outage Central area
5	and stuff.
6	SENIOR SPECIAL AGENT ULIE: So these
7	photos were going around. Who would have been in
8	Outage Central during this time frame?
9	MR. GEISEN: We had a lot of people in
10	Outage Central during that time frame; probably 20, 30
11	people.
12	SENIOR SPECIAL AGENT ULIE: The outage
13	MR. GEISEN: The outage management, the
14	outage directors, the sight directors, sight VP. Each
15	of our major disciplines had a representative on the
16	team.
17	Early on, like I said, I picked up the
1.8.	manager of design position a week before the outage
19	started. So, really, for first three weeks of the
20	outage, I was just trying to learn who the people were
21	reporting to me and learn the job.
22	One of my supervisors, Theo Swim was the
23	day shift engineering liaison on the outage management
24	team at Outage Central. His counterpart, being Glenn
25	McIntyre was on back shift.
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1	I think it was three or four weeks into
2	the outage, I said, well, I'm going to give Theo a
3	break. He's been going nonstop, so I volunteered to
4	go take his spot on the team there, and that's how I
5	got involved with actually responding to one of the
6	CRs, saying, hey, we are going to go clean the head,
7	and that's when I saw a lot of these pictures and
8	stuff.
9	SENIOR SPECIAL AGENT ULIE: Can you put
10	names to you mentioned outage management, outage
11	director, the VP at the time, those individuals?
12	MR. GEISEN: Guy Campbell was the VP at
13	the time. We had, as far as directors go, Steve
14	Moffitt, Lonnie Worley, Jim Lash, and John Messina
15	were the directors at the time, and they took turns.
1 <u>6</u>	There was always a director providing oversight, and
17	they were like on a weekly rotation. One person was
18	always on night shift for a week, and they took turns
19	at that.

I couldn't tell you exactly who was where when, but the outage directors was Scott Coakley was the day shift outage director and Joe Rogers was the night shift outage director. Usually we had an outage scheduler. Those were people that worked for Scott Coakley normally, and they would be on there

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maintaining the Primivera schedule.

We also had positions in there -- I'm trying to remember the org chart and who would have been on it, but we have a reg affairs -- not reg affairs -- RP health physics individual on the team. We had somebody there representing maintenance. We had somebody representing operations. I would have to go back and look at an org chart to tell you the actual names of those people.

SENIOR SPECIAL AGENT ULIE: Do you have a specific recollection that the issue about the leakage out of the weep holes, was that a topic of discussion amongst the managers you mentioned? Was there a discussion, concern, or just simple discussion about corrective action related to it?

MR. GEISEN: Well, I'm sure it was probably a topic of discussion. I think everyone is probably operating under the premise that, well, we have more flange leakage. Let's go after it and get it cleaned.

That was the assumption we immediately jumped to. I don't think anybody even dreamed there would be two sources of leakage in the exact same location.

Once we solved this, then the next step

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1	everyone focused on was let's go do our flange
2	inspection. We know we had a problem there in the
3	past. Let's go look at that and see what we have got.
4	When it was identified that there was some flanges
5	leaking there and running down the side of the stuff,
6	then I think everyone just jumped to the conclusion,
7	ah-ha, we have got our source.
8	Clearly, once again, hindsight being
9	20/20, that was not the case. We actually had two
10	different, separate sources going on.
11	SENIOR SPECIAL AGENT ULIE: Had you had
12	any reference point with the closer head or reactor
13	vessel head flange area that's in the picture of this
14	particular area from prior outages?
15	MR. GEISEN: I didn't personally. To be
16	honest, I wasn't focusing on it. Whether the
17	Mechanical Systems Group I assumed they were going
18	to go ahead and chase this to ground, and so,
19	therefore, I wasn't really focusing on it.
20	SENIOR SPECIAL AGENT ULIE: Do you recall
21	any discussions of information being discussed that
22	this was significantly worse or different than what
23	had been seen during past outages?
24	MR. GEISEN: It was clearly obvious based
25	on picture that we had got it was significantly worse
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1	than what we had seen in past outages.
2	SENIOR SPECIAL AGENT ULIE: Why is that?
3	Why do you say that?
4	MR. GEISEN: Just because the pictures
5	showed a lot more stuff running out of the mouse holes
6	than what we had seen before.
7	SENIOR SPECIAL AGENT ULIE: That's what
8	I'm trying to understand, just because you said you
9	personally didn't have a reference point.
10	So how did you get that impression? Do
11	you follow me?
12	MR. GEISEN: I guess in looking at the
13	pictures, it's obvious we have gotten a lot more
14	boron. I had never seen a picture like this before.
15	So therefore, to me, it was clearly this is worse than
16	it was.
17	SENIOR SPECIAL AGENT ULIE: Okay. But if
18	you didn't have a reference point if you hadn't
19	seen it before, how do you know that it's not
20	occurring, if you will; that's just what you see in
21	every refueling outage when you go into an outage?
22	MR. GEISEN: I guess I would operate on
23	the premise that if this had occurred, every single
24	outage I would have seen pictures.
25	SENIOR SPECIAL AGENT ULIE: Okay.
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1	MR. GEISEN: The fact that I hadn't seen
2	them I kind of chalked this up to this stuff was
3	those type of pictures floating around, that wasn't
4	normal.
5	SENIOR SPECIAL AGENT ULIE: That's just
6	what I'm trying to understand, just to give me a
7	better understanding.
8	Were you in a position during past
9	outages, for the 10 and 11 refueling outages, if there
10	were pictures, to have seen them?
11	MR. GEISEN: Only if I seeked them out.
12	Like I said, in the 10RFO, unfortunately, I was
13	preoccupied trying to get ready for the final throes
14	of my SRO exams and everything.
15	Then the 11RFO, I was working on the
16	reactor vessel not the vessel but working in the
17	D-rings, rebuilding motors, and it's not to say the
18	information is not available if you seek it out. The
19	photos and stuff were readily available. I just
20	didn't make a conscious decision to go and seek that
21	stuff out.
22	SENIOR SPECIAL AGENT ULIE: You had been
23	trained just prior to this 12RFO as far as the
24	continuing training on the boric acid corrosion
25	control procedure.
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MR. GEISEN: Right.

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SENIOR SPECIAL AGENT ULIE: As far as how you would characterize the leakage that you were looking at in these pictures, in the different categories, how would you have characterized it or how did you characterize it?

MR. GEISEN: Well, in my own mind, I was -- I had a wrong paradigm. Let's put it that way. I was operating under the premise that boric acid at head temperatures was not corrosive because it dries out, and at 500, 600 degrees, it's not corrosive.

My concern would have been with the fact that, okay, well, the flanges clearly are stainless. So, therefore, where is this rust coming from.

My concern at that point was, well, we need to get up and look underneath these things and look at all the supports that are supporting the insulation, because that's all carbon steel, and is that being affected and going back and looking at the video and everything that was taken.

21 Well, clearly we did a very good job of 22 videotaping the underside of that insulation and 23 looking at all of those angle iron and everything 24 that's used to support the insulation, and there was 25 a substantial amount of corrosion on that.

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I think what we did at that point was say, ah-ha, that's where it's coming from and didn't go any further from that because that was your paradigm, that it's not going to rust on the head because this is active leakage that must have occurred during the operating cycle, because when we look at it right now, it's not actively leaking.

So, therefore, if it occurred at operating, during the operating cycle, at operating temperatures, it would immediately have flashed to steam and wouldn't have been corrosive. Well, we know that's not the case. That was clearly a false paradigm we were operating under.

SENIOR SPECIAL AGENT ULIE: Would you have characterized this as a significant leakage at the time?

MR. GEISEN: Absolutely. Somethingdefinitely needed to be fixed.

SENIOR SPECIAL AGENT ULIE: You said you had looked at the Condition Report. I think that's Condition Report 2000-1037. I'm showing you a copy of that now.

MR. GEISEN: Yep. This is the one that I looked at.

SENIOR SPECIAL AGENT ULIE: Is there a

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1	reason that I believe it's on the second page,
2	where the category shows "Routine." It said the due
3	date there was July 17th of 2000 and the owner is
4	System Engineering and Mechanical, I believe.
5	MR. GEISEN: Correct.
6	SENIOR SPECIAL AGENT ULIE: Is there a
7	reason that the category, based on your understanding
8	at the time, why that wasn't questioned?
9	MR. GEISEN: To be completely honest, I
10	didn't even pay attention to what the category was
11	when I looked at this. My focus really was, what we
12	do when these Condition Reports come in is, we
13	evaluate them, they are assigned a category, but the
14	very first screening we want to do is say, okay, is
15	this something that may or may not require work that
16	we want to do corrective action or remediation or
17	whatever prior to doing a load change, and what we do
18	is we put it on a mode change or we assign a mode
19	restraint to it.
20	Now, that is and is not a mode restraint.
21	The fact that by definition a mode restraint is
22	something that operations is controlling, it's on the

allow the plant to proceed further and do a mode change until that's all resolved and everything.

Mode Restraint Checklist, and they are not going to

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What this was was just a Condition Report 1 2 that was labeled as a mode restraint, and how we 3 handled those at that time was we wanted to ensure 4 that Condition Report had been evaluated, is there 5 work that needs to be done in the field to address 6 this, and that's why I responded to that, resolving it 7 to say, what we need to do is we need to go in and 8 clean the head and get it cleaned off prior to 9 changing modes. SENIOR REACTOR INSPECTOR GAVULA: 10 Who makes the mode restraint decision, is that at the 11 12 worker level, supervisor level, outage? 13 MR. GEISEN: When the Condition Reports 14 come out? That's all done by the -- well, it's called 15 Management Review Board. the MRB, Historically, 16 that's been the morning meeting. 17 SENIOR SPECIAL AGENT ULIE: Okay. So when 18 they looked at the Condition Report, then they were the ones that said, okay, we will make this a Mode 4 19 20 restraint. 21 MR. GEISEN: Right. 22 SENIOR SPECIAL AGENT ULIE: And that's how 23 that became a --24 MR. GEISEN: Mode 4, Mode 6, Mode 5, whatever. That's just based upon what the managers in 25 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

NRC002-1301

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1	their meeting feel is likely it's driven more by
2	when is this equipment needed to be functional and
3	let's make sure we put a mode restraint so we resolve
.4	all the functionality issues prior to that.
5	SPECIAL AGENT JANICKI: Were you a part of
6	that management review board?
7	MR. GEISEN: If it came through when I was
8	on that board, yes. I don't distinctly remember.
9	There's been thousands of Condition Reports that have
10	gone through. I don't distinctly remember this
11	particular one.
12	SENIOR SPECIAL AGENT ULIE: I'm showing
13	you a copy of that Mode 4 restraint. If you would,
14	take a moment, and did you sign and date this as it's
15	shown on that sheet?
16	MR. GEISEN: That's correct.
17	SENIOR SPECIAL AGENT ULIE: Is that date
18	shown the date that you did sign it?
19	MR. GEISEN: That's correct.
20	SENIOR SPECIAL AGENT ULIE: So that's
21	April 27th of 2000, correct?
22	MR. GEISEN: That is correct.
23	SENIOR SPECIAL AGENT ULIE: All right. Do
24	you know if this sheet was part of the original
25	Condition Report 2000-1037?
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I was curious, if you couldn't find it, how could you be showing it to me. So I know there is some confusion there, and I, quite frankly, don't know whatever happened with that. Apparently it was with some copies but not with other copies. I don't know if that answers the question but...

SENIOR SPECIAL AGENT ULIE: Let me ask this: The intent of the Mode 4 restraint, it's to prevent the plant from restarting until the applicable work is completed, is that correct?

MR. GEISEN: On a CR, the intent is to ensure that we review that CR for work that needs to be done that should be added to the official Mode 4 restraint, because the Condition Report by itself doesn't do work in the field. You need to evaluate it and say, okay, I got to generate a work order. I have to get a procedure schedule or a test scheduled or something like that. That's what operations tracks, so what we are trying to do is go through our Condition Reports and say, this one is obviously going

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to cause some work to be done. Let's make sure we have some work out there. In this case, I know it was going to require us to get the head cleaned, and there was cleaning scheduled and so we closed it to that or took it off of the Mode Restraint List based on the fact that that cleaning was scheduled and was supposed to be ongoing within the next couple of days at that point. SENIOR SPECIAL AGENT ULIE: Is that common

11 practice?
12 MR. GEISEN: It was at that time.

Definitely isn't anymore.

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SENIOR SPECIAL AGENT ULIE: Which leads to the next question on why it was signed off before the work was completed. It seems to be out of place or opposite of --

18 MR. GEISEN: At that time, we could close 19 Condition Reports to a Corrective Action document. 20 Now, it depends on what that -- well, I would say now, 21 based on upon my knowledge of two weeks ago about our 22 corrective action program at Davis-Besse, we had 23 changed in between 12RFO and 13RFO to say that it 24 depends on what the categorization of the Condition 25 Report is.

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If you had what was called a Noncondition Adverse to Quality NCAC, you could actually still close that Condition Report to a Corrective Action document or a work order or some other document. If it was evaluated as a higher category, then, no, that Condition Report actually had to stay open.

You had to sign a Corrective Action to maintenance that says, go do this work order. Instead of generating a work order, you say, you have to go do this work order. They would have to do that work order and they would have to go back in and close out that Corrective Action.

Being this is a routine, it kind of falls in the middle, because under our -- we shifted Under the new criterion, if you labeled criteria. something -- if this had been categorized as not condition adverse to quality, then, yes, you could still close it out just by doing that.

I don't necessarily know that's what this 19 20 would have been categorized as, but that's how it was back then, and it was identified as a hole in our 21 22 Corrective Action Program that they went and fixed 23 when we went to the new Corrective Action NOP, Nuclear Operating Procedure.

> SENIOR SPECIAL AGENT ULIE: Do you know

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1	why this sheet had not been given to the NRC Augmented
2	Inspection Team during this past spring?
3	MR. GEISEN: Not in the least. Like I
4	said, we provided the CR, and then I was surprised to
[′] 5	find out that this sheet was not actually with the CR,
6	because when I had reviewed the CR with the Root Cause
7	Team prior to the AIT team, it was attached, and I
8	can't explain why it was in one case and wasn't in the
9	other. I don't know.
10	SENIOR SPECIAL AGENT ULIE: Do you have
11	any belief that it was intentionally done for any
12	reason?
13	MR. GEISEN: I'm not sure why. I mean,
14	the only person that makes it look bad is me.
15	SENIOR SPECIAL AGENT ULIE: Do you know
16	who were the individuals that were involved at that
17	particular time?
18	MR. GEISEN: With?
19	SENIOR SPECIAL AGENT ULIE: Ones that were
. 20	going to be giving it to the NRC, or you said when you
21	saw it in the spring it was attached.
22	MR. GEISEN: When I discussed it with
23	members of our company Nuclear Review Board, they
24	showed me this. So, then, when I heard later that the
25	AIT team had a copy of the root cause and didn't have
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1	this page in there, I was perplexed because, wait a
2	minute. I saw a copy that had it in there, so I'm not
3	sure how it got disconnected. Maybe because it's the
4	last page in the document and it got ripped off or
5	missed during copying. I don't know, but I know it
6	was there earlier, and I know it was eventually I
7	don't know if they actually even found the original.
8	SENIOR SPECIAL AGENT ULIE: Any questions
9	on this?
10	SPECIAL AGENT JANICKI: Who was on the
11	CNRB at that time?
12	MR. GEISEN: It was actually a one-on-one
13	conversation with myself and Jack Martin.
14	SPECIAL AGENT JANICKI: Going back to the
15	Condition Report 2000-1037, did you also look at
16	Condition Report 2000-0782?
17	MR. GEISEN: Yes, I had. CR 0782 was
18	addressing the boric acid issue.
19	SENIOR SPECIAL AGENT ULIE: Here's a copy
20	of it.
21	MR. GEISEN: Yes.
22	SPECIAL AGENT JANICKI: Looking at that
23	last mode restraint removal, the first couple of
24	sentences, it seems to me that this Condition Report,
25	being 1037, was written for boron on the nozzles on
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NRC002-1307

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1	the head, but the review being performed under 782
2	encompassed this area, it said. So it seems to me
3	that this Condition Report, by putting on this mode
4	restraint removal, you are referring back to 782.
5	MR. GEISEN: Correct. I felt as though
6	782 and 1037 were repetitious.
7	SPECIAL AGENT JANICKI: But isn't 782
.8	actually addressing the flange area and not the nozzle
.9	area?
10	MR. GEISEN: That's not how I read it. I
11	mean, looking at the initial description in here, 782
12	is talking about boric acid coming out of the weep
13	holes. I mean, it's talking about the whole thing,
14	and then the other part was talking about, okay, we
15	have got I say, "the other part." No. 1037 was
16	talking about accumulation in the area of the
17	penetrations of the head and on top of the CRDM
.18	flanges.
19	Specifically, it says that boric acid is
20	clearly on top of the thermal insulation as a result
21	of the CRD leakage. I guess I viewed these as two in
22	the same and that really what we wanted to do was go
23	in and clean the head thoroughly, and that was going
24	to be the corrective action for this.
25	SPECIAL AGENT JANICKI: Under which of
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1	these Condition Reports is it your understanding that	
2	the head was going to be cleaned?	
3	MR. GEISEN: No. 1037.	
4	SPECIAL AGENT JANICKI: Again, what was	
5.	your understanding of what 782 was for?	
6	MR. GEISEN: It was going after the source	
7	of all of the leakage because I viewed 1037 as just	
8	saying, hey, we have got debris up there. We have to	-
9	do something about the debris, whereas 782 was just	
1.0	looking at what the source was.	
11	My frame of reference at that point was,	
12	hey, we had attempted to get boric acid off of the	
13	head before using mechanical cleaning methods and	
14	everything like that, and 1037 was just saying you've	
15	got to get it off, period. No. 782 was going to go and	
16	address the sources and everything, but was it	
17	actually going to go and get the head cleaned, and	
18	that's what we were trying to do with 1037, was to	
19	drive the fact that we wanted that head cleaned, not	
20	just look at the source of the leakage.	
21	Am I coming across as making sense here?	
22	SPECIAL AGENT JANICKI: Yes, you do, but	
23	kind of understand where I'm coming from. Looking at	
24	the mode restraint, it does make sense what you're	
25	saying about going back to the source in 782, but when	ł
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1 I look at the mode restraint, when I first read it, it seems that you were basically referencing 1037 back to 2 З a different Condition Report. You are referencing it 4 back to another Condition Report event initially, but 5 saying that your understanding is that only 1037 is 6 only there to clean the head. 7 Right. MR. GEISEN: That's what I was 8 trying to say in here, is that 782 is taking care of .9 the reviews. There is no separate evaluation that's 10 got to be done for that. They are going to take care 11 of the sources and all that, but we need to clean the 12 head. 13 SPECIAL AGENT JANICKI: Okay. 14 SENIOR SPECIAL AGENT ULIE: My impression, 15 when I read 1037, I think your comment hit it on the 16 head before when you said that there seems to be some 17 repetitions between the two. 18 I would think that initially it was 19 intended that one was going to be covering the head 20 and one was going to be covering flanges; but when you 21 looked at both of them, they seem to both address 22 flanges, even though 1037 does talk a little bit about 23 the accumulated boron that was underneath the 24 insulation under the head. 25 MR. Right. GEISEN: I quess I was NEAL R. GROSS

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focusing, when I read it -- I looked at it that it's saying you have boron accumulation, and it goes on in the last sentence of that Condition Report to say that the leakage issues are being discussed under 782, and that's how I took that 1037 at that time, is 782 will take care of leakage issues. We just need to clean up the mess, and how are we going to address cleaning up the mess under this.

9 There was a lot of discussion on how we 10 were going to clean up that mess. When we actually 11 got down to it, I got a lot of heat from one of my 12 supervisors and one of my engineers about using water 13 to clean the boron. They would have rather we left 14 the boron there in a dry state.

Once again, we were under the paradigm that it's not corrosive at 600 degrees, which is BS -excuse my language -- but they didn't want to use water. They wanted to put -- they didn't want to put it back in a liquid state, and I remember having this conversation with them, saying it's not going to matter because we are going to flush it all off of this. I would rather have this flushed off than not. I remember getting somewhat annoyed last fall when I found out that, no, it wasn't completely

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cleaned, but I was led to believe that, but like I

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1 said, it didn't really affect what I was working on at 2 the time because I was really dealing with as-found, 3 not as-left. It definitely would have affected me 4 going into 13RFO and what I was going to have to do 5 from an inspection standpoint, but Mark McLaughlin had 6 to worry about that part. I was doing the model. He 7 was doing the prep for 13RFO. 8 So looking back on it, was there a 9 potential for me to catch this and look at it a 10 different way? Yes, there was. Did I? No, I didn't. 11 SENIOR SPECIAL AGENT ULIE: Who was the 12 supervisor and the engineer that you had those 13 discussions with that you just referenced about using 14 water versus 15 MR. GEISEN: Prasoon Goyal was the 16 engineer and Theo Swim was the supervisor. 17 SENIOR SPECIAL AGENT ULIE: All right. 18 Any other questions on either of the Condition Reports 19 or 12RFO? 20 SENIOR REACTOR INSPECTOR GAVULA: Are we 21 going to get into the work order though? 22 SENIOR REACTOR		.55	
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19 or 12RFO? 20 SENIOR REACTOR INSPECTOR GAVULA: Are we 21 going to get into the work order though? 22 SENIOR SPECIAL AGENT ULIE: Go ahead. 23 SENIOR REACTOR INSPECTOR GAVULA: It's 24 more of just a general question, your statement that 25 NEAL R. GROSS NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE, N.W. (202) 234-4433 WWW.nealrgross.com	18	Any other questions on either of the Condition Reports	
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<pre>24 more of just a general question, your statement that 25 when you made the mode release and I think it was NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com</pre>	23	SENIOR REACTOR INSPECTOR GAVULA: It's	
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NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com	25	when you made the mode release and I think it was	
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		1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701	

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1	on the 27th	
2	MR. GEISEN: Correct.	
3	SENIOR REACTOR INSPECTOR GAVULA: the	
4	comment was made that the way it's written, it appears	
5	that it's going to be cleaning in the future, that the	
6	cleaning was ongoing.	
7	MR. GEISEN: That's correct.	
8	SENIOR REACTOR INSPECTOR GAVULA: But if	
9	you read the work order, the work order is basically	
10	signed off on the 25th to say that we have completed	
11	that.	
12	MR. GEISEN: Right. I've seen this	
13	subsequent to that.	
14	SENIOR SPECIAL AGENT ULIE: Just for the	
15	record, Mr. Geisen has been handed a copy of Work	
16	Order 1846.	
17	SENIOR REACTOR INSPECTOR GAVULA: You've	
18	seen that since?	
19	MR. GEISEN: Right.	
20	SENIOR REACTOR INSPECTOR GAVULA: Were you	
21	aware at the time that the work order had been signed	
22	off and supposedly had been completed?	
23	MR. GEISEN: I know that the work order	
24	had not been signed off, whether it had been completed	
25	or not, because I had verified that it was in the	
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1	schedule. It was scheduled to be worked. The work
2	order at that time was still open.
3	SENIOR REACTOR INSPECTOR GAVULA: What
4	process were you referring to
.5	MR. GEISEN: I was using the database,
6	computer data base, for checking to make sure this was
7	scheduled and ready to go. Yes, it was signed on, but
. 8	I wasn't aware that the work was complete yet when I
9	filled out the Condition Report, and I went back and
10	I've hashed through this how would I have done this
11	differently. I went through the database, and you
12	start looking at the data base. This work order
13	wasn't closed out until the 29th. They may have
14	signed on the 25th, and Andrew Siemaszko signed a
15	piece of paper saying that the head was cleaned on the
16	25th. "Work performed without deviations" is the
17	exact terminology.
18	The actual SRO reviews and closeout
19	occurred on the 29th and the planner occurred on the
20 [.]	lst of May. So from a computer standpoint, when you
21	go to look at the work order on the computer, it still
22	shows that it's signed on to continue working because
23	it hasn't been closed out yet.
24	SENIOR SPECIAL AGENT ULIE: But would you
25	agree on the cover sheet, Mr. Siemaszko signed off
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1	dated April 25th, and by signing off on that date,
2	he's indicating that the work is completed based on
3	his sign off?
4	MR. GEISEN: Yes, I would agree with that.
5	But like I say, I didn't have this. This was in the
6	field somewhere. What I had to go by was the database
7	that tracks these and shows it's in the field in a
8	working category, but not field complete.
9	SENIOR REACTOR INSPECTOR GAVULA: Were you
10	having discussions with Andrew at the time with regard
11	to the cleaning process, the efforts that were going
12	on?
13	MR. GEISEN: I don't remember any specific
14	conversation with Andrew. I knew we were cleaning
15	
	with water, and because I had a lot of discussion with
16	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like
16 17	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been
16 17 18	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so
16 17 18 19	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so let's get in there and just wash it off; and
16 17 18 19 20	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so let's get in there and just wash it off; and recognizing that's how we had been cleaning boron off
16 17 18 19 20 21	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so let's get in there and just wash it off; and recognizing that's how we had been cleaning boron off of the containment air coolers for the whole previous
16 17 18 19 20 21 22	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so let's get in there and just wash it off; and recognizing that's how we had been cleaning boron off of the containment air coolers for the whole previous cycle, it just seemed to be the logical process for
16 17 18 19 20 21 22 23	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so let's get in there and just wash it off; and recognizing that's how we had been cleaning boron off of the containment air coolers for the whole previous cycle, it just seemed to be the logical process for removing the boron, is to put it back in the liquid
16 17 18 19 20 21 22 23 24	with water, and because I had a lot of discussion with Prasoon Goyal on that topic, which to me seemed like the next logical step because we had not been successful previously in just vacuuming up stuff, so let's get in there and just wash it off; and recognizing that's how we had been cleaning boron off of the containment air coolers for the whole previous cycle, it just seemed to be the logical process for removing the boron, is to put it back in the liquid format and wash it off. I'm not sure I would have had

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1	SENIOR REACTOR INSPECTOR GAVULA: After
2	the head was cleaned, supposedly there was a videotape
3	that was made and that was shown to several managers
4	just to show the success, if you will, of the process.
5	Were you involved in any of that?
б	MR. GEISEN: I received a briefing that
7	said the head was clean, but I don't remember actually
8	seeing that video of that until this past a year
9	ago; Fall of 2001.
10	SENIOR REACTOR INSPECTOR GAVULA: When you
11	said you received a briefing, in what context was
12	that?
13	MR. GEISEN: I thought I can't be
14	certain, but I thought it was when we were in the
15	fourth floor conference room for the work support,
16 [.]	which is where we ran our Outage Central out of, and
17	I thought we had gotten briefed there that the head
18	was cleaned.
19	SENIOR REACTOR INSPECTOR GAVULA: By who?
20	MR. GEISEN: I thought it was Andrew that
21	briefed us, but I can't be absolutely certain.
22	SENIOR SPECIAL AGENT ULIE: What's the
23	time frame that would have taken place?
24	MR. GEISEN: That would been early,
25	mid-May.
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1	SENIOR SPECIAL AGENT ULIE: Of?
2	MR. GEISEN: Of 2000. I'm sorry.
,3	SENIOR REACTOR INSPECTOR GAVULA: So this
4	would have been part of the this was before the
5	outage was completed?
6	MR. GEISEN: This would have been talking
7	about the restart readiness, going through those type
8	of things; are we ready to start. I know we had a
9	long briefing on a lot of stuff.
10	I know when we left that outage, I was
11	under the impression that the head was clean, and I
12	guess I didn't question that because I thought, from
13	my frame of reference, hey, we went in to water clean
14	this off. That had always been successful in the
15	containment air coolers, and I just assumed it was to
16	be successful on the head. Otherwise, we wouldn't
17	have done it in the first place.
18	Since I hadn't heard anything to the
19	contrary that said that wasn't successful, I was
20	operating under the premise that it was.
21	Now, do I remember specifically a person
22	coming up to me and saying, Dave, this wasn't clean?
23	No, I don't.
24	SENIOR REACTOR INSPECTOR GAVULA: You made
25	a comment earlier that there was a potential concern
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1	with respect to the rust coming out of the weep holes
2	that may have come from the structural steel that was
3	supporting the insulation, and you made a comment that
4	if you go back and you look at the videotape, you can
, 5	see that they were kind of looking at that area.
6	MR. GEISEN: Yes.
7	SENIOR REACTOR INSPECTOR GAVULA: At what
8	point did you become familiar with that videotape?
9	MR. GEISEN: I knew that we had done
10	videotapes. I hadn't particularly gone and viewed
11	them. I kind of wish I had at this point, but that's
12	water under the bridge. But, I mean, I knew that we
13	had we always had videotapes of as-left.
14	SENIOR REACTOR INSPECTOR GAVULA: But you
15	made a comment that if you go and look at the
16	videotapes, you can see that they are looking up at
- 17	the insulation.
18	MR. GEISEN: Correct, because I looked at
19	some of these tapes last fall.
20	SENIOR REACTOR INSPECTOR GAVULA: Okay.
21	So it would have been last fall when you had seen the
22	as-left or the clean videotape?
23	MR. GEISEN: Correct. I don't remember
24	who the conversation was with, but I remember
25	overhearing a conversation where someone was wanting
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1	to look at the structural steel supporting insulation.
2	There are a lot of side-bar conversations that go on
3	during the Outage Central. So I can't tell you who was
4	having the conversation because this was over two
5	years ago, but I know that that was one of the things
6	that was considered, that we need to look at the
7	structural steel supporting insulation because that's
8	carbon steel and you're not going to do that at high
9	temperatures.
10	SENIOR REACTOR INSPECTOR GAVULA: Do you
11	know if that conversation was actually communicated to
12	Andrew, who was doing the inspections?
13	MR. GEISEN: I don't know.
14	SENIOR REACTOR INSPECTOR GAVULA: I'm just
15	trying to get a context of
16	MR. GEISEN: I don't remember that. Like
17	I said, this was just something that I heard in
18	passing as a side-bar. I kind of listen to a lot of
19	stuff that's going on when I'm sitting there. Being
20	a part of Outage Central, you're there for 12 hours a
21	day, and there is a lot of stuff that comes in and
22	goes out, and I just kind of listen to it and absorb
23	it, but I don't remember if anyone took that outside
24	of that meeting and went and talked to Andrew. He
25	wasn't part of the Outage Central. He wasn't sitting
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1	there. He was up on the 5th floor.
2	SENIOR REACTOR INSPECTOR GAVULA: Just how
3	contentious was the head cleaning issue?
4	MR. GEISEN: Well, from what I know now or
5	what I knew then? Obviously, from what I know now, I
6	think it was very contentious.
7	SENIOR REACTOR INSPECTOR GAVULA: What you
8	knew then. Was it obvious this was a
9	MR. GEISEN: I think it was an annoyance
10	to the directors, the outage directors, because any
11	perturbation to the schedule was an annoyance, and
12	this was going to clearly be a perturbation because it
13	was not previously identified work that was going to
14	need to be done. I'm not sure how that categorizes
15	into annoyances.
16	These guys are trying to push the schedule
17	all the time. I can't speak to how annoyed they were.
18	That's an emotion on their behalf; but from an outward
19	appearance, obviously they got upset anytime there was
20	a perturbation in the schedule, whether it was work
21	added to the schedule or work not completed on time or
22	whatever.
23	I mean, does that answer your question?
24	SENIOR REACTOR INSPECTOR GAVULA: Since I
25	wasn't there, I'm just trying to look through your
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1	eyes at the time and see if there was a shouting match	
2	going on at some point or just what	
3	MR. GEISEN: I don't remember any kind of	
4	shouting match; but, I mean, this was going to be a	
5	perturbation, but we have hundreds of perturbations to	
6	the scheduling.	. 1
7	SENIOR REACTOR INSPECTOR GAVULA: Okay.	
8	MR. GEISEN: Believe it or not, nothing	
.9	ever goes as completely planned.	
10	SPECIAL AGENT JANICKI: If you would have	
11	known at the time that there was boric acid left up on	
12	the head, would that have caused you a concern at the	
13	time?	
14	MR. GEISEN: It would have caused me a	
15	concern because the desire the goal was to get it	
16	all cleaned off and from a standpoint that we wanted	
17	to have a clean slate for future inspections. You	-
18	know, would it have caused me a concern that I'm	
19	corroding a hole in my head, I wish I could say that	
20	was the case; but in all honesty, that was not the	
21	case at that time. I was not operating under that	
22	frame of reference, and it was really just a frame of	
23	reference of I've got debris up there that impedes me	
24	doing an inspection next time around. Let's get it	
25	off.	

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SENIOR REACTOR INSPECTOR GAVULA: How about from a sensitivity of the RC2 event, just leaving boric acid on carbon steel, how much did that hinder the --

MR. GEISEN: It didn't. Once again, I would say now they are a very similar event. If you would have asked me back then, I would say, no, they are radically different because RC2 is running at about 200 degrees. Optimal is 2- or 300 degrees ambient air. It's optimal condition for corrosion. You can corrode inches a month.

Our head is 5-, 600 degrees and this stuff is going to dry out very quickly and not be corrosive. Obviously, Davis-Besse has changed the entire industry perspective on that, and at least I would like to think we have changed the entire industry with respect to that.

SPECIAL AGENT JANICKI: Just one last thing. You were talking about the outage directors and scheduling. Do you recall any particular conversations around the time that you signed the mode for release regarding outage schedule; like, we have to get the head back up, anything to that nature.

MR. GEISEN: Not specifically to that, no, I don't. It's not to say it didn't occur, but it

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1	wasn't one that I was inherently involved with.	
2	SPECIAL AGENT JANICKI: Do you recall it	
3	being a concern at the time, about getting the head	
4	flown?	
- 5	MR. GEISEN: Absolutely. That's a concern	
6	in every outage. I would be lying if I said there was	
7	no schedule pressure felt during outages.	
8	SENIOR SPECIAL AGENT ULIE: We would know	
9	that you were, too.	
10	MR. GEISEN: That would be obvious.	
11	SENIOR REACTOR INSPECTOR GAVULA: I don't	
12	know that you would have been involved, but just from	
13	an impression, the flange inspections that were going	
14	on, there was some leakage identified from the	
15	flanges. How was that portrayed? So you got all the	
16	stuff on the head, and it's probably from the flanges.	
17	How was the flange leakage portrayed to	
18	outage management? Do you remember any discussions in	
19	that regard?	
20	MR. GEISEN: I believe that would had to	
21	have occurred earlier on, because at this point, we	
22	were already into it, and I believe at this point we	
23	were already completed with the repairs of the flange.	
24	There is always a push or always has	
25	been to go in very early and get that flange	
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inspection done as quickly as possible, as early as possible so that we could evaluate and identify the scope of flange repairs because that was something that was always, from an outage schedule standpoint -we would assume, you know, X number of flanges will be needed to be repaired and fixed. So there is always a push early on to firm up what that was and get that trued up in the schedule.

I think we usually assumed like four flanges we were going to have to go in and fix or something like that. So I know that that push was made much earlier on in this time frame.

SENIOR SPECIAL AGENT ULIE: How about from the perspective that in this case apparently they had to remachine one of the flanges, and I don't think that was a planned activity?

MR. GEISEN: No, it wasn't. Like I say, we assumed X number of flanges we were going to have to go in and fix. It wasn't until that flange was actually taken apart and identified that I think there was some scratches or etches on the face, and I believe that was the one where we wanted to machine it because it wasn't completely perpendicular. It had been that way for ages, but this was a habitual leaker for us, and that was identified by Framatome that that

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1	could be one of the causes. Let's go in and machine
2	that face, and you try to true it up and make it more
3	so that that particular drive was parallel with all
4	the other drives instead of skewed slightly. That was
5	identified much later. So that was definitely a scope
6	addition to the outage.
7	I'm not sure I answered your question.
8	SENIOR SPECIAL AGENT ULIE: Just looking
9	at it from my perspective, you have all the boric acid
10	identified on the head and it's evidently a lot more
11	than what you had identified in the past.
12	MR. GEISEN: Correct.
13	SENIOR SPECIAL AGENT ULIE: You now have
14	pictures. Somebody is showing you a picture, and this
15	is out of the ordinary. So now there needs to be some
16	correlation to you having something out of the
17	ordinary with respect to the flanges themselves.
18	MR. GEISEN: I think that was probably why
19	there was so much focus on remachining that other
20	flange because, you know, here we are going in and
21	repairing these flanges and we are not gaining ground
22	because we are coming in and we are finding it's worse
23	than it was before, and we are identifying the exact
24	same flange is leaking again.
25	Why is that? What can we do to fix that

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1	flange? Instead of just cleaning it and throwing
2	another gasket on there and making it tight again,
3	what can we do from a more permanent standpoint to
. 4	make it better, and that was what the driving force
5	for doing that machining of that flange. Let's square
6	it up.
7	Clearly, this is something where that
8	actual nozzle was penetrating through the head at a
9	skewed angle that was different than the rest of the
10	nozzles and had been that way ever since original
11	construction. Let's fix it once and for all. I think
12	that was one of the driving forces behind that. It's
13	not to say we didn't have blinders on. Clearly, we
14	did. There is no doubt about that.
15	SENIOR SPECIAL AGENT ULIE: Okay. Where
16	are you getting your information in that regard? Are
17	you getting who is presenting that information to
18	you as far as the flange not being squared and being
19	a habitual leaker?
20	MR. GEISEN: Well, I don't think anyone
21	actually came and said, Dave, I'm going to brief you
22	on this. This is one of those things that I just kind
23	of keep my ear to the ground and listen to the stuff.
24	I remember that being one of the
25	side-bar-type conversations going on in the Outage
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1	Central from the standpoint that my organization at
2	that point, which was design, was going to have to
.3	review the final design resolution of machining this
4	flange for form, fit, function, that we haven't
5	changed anything. So I was involved with it from that
6	standpoint.
7	Do I remember asking a question, why are
8	we doing this? I don't necessarily know that I asked
9	that question because it seemed intuitively obvious to
10	me we are doing this to fix a long term, long-standing
11	issue.
12	SENIOR SPECIAL AGENT ULIE: Do you know if
13	anybody at that time had gone back into the historical
14	documents, looking at the flange inspections from '99?
15	MR. GEISEN: To say, why have we had so
16	many of that particular drive?
17	SENIOR SPECIAL AGENT ULIE: Yes.
18	MR. GEISEN: I know that that drive had
19	been identified as a leaker in the past. The name
20	that pops into mind is Ed Chimahusky in those
21	interviews in the past correlations.
22	During 12RFO was he the one that did the
2,3	actual correlations? Probably not. That probably
24	would have been I'm guessing at this point
25	probably Pete Mainhardt or Andrew Siemaszko.

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SENIOR SPECIAL AGENT ULIE: Okay. But you don't know if anybody had gone back into the records? It would have just been maybe a discussion about the previous inspector that had been part of the flange inspections?

MR. GEISEN: I don't know. I don't know what kind of detail went into that. I know we had discussed what flanges we were replacing, and I know there was some discussions about which ones, that this was a repeat issue on this particular flange. I don't know. I don't know specifically who did that correlation, I guess is the answer to your question.

SENIOR SPECIAL AGENT ULIE: Dave, I wanted to talk about the August to December of 2001 time frame, so last fall, from the bulletin, kind of on.

MR. GEISEN: The painful months, yes. SENIOR SPECIAL AGENT ULIE: Looking at Page 18 of Attachment 1 to Serial No. 2731, it was the September 4th 2001, the first response to the NRC bulletin, just to kind of put you in the frame of mind from where I'm going to be coming from on my questions.

There is a chart that's on that page that talks about the deposits being found and then the goal

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is to determine the source of the leakage, and it breaks it down into being either flange leakage, nozzle leakage, second, or couldn't determine the source.

MR. GEISEN: Yes.

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SENIOR SPECIAL AGENT ULIE: Let me just provide you two documents. One is an e-mail dated August 11th, 2001, that was from Prasoon Goyal to you and Mr. Swim and Mr. Woukko was cc'd, and the second document is a consultant's report dated September 14th, 2001. It's titled "Piedmont Management and Technical Services, Incorporated."

On the e-mail, I've highlighted kind of the sections that I'll be speaking to. The August 11th 2001 e-mail specifically pointed out that at a meeting that took place on August 11th that Prasoon Goyal had said that he had pointed out at this meeting that Davis-Besse could not clean the reactor vessel head.

In the September 14th consultant's report, it notes that "On completion of 12RFO, 12 refueling outage, the reactor vessel head did have boric acid deposits of considerable depth left in the center top area of the head and the cleaning of this area at that time was not successful in removing all of the

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1 deposits, partly due to the limited access." To start off, my question, if you had this 2 information that you knew that the head had not been 3 4 completely cleaned, that a portion of the head was 5 obstructed by deposits, then it would be known that the source of the leakage in those uncleaned areas 6 7 couldn't be determined. Knowing that, when the NRC bulletin came 8 out, it stated that if the source of the leakage 9 couldn't be determined it should be assumed to be 10 11 coming from a nozzle leak. 12 Why wasn't that taken My question is: into consideration during the fall when NRC and FENOC 13 were in these discussions about shutting down prior to 14 15 the end of the year? 16 MR. GEISEN: Well, first of all, that's --17 SENIOR SPECIAL AGENT ULIE: Take your 18 time. 19 MR. GEISEN: I'm trying to figure out where do I start with this one. 20 21 SENIOR SPECIAL AGENT ULIE: Sure. 22 MR. GEISEN: First of all, the 8-11 e-mail that I had gotten, what that was really focusing on 23 was the issue of what do we need to do as far as 24 25 getting stuff in place for doing visual inspections NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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and that we may have to do a hundred percent volume 1 metric. We are anticipating that being the worse case 2 3 and getting up to speed. 4 I was working closely at that time with Mark McLaughlin to come up with a plan of attack, 5 action plan, how are we going to do our inspections, 6 7 and that's really what this flow path was designed This is how we are going to do our inspection 8 for. 9 going forward in 13RFO. 10 So when it says about the mouse holes and requesting three large holes cut and all that to do 11 12 the viewing and the cleaning, one of the things we had 13 done to address that was to basically copy what 14 Arkansas had proven to be effective at their plant, which is using a Rover. It's actually called Rover, 15 R-o-v-e-r, and we bought the exact same, identical 16 test equipment that they used. We even had a general 17 18 agreement between myself and the Steering Committee rep from Arkansas that we would borrow theirs if ours 19 20 crapped out, and in the future, they could borrow ours if theirs broke, and so we viewed that, hey, this is 21 22 field tested. We are going to go off and we are going 23 to use this.

So at that point, were we looking at do we need three large holes to be cut and everything? That

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was really just a desire. It wasn't a must do. felt we had a path to repair that.

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This other Piedmont document, this is the document that I said that I became aware of in the fall that, hey, we had left stuff. Unfortunately, after had made our initial this came out we presentation in the September 4th dated submittal. So the subsequent document that we put out, the October 17th or whatever, we tried to go back in and add in a lot more detail into that that had not been in the previous one, and that's when we started putting -- we had put in there the table that went drive by drive that Andrew Siemaszko had worked to put together.

Once again, like I said earlier, the fact 14 15 that we had boric acid on top of the head and it had 16 been left there, when I did find that information out, 17 I was already in this mode of these were my as-found for each of these outages and this was my model, and 18 19 did I have blinders on or was I approaching it somewhat narrow? Probably. Looking back on it, most 20 definitely, but I was really focusing on what was my 21 22 crack propagation rate and when did I have to start that from? 23

Did I go back to the exact verbiage of the bulletin that said, if you don't know where it's from,

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1	you have to assume this? No, I did not.
2	SENIOR SPECIAL AGENT ULIE: Did you have
3	any specific discussions with Gregg Gibbs, who was the
4	consultant that put out that September 14th report?
5	MR. GEISEN: No. I mean, he was working
6	real closely with Mark, and the reason this was being
7	done was because Mark was tasked with coming up with
8	the inspection plan for 13RFO. Like I said, I was
9	letting Mark run with that. He knew the head inside
10	and out.
11	SENIOR SPECIAL AGENT ULIE: I know when
12	you refer to Page 18 on the chart that you are looking
13	towards the future, but you are getting information in
14	the report and in the e-mail that it's the as-left
15	condition, the head was not left in a clean condition.
16	The NRC was asking, in a historical sense,
17	look at what your past inspections were to justify the
18	continue to operate the end of the year.
19	So I'm having difficulty in why I know
20	you say you are looking to the future, but why wasn't
21	the same information taken in the fall and looking at
22	the past, realizing that there were these problems and
23	considering maybe we don't know the source of our
24	leakage, even though in the letters there is the
25	inference that it was clearly the operative word

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"clearly" -- attributable to flange leakage, but when this re-review was ongoing -- I mean, I get the sense that was one of the purposes of the re-review, was to be more critical and to see whether the past inspections legitimately were good inspections that could qualify to justify continuing to operate beyond the end of the year.

8 I think our problem at that MR. GEISEN: 9 point was -- what do you want to call it, technical 10 arrogance or whatever? We clearly knew that we had flange leakage, and if you establish that as this is a fact, we have flange leakage and the boric acid that is on top of our head is from our flange leakage, you tend to ignore the rest, and that's where we were.

15 We knew that we had flange leakage. We 16 knew that it had deposited boron on the head, and so, 17 really, we got back to, okay, from a bulletin 18 standpoint, what are we trying to show? That we are not susceptible. We don't have a circumferential crack that is the same magnitude as a Oconee 3 and we are not going to.

That was really what my focus was this whole time. This has been a career changing event for No mistaking about that. Very little solace me. comes from the fact that I can look at my model and

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1	say, hey, guess what? I was right. I didn't have
2	circumferential cracking. It doesn't mean a whole lot
3	once you have a hole in your head. That's what we
4	were focusing on. We had tunnel vision going after
5	that approach; right, wrong, or indifferent.
6.	SENIOR SPECIAL AGENT ULIE: With respect
7	to the transmittals and let me start out, this is
8	one of the October 30th letters that on Page 3 and/or
9	7 of Attachment 1, there is reference that, again,
10	it's talking about future inspections.
11	MS. PENNY: What's the serial number?
12	SENIOR SPECIAL AGENT ULIE: No. 2741.
13	That's one of the October 30th letters. It talks
14	about "Inspections will not be compromised" this is
15	future inspections "will not be compromised due to
16	any pre-existing boric acid deposits."
17	Since this was after you had received the
18	information and Mr. Gibbs, the consultant's, report
19	about the deposits being left in the head, is there a
20	reason why, knowing that deposits were left on the
21	head, knowing that then the accuracy of these
22	statements that the condition the inspections wouldn't
23	be compromised by pre-existing conditions well,
24	knowing that the pre-existing conditions would affect
25	the future inspections, is there a reason that these

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types of statements weren't corrected during the 1 review process, based on your knowledge? 2 MR. GEISEN: Well, because the reason that 3 -- I quess when I read that, I didn't see -- I felt 4 5 that was very much true. I still do, because the way 6 that the procedure was written was that, yes, we 7 weren't going to do a VT-2 inspection; and if you can't get results from a VT-2, you are going to do a -8 9 It's still the same part of the inspection. So NDE. 10 having pre-existing boric acid crystals in there, if that prevented you from visually doing the inspection, 11 12 you immediately went into an NDE of that. 13 SENIOR SPECIAL AGENT ULIE: From the standpoint of a visual inspection, if it's a VT-2, you 14 start out with a visual inspection, correct? 15 MR. GEISEN: Yes. 16 17 SENIOR SPECIAL AGENT ULIE: So from the 18 standpoint if you have pre-existing deposits on the 19 head, it's going to affect the ability to do an accurate or complete visual inspection, will it not, 20 21 whether it's a VT-2 or just a visual inspection? 22 MR. GEISEN: Absolutely, and we knew at 23 that point that we would probably be into an NDE, 24 nondestructive-type examine inspection for those 25 nozzles that we could not see visually.

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SENIOR SPECIAL AGENT ULIE: Isn't the reference that's on Page 3, referring to a visual compromised inspection, won't be due to the pre-existing deposits? Ι it VT-2mean, says inspection, but is that not also a visual inspection?

MR. GEISEN: Yeah. I guess you could take

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it that way. That's not how I took it when I read it. The way I took it when I read it was, inspections will be performed in accordance with the procedure. That procedure is being developed to do a VT-2 inspection, but I didn't take it as being -- maybe I knew too much at that point. I knew that we were going to be doing an NDE if we couldn't see visual, so any existing deposits was not going to change that. We are going to be into an NDE.

Also, given the fact that we already knew we are going to do an NDE of several nozzles because the SIA, in the following paragraph, we mention it briefly, that SIA had gone through to determine if we had sufficient clearances and identified that we didn't have sufficient clearances on four of the nozzles. So, therefore, you can automatically be into an NDE on those because you can't take credit for a visual if it won't manifest itself.

SENIOR SPECIAL AGENT ULIE: But isn't the

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1	point of the information that's in the letter talking
2	about future visual inspections won't be compromised
3	and that's what's not accurate?
4	MR. GEISEN: I could see how that was read
5	that way. Yes, I can see how that's read that way.
6	SENIOR SPECIAL AGENT ULIE: What I'm
7	asking is, at the time, based on your knowledge of the
8	consultant's report, knowing that the deposits were on
9	the head, why was that allowed to stand as it's
10	written rather than be corrected.
11	MR. GEISEN: Like I said, I think it's
12	just I didn't take that that way. I didn't read it
13	that way, and maybe I knew too much information as to
14	how we were going to do the inspection. Definitely,
15	looking at it, I can say that it could have been
16	worded much better because we had the intention of
17	doing a full-blown inspection of this, and we were
18	going to use NDE techniques, and one of the
19	commitments we had made was that we were going to
20	submit another letter in January of 2002 specifying
21	exactly what our techniques were going to be because
22	we knew those were still being developed.
23	SENIOR SPECIAL AGENT ULIE: What was the
24	sense on why NDE was going to be necessary?
25	MR. GEISEN: Because you are going to have

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1	times where you can't tell. You are going to have
2	uncertainty.
3	SENIOR SPECIAL AGENT ULIE: Didn't you
4	have that uncertainty at that point in time in the
5	fall?
6	MR. GEISEN: We probably did. I guess I
. 7	really didn't think about it from that standpoint.
8	SENIOR SPECIAL AGENT ULIE: So, then, the
9	next obvious question is: With the discussions that
10	NRC was talking along those same lines as to why we
11	believe you already have a crack or based on all of
12	the other information that was coming in that the
13	other B&W plants up to that point had found nozzle
.14	cracks, that some of the same heat numbers were
15	MR. GEISEN: Well, I'll admit that the NRC
16	staff may have been thinking that, but this gets back
17	to one of my pet peeves, so I'll preface it that way,
18	because at the time, I was trying to think about what
19	are they thinking, because every time I asked the
20	question, what does your model show, I was told, we
21	can't tell you. It's predecisional.
22	Okay. So I don't know exactly what was
23	going on, and at this point, I was trying to think of
24	everything that could be leading them down the path of
25	saying we need to immediately shut down; and from my
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1	aspect, that was well, let's go through all of my data
2	and let's come up with a nozzle-by-nozzle review.
3	Let's look at worst case scenario: crack propagation,
4	because, once again, I was looking at it from a
5	standpoint of an axial crack won't shut me down.
6	I mean, after all, if an axial crack could
7	shut me down, then the bulletin would have been
.8	written on the first Oconee plant. It wasn't. It was
9	written based on Oconee 3 finding 165 degree
.10	circumferential.
11	Did I have blinders on? Absolutely. Was
12	I alone in those blinders? No, I wasn't. If I could
13	change that, I would love to, but, I mean, that's what
14	we were focusing on, so I can't say what the staff was
15	thinking because we weren't getting any answers.
16	SENIOR SPECIAL AGENT ULIE: Understanding
17	I'm speaking with limited understanding and limited
18	knowledge, I'm just looking at it from what you are
19	saying with respect to having the knowledge that
20	deposits were left on the head.
21	You knew that the NRC was concerned about
22	the quality of the past inspections, and correct me if
23	I'm wrong, is that they were looking at the past
24	inspection quality, were they not?
25	MR. GEISEN: After this? Yes, they were.

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1	MS. PENNY: After which?
2	SENIOR SPECIAL AGENT ULIE: I'm referring
3	to from the bulletin time period on to the end of the
4	year.
5	MR. GEISEN: The bulletin time period, it
6	just said, discuss your past four years worth of
7	inspections, and that's what we were trying to do.
8	Did I place a lot of emphasis on the
9	inspections? No, I didn't. I was really looking at
10	what is the likelihood of me having a circumferential
11	crack relative to Oconee 3; and I've got to admit,
, 12	when you go and approach the bulletin from that
13	aspect, you tend to not look at anything else.
14	SPECIAL AGENT JANICKI: I'm going to show
15	you a document from January 30th, 2001. It's a memo
16	from Goyal. I think it's actually from Swim through
17	Goyal.
18	MR. GEISEN: From Goyal to Swim, correct.
19	SPECIAL AGENT JANICKI: You are cc'd on
20	it.
21	MR. GEISEN: Correct.
22	SPECIAL AGENT JANICKI: I don't know how
23	long it's been since you've seen this particular
24	document.
25	MR. GEISEN: I get a trip report on every
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1	single trip everyone makes. I had 72 people working
2	for me, so I get a lot of these.
3	SPECIAL AGENT JANICKI: Does that have a
4	Bates number on it?
5	MR. GEISEN: CR14 H-0050.
6	SPECIAL AGENT JANICKI: There is a
7	reference in there to I think they are talking
8	Oconee in that one.
9	MR. GEISEN: Oconee 1, correct.
10	SPECIAL AGENT JANICKI: Okay. The third
11	bulletin, it talks about the cracking at CRD on Nozzle
12	21.
13	MR. GEISEN: Yes.
14	SPECIAL AGENT JANICKI: It says, the most
15 [.]	probable root cause was primary water stress corrosion
16	cracking or PWSCC.
17	MR. GEISEN: Correct.
18	SPECIAL AGENT JANICKI: What do you
19	understand that to be, axial or circumferential?
20	MR. GEISEN: This was axial.
21	SPECIAL AGENT JANICKI: Okay. But, now,
22	moving ahead to the Fall of 2001, you are saying your
23	only concern was circumferential cracking, but I
24	guess, if you look back at this in January of 2001,
25	it's talking about an axial crack that was causing
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problems at Oconee.

MR. GEISEN: Yes. This was actually Oconee 1, the first plant they went through. They had axial cracking through the J-groove weld material, that's 182 alloy material.

Initially, we thought this was a concern, but we didn't understand all of the mechanisms and everything like that, and we are trying to learn as much as we could from that. Before we got too far into delving into this, Oconee 3 had come onto the horizon, and Oconee 3 had had the same type of axial cracking, but now the problem was that it cracks all the way through the J-groove.

14 It gets to the top of the J-groove, and metal, 15 there is the base and it then turns 16 circumferential, and it started growing around 17 circumferentially, and they had 165 degrees 18 circumferential crack. Now, from а safety perspective, that was a whole new ball game now 19 20 because in the one case, it's purely a leakage issue. It's not an imminent failure because the structural 21 22 integrity of the head and the nozzle is not 23 immediately impacted by a single crack through a 24 J-groove weld. When it starts going 25 circumferentially, it's a whole new ball game because

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1 now we are looking at potentially ejection of the 2 nozzle. 3 So at that point, that was what the 4 bulletin was driving at, that's what we were focusing 5 on, what is our susceptibility to this. What's going 6 to drive that, because, like I said, corrosion was not 7 the issue. The issue was cracking of the nozzle and 8 ejection of the nozzle. That was felt to be the more 9 immediate danger. 10 SPECIAL AGENT JANICKI: Okay. But I guess 11 in trying to understand 12 MR. GEISEN: I don't know if I answered 13 your question. 14 SPECIAL AGENT JANICKI: I think you are 15 trying to, but I guess, from my perspective, though, 16 in answering the bulletins, you are talking about you 17 had tunnel vision on circumferential and you thought 18 that was the most important, but clearly there were 19 indicators out there that said, you know, axial was 20 causing problems as well; and, I guess, why did you 21 MR. GEISEN: Don't get me wrong. I'm not 22 met axial isn't a		87
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seeing as well -- axial was a problem in that it was 1 2 a precursor to this circumferential crack, so we weren't ignoring the axial crack. We were just -- it 3 4 is the precursor to the circumferential. 5 SENIOR REACTOR INSPECTOR GAVULA: How about from a tech spec perspective with regard to 6 7 pressure boundary leakage? 8 MR. GEISEN: We could have done a lot 9 better. SENIOR REACTOR INSPECTOR GAVULA: Did the 10 11 bulletin also have a portion which asked you to 12 address complying with tech spec pressure boundary 13 leakage? 14 MR. GEISEN: I don't remember that part. 15 I'm not saying it doesn't. I just don't remember. Ι 16 would have to go back and look at the bulletin. SENIOR REACTOR INSPECTOR GAVULA: Would an 17 18 axial that went through walls which led to pressure 19 boundary leakage, what would your tech specs have you 20 do? MR. GEISEN: It would be we -- Davis-Besse 21 22 tech spec -- would require you to shut the plant down 23 and fix it. SENIOR REACTOR INSPECTOR GAVULA: 24 What 25 time frame? NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.nealrgross.com

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1	MR. GEISEN: I don't remember exactly what
2	the tech spec says, but it's not months, if that's
3	what you are getting at.
4	SPECIAL AGENT JANICKI: Can we take a
5	five-minute break?
6	SENIOR SPECIAL AGENT ULIE: Sure. We are
7	going to go off the record. We'll take a five-minute
8	break.
9	(Recessed from 10:37 to 10:45 a.m.)
10	SENIOR SPECIAL AGENT ULIE: All right.
11	Jim.
12	SENIOR REACTOR INSPECTOR GAVULA: Dave, if
13	we can go back to the Serial No. 2741 letter
14	MR. GEISEN: Okay.
15	SENIOR REACTOR INSPECTOR GAVULA: Page
16	3, we talked about earlier that the section that Joe
17	had pointed you to. If we can go down to the very
18	bottom paragraph, that's where there is a discussion
19	about the SIA analysis where Nozzles 1 through 4 don't
20	have a gap, if you read the part of the very last
21	sentence in that section, the statement basically
22	says, if any other nozzle is found to be obscured,
23	implying that we know Nozzles 1 through 4 don't
24	have sufficient gap and that's why they will receive
25	a supplemental inspection, but the statement says, if
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1	any other nozzle is found to be obscured from visual
2	examination, then we will do a supplemental.
3	The certain implication there is that
4	everything else is clean at that point, right?
5	MR. GEISEN: I guess you could read it
6	that way.
7	SENIOR REACTOR INSPECTOR GAVULA: Let me
8	refer you, Dave, to Page 1 of the same document,
9	Attachment 1. It's Serial No. 2741, the last
10	paragraph that's on that page, talking about that a
11	review of specific focus on the type of boric acid
12	crystal deposits that were seen at the Oconee station
13	was done.
14	Why did the bulletin response document
15	that indications of boron leakage seen at Oconee were
16	not seen at Davis-Besse when it was known that the
17	boron leakage underneath the inaccessible areas had
18	not been inspected? Again, this is going back to that
19	consultant's report on August 11th.
20	MR. GEISEN: Well, I guess the best way to
21	answer that is to say that what we were trying to do
22	is go look at each of our nozzles and go back in
23	history, and what we believe we had was some leaky
24	flanges that were, because of not cleaning in the
25	past, after 10RFO or 11RFO, built up a bigger area
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that obscured it.

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We were reviewing that as that's a source of leakage, and in my mind, was that a valid assumption. At that time, if you've got results from SIA that says even if you had cracks on these nozzles, they were not going to leak, they are not going to manifest itself, and they have boron on them from flanges from up above, you know, you are going to have to do some sort of other inspection methodology for going in and looking at those. So we already knew we were going to have to do some other inspection on them.

SENIOR SPECIAL AGENT ULIE: With respect to the SIA analysis, was that intended to be for no leakage would occur 360 degrees or at a given point? Was that known?

My understanding is that was known in the fall, that it wasn't intended -- the SIA analysis -to say that the interference fit was so tight for all the top center nozzles 360 degrees, but only at a given point.

MR. GEISEN: No. If that was the case, we would have actually a lot more.

What they were doing, was my understanding of it, was that we were coming in here saying there

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wasn't enough of a growth in any direction to allow it to manifest itself.

SENIOR SPECIAL AGENT ULIE: Your understanding that there would be no leakage as a result of the interference fitting so tight?

MR. GEISEN: If the interference fit all the way around, you can't take credit for having the leakage manifest itself. If you've got an interference fit, but it opens up and an interference fit is not all the way around, you can take credit for the leakage is going to come out that side that is not interference fit.

SENIOR SPECIAL AGENT ULIE: Right. I can't identify what that document was that I had seen, but I thought there was a document that came out in October, November, December time frame that talked about that.

MR. GEISEN: I would have to go back and review that SIA actual analysis. I remember looking at the -- they had like a graph -- or not a graph -but a pictorial or aerial view of the head that showed the occluded areas that still had interference fit.

What they did, if you had an opening -even if you had interference fit at some point, to them, that would still show that you had ability to

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SENIOR SPECIAL AGENT ULIE: That's fine on that subject. I don't have any other information that I can produce, but with respect to the issue of leakage, the boron leakage, knowing that the underneath the inaccessible areas couldn't be viewed, how could the statement be made that indications of boron leakage as seen at Oconee weren't seen at Davis-Besse? MR. GEISEN: Because we were applying that

comment to those that we could see. SENIOR SPECIAL AGENT ULIE: So it was intended to be only to those that could be seen?

MR. GEISEN: Correct.

15 SENIOR SPECIAL AGENT ULIE: All right. But isn't the inference that's made, though -- I mean, 16 17 why weren't those words put in of what could be seen? 1.8 MR. GEISEN: I guess I thought they were. When you say that -- maybe I ought to ask you to 19 20 restate the question so I understand what I'm 21 answering.

SENIOR SPECIAL AGENT ULIE: 22 Why wasn't 23 there a complete phrase or sentence about the boron leakage that was being seen at Oconee wasn't seen at Davis-Besse and was intended to be only for those 25

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nozzles that could be inspected?

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MR. GEISEN: We make a statement in that same paragraph. It says, "During the 12RFO inspection 24 of the 69 nozzles were obscured by boric acid deposits that were clearly attributed to Motor 2 flanges from the center CRDMs."

We weren't trying to hide anything. We were specifically saying, hey, we couldn't see these. The part of the thing that I wish I could go back and change was the fact that we were attributing it to the leakage flanges because we weren't looking to the potential of having two leaking sources in the same area. I mean, even to this day, I look at that Drive No. 3 and it bugs the heck out of me because according to the SIA information, it shouldn't have leaked.

16 SENIOR SPECIAL AGENT ULIE: Do you 17 acknowledge now that with respect to the statement 18 about clearly attributable to leaking flanges that the 19 source of the leakage wasn't truly known at the time? 20 MR. GEISEN: Well, I know that we had -yes, I would say we had leakage at the time. We had 21 22 leakage from the flanges.

Where we failed was to say, well, could we have two sources of leakage in the same vicinity. SENIOR SPECIAL AGENT ULIE: Right. How

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1	was it known that it was solely flange leakage?
2	MR. GEISEN: Because it was the typical,
3	hey, I have boric acid here. Let me find the source,
4	and we found it, and when we found the source, ah-ha,
5	here's our source.
. 6	Did we take it a step further and say, is
7	that every possible source we could have? No.
8	SPECIAL AGENT JANICKI: Here's an August
9	17th e-mail, 2001. I would ask you to look at it. It
10	is addressed to Steve Fyfitch from Framatome, but you
11	are cc'd on it.
12	MR. GEISEN: Yes.
13	SPECIAL AGENT JANICKI: The last sentence
14	of the first paragraph, where it talks about Goyal
15	apparently wants to go back to the 1998 inspection and
16	basically ignore the 2000 because the '98 was the last
17	good head inspection examination where you have no
18	nozzle leakage.
19	I guess I would kind of like to get your
20	interpretation of what
21	MR. GEISEN: What this was written for and
22	why?
23	SPECIAL AGENT JANICKI: Right.
24	MR. GEISEN: What this was, in order to
25	take credit for the visual inspections, you had to
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know that all of your gaps opened up. Initially, what 1 we did is we said, okay, we are going to go ask 2 Framatome to say they have already done that analysis 3 for Oconee, and what we were simply doing is asking 4 them to review that and say that it still applies to 5 Davis-Besse as well. 6

7 The reason we had to go do that is because the way they came up with those was they went back and 8 9 looked at your actual manufacturing tolerances for 10 that particular head. They had that information, and we were asking them to go back and do that so that we 12 could say, yes, you can even take credit for a visual 13 inspection of this nozzle or not, because at that point, we didn't have any gap information. This was the first kickoff to get that information, and we subsequently then also went to SIA to get the same information, like a double-check.

SPECIAL AGENT JANICKI: But I guess what is of particular importance to me is the no nozzle leakage section or the phrase that's used in there.

SENIOR REACTOR INSPECTOR GAVULA: As opposed to flange leakage?

> SPECIAL AGENT JANICKI: Right.

MR. GEISEN: I'm not sure how to read that into there. I guess at the time, when I read this, it

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was clearly obvious to me what we were asking for.

We were asking them for gap information. 2 3 When you ask is it possible to go back to 1998, what they are doing is they are -- that's talking about 4 5 crack growth rate because he asked, in the sentence right before that -- well, two sentences before that, б he says, "I assume you will address the leakage through the analyst to show that we have adequate or similar gaps to the Oconee plant, allowing the leakage to be detected. Also, crack growth or current knowledge in existing circumferential cracks will not result in a nozzle failure until next refueling outage."

Well, when we were asking is it possible 14 to go back to 1998, we were saying could we apply 15 16 those crack growth rates all the way back to 1998 and 17 say that we were still good to go to the next 18 refueling outage.

SPECIAL AGENT JANICKI: Okay.

20 MR. GEISEN: I guess you have to look at the whole paragraph. 21

22 SPECIAL AGENT JANICKI: Going on, though, why wouldn't you use the 2000 inspection at that 23 particular point? Why wouldn't you want to use the 24 25 2000 inspection?

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1 If you understand that the whole head has been cleaned, what is your understanding at this point 2 when you read it? Wouldn't you come back and ask 3 them, how come we are not using 2000? 4 Because our as-found data 5 MR. GEISEN: from 2000 was clearly that we had a lot of boron on б 7 our head when we came into the outage in 2000. It's not how we left it that matters. It's how we found 8 9 it. Does that make sense? I'm looking at it 10 11 from an as-left doesn't mean anything to me other than as a comparison point to the next as-found, because we 12 really have to press up to full temperature and 13 14 pressure to validate, and until you do that, until you 15 have a run cycle, it's your as-found coming in off of 16 that run cycle that says, hey --SPECIAL AGENT JANICKI: But if you are 17 18 saying it's flange leakage, what difference does it 19 make? 20 MR. GEISEN: Because what we are looking at is our data we had from -- our as-found data for 21 12RFO for 2000 had a lot of drives that were obscured, 22 and what we are looking at is can we go back even 23 further. Can we apply the crack growth rate to say we 24 25 can go back even further and still be okay.

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1	It was really the first effort in trying
2	to determine the starting point at which we start
3	applying a crack growth rate model.
4	SENIOR SPECIAL AGENT ULIE: But from the
5	standpoint of as-found versus as-left, from the boric
6	acid corrosion control procedure, besides determining
7	source of the leakage, you are also supposed to be
8	inspecting for corrosion?
9	MR. GEISEN: Correct.
10	SENIOR SPECIAL AGENT ULIE: So would the
11	as-left not be important from the standpoint of the
12	current outage that you are checking for corrosion,
13	and for the future, like you said, if it's not a clean
14	head when it's left, it could obscure or mask the
.15	identification of problems during the next outage.
16	MR. GEISEN: I would say from that
17	standpoint, that's true. That's true. From a boric
18	acid control standpoint, as-found/as-left comparison
19	of them is very important.
20	What we were focusing on here and what
21	this is actually going to is discussing from a crack
22	propagation what's the starting point, how long can we
23	run from that starting point, and that's what we were
24	focusing on. To say that this was a gross failure of
25	our boric acid control, there is no question about
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I think one of the problems with that is that from an evaluation of boric acid, we were evaluating under the basis that it's okay to have it on something that's that high of temperature.

Boric acid is inert at 500, 600 degrees. I don't know how many times I've read that someplace, and you don't have to read it too many times before it becomes ingrained as part or your paradigm that you measure everything to. So, therefore, leaving boric acid on something that it's not going to affect is no different than if you left boric acid on stainless steel. It's not going to affect it.

SENIOR SPECIAL AGENT ULIE: With the exception unless you have a nozzle crack, then it's going to be a continuously rewetted, correct?

MR. GEISEN: Is it?

SENIOR SPECIAL AGENT ULIE: Well, from the standpoint that at operating temperatures you are going to continuously have a supply of boric acid solution coming out of the reactor coolant, from the reactor coolant system.

23 MR. GEISEN: Yes, that immediately flashes 24 to steam. You know, that's the problem we were 25 struggling with at that point, that it immediately

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flashes to steam.

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SENIOR SPECIAL AGENT ULIE: But isn't there a distinction between flange leakage where that would apply versus a nozzle leak where it's a continuous wetted supply? There seems to be a distinction there.

7 MR. GEISEN: I think, yes, there probably 8 is, but we also at the same time had data that 9 indicated our top five nozzles won't leak because of 10 the interference fit, so then it gets back to, if you 11 had a leak, it wouldn't even get past it. I struggle 12 with that. To this day, I struggle with that because 13 we clearly went the wrong direction on that.

SENIOR REACTOR INSPECTOR GAVULA: Were you around during the SG1-2 steam generator when there was a head flange leak off of the --

MR. GEISEN: Oh, the head flange, yes. SENIOR REACTOR INSPECTOR GAVULA: Were you familiar with the corrosion that occurred on the steam generator itself as a result of that event?

21 MR. GEISEN: I remember seeing some 22 pictures back then, yes.

23 SENIOR REACTOR INSPECTOR GAVULA: Was the 24 corrosion more? Was it insignificant?

MR. GEISEN: It was pretty significant.

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SENIOR REACTOR INSPECTOR GAVULA: Okay. So part of the precept is the source of the leakage is a part of the aspect associated with whether the boric acid is going to be corrosive or not, is that true? MR. GEISEN: I would say that's true.

SENIOR SPECIAL AGENT ULIE: Was there a discussion with respect to the impediments in doing the inspections with respect to the 2 inch gap, the mouse holes that's talked about in the e-mail and the consultant's report, 2 inch gap, the mouse holes, and the deposits themselves acting as impediments? Was that discussed during last fall?

MR. GEISEN: It wasn't discussed necessarily as a response to our bulletin, but it was discussed from a standpoint of what are we going to do going forward and how can we make sure that we are going to be able to do a qualified visual inspection going forward. That was one of the predominant reasons we bought all of the equipment that was already field tested or proven at Oconee -- not Oconee, but Arkansas.

SENIOR SPECIAL AGENT ULIE: Again, why was it not talked about in the current and past tense as it was about the future inspections?

MR. GEISEN: I guess the best way to put

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103 that is what was past was past. What you have was 1 2 basically a video that was taken on a stick, however you want to call it -- on a long probe. Clearly, it 3 was not something that you could say I'm taking 4 5 credit; is this being a VT-2 inspection. We knew up front we couldn't do that. 6 7 Going forward, we knew we had to, and so we were trying to establish with the crawler and everything a .8 means to be able to go in and do that and take a 360 9 degree look around the nozzle at a VT-2 quality level. 10 SENIOR SPECIAL AGENT ULIE: 11 Wasn't what 12 the NRC was asking in the bulletin response or in 13 their subsequent request for additional information talking about impediments to the past inspections? 14 15 MR. GEISEN: Well, I don't think we ever 16 said, though, that we were taking credit for those 17 past inspections, VT-2 quality inspections. 18 SENIOR SPECIAL AGENT ULIE: Not VT-2, but 19 just sampling of the past inspections from a visual 20 inspection standpoint. I'm not sure I'm following 21 MR. GEISEN: 22 you. SENIOR SPECIAL AGENT ULIE: Well, the NRC 23 asked in their request for additional information for 24 FENOC to identify what the impediments were to those 25 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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past inspections.

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MR. GEISEN: Yes.

SENIOR SPECIAL AGENT ULIE: Nothing was said about the past deposits, the 2 inch gap.

MR. GEISEN: Other than the fact that --SENIOR SPECIAL AGENT ULIE: Or the mouse holes, I don't believe.

MR. GEISEN: Well, it affects -- we said these were the drives we couldn't inspect. I'm not sure how much -- in my mind, that pretty much answers the question. You are saying, hey, we can't inspect these. We're not taking credit for these inspections; 24 drives during this outage, 19 drives during this outage, and 4 drives during this outage. We can't take credit for them, whether it's because the gaps aren't opening or they are precluded with boric acid deposits.

SENIOR SPECIAL AGENT ULIE: But with respect to the mouse holes and the 2 inch gap, nothing was specifically called out.

21 MR. GEISEN: Because I think we felt, and 22 still feel, that you can do an inspection on the rest 23 of those nozzles. The ones that were not precluded, 24 you can still do an inspection of them.

SENIOR REACTOR INSPECTOR GAVULA: Well,

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1	it's not a question of you can do it, but had you done
2	it in the past?
3	MR. GEISEN: Did we do an inspection of
4	those? Yes, we did.
5	Were they VT-2 quality inspections? No.
6	No, they were not. Did we have, you know, a firm
7	video record all the way around to the level of
.8	clarity and everything that you would want for a VT-2?
9	No, we did not.
10	What we were taking credit for was the
11	fact that we saw these. We did not see boric acid
12	build-up on these nozzles that were outside this
13	precluded range. We didn't have any. What we had
14	was, when it comes right down to it, boric acid
15	leakage past a nozzle that was within that boundary
16	that we were saying that we couldn't inspect.
17	SENIOR SPECIAL AGENT ULIE: The October
18	17th submittal had a table in it.
19	MR. GEISEN: Correct.
20	SENIOR SPECIAL AGENT ULIE: It had three
21	columns; one for 1996, one for 1998, and 2000,
22	basically, on a nozzle-by-nozzle basis, delineated
23	which nozzles could be seen, which nozzles had been
24	recorded on videotape, and which nozzles were obscured
25	by boric acid.
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1	What role did you play in generation of
2	that table?
3	MR. GEISEN: I made the assignment to
. 4	Andrew Siemaszko to generate that table, and I told
5	him how I wanted it done nozzle by nozzle versus just
6	a visual of the whole head.
7	SENIOR SPECIAL AGENT ULIE: Do you know
8	who checked the accuracy of that table?
9	MR. GEISEN: What I did is I did a spot
10	check of what he provided.
11	SENIOR SPECIAL AGENT ULIE: And the
12	checking was based on what?
13	MR. GEISEN: I sat down with him and asked
14	him to tell me how you are doing this, tell me how you
15	are making the calls, and walk me through some of
16	these, how you are doing it, and I agreed with his
17	methodology and his thought process.
18	SENIOR SPECIAL AGENT ULIE: Based on that
19	table, there was a sketch that was generated as part
20	of that submittal as well.
21	MR. GEISEN: Correct.
22	SENIOR SPECIAL AGENT ULIE: It showed
23	areas of boric acid on the head.?
24	MR. GEISEN: Correct.
25	SENIOR SPECIAL AGENT ULIE: Were you also
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. 1	involved in that aspect?
2	MR. GEISEN: No. That was done
3	separately. Mark McLaughlin working with, I think, a
4	student out of engineering generated that because he
5	felt it created more of a pictorial image of where all
6	of these drives are located.
7	Going nozzle by nozzle you couldn't tell
8	off of the table the relative significance between
9	them, so I wanted to portray it on a picture to show
10	where they all were.
1,1	SENIOR SPECIAL AGENT ULIE: Okay. But
12	that sketch or diagram was generated based on the
13	table information?
14	MR. GEISEN: That's my understanding, yes.
15	SENIOR SPECIAL AGENT ULIE: If we can take
16	a look at that table that's part of the sketch and
17	it's going to show up on several times. First time is
18	at the 17th and also shows up in the October 30th
19	stuff as well.
20	MR. GEISEN: Once you come up with a good
21	sketch, you might as well use it over and over again,
22	right?
23	SENIOR SPECIAL AGENT ULIE: Sure.
24	I'll let you take a look at this. This is
25	a Peacock from 1998. I apologize for the quality.
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1	This is a '98, and 767 is the Peacock Potential
2	Condition Adverse to Quality Report.
· 3	MR. GEISEN: Okay.
4	SENIOR SPECIAL AGENT ULIE: Had you seen
5	this before today?
6	MR. GEISEN: I probably have. I think
7	I've reviewed every CR this past spring as part of the
8	root cause.
9	SENIOR SPECIAL AGENT ULIE: On the first
10	page of that, it shows a sketch of the head, and it
. 11	has a rectangle that is identified with areas of
12	clumps. There is a disparity between where that says
13	the areas of clumps I'm assuming it's referring to
14	boric acid clumps versus what's shown in the sketch
15	that was supplied in October 17th.
16	Do you have any explanation of why there
17	had been a difference?
18	MR. GEISEN: Only other than the fact that
19	they just drew a great big square around the head. I
20	mean, it encompasses the top drives, but aside from
21	that, no, I don't know.
22	SENIOR SPECIAL AGENT ULIE: Did you look
2,3	at the '98 tapes when you were validating that table?
24	MR. GEISEN: I looked at some of them. I
25	can't say that I looked at all of them. That's why I
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1	assigned it to Andrew in the first place. He was at
2	this for a solid week, hour after hour. So there was
3	no way that I looked at all 40 hours of tapes or
4	whatever.
5	SENIOR SPECIAL AGENT ULIE: Was there
6	anybody that checked in detail any information that he
7	generated?
8	MR. GEISEN: No. What we did, we did a
9	spot check of it, and I trusted that he knew what he
10	was doing. He had gone down to Arkansas to
11	participate during their outage in the spring so that
12	he was familiar with their visual inspection that they
13	did. So we felt that he was probably the best person
14	to do this, No. 1, since he was the reactor coolant
15	system engineer and, No. 2, he had actually seen the
16	inspection done at another facility.
17	SENIOR SPECIAL AGENT ULIE: Did you use
18	the people that had performed the inspection during
19	'98 in generation of that table?
20	MR. GEISEN: He had talked with them, but
21	I can't say to what extent he used them. I know that
22	he had mentioned that he had talked to both Pete
23	Mainhardt and Chimahusky.
24	SENIOR SPECIAL AGENT ULIE: Would it
25	surprise you to find out that, if you go back and look
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1	at the '98 videotape, that in fact the area of boric
2	acid that they are talking about is accessible through
3	weep holes one and two, which would be on the
4	northwest side of the head?
5	MR. GEISEN: Yes, I guess that would
6	surprise me. I would have to ask how far in did they
7	have to go before they saw that. If they went all the
8	way up towards the top of the dome, then I guess I
9	would say, no, I guess it doesn't surprise me.
10	SENIOR SPECIAL AGENT ULIE: How about in
11	looking at the head map, the big one here, if Nozzle
12	20 and Nozzle 13 were obscured, would that surprise
13	you?
14	MR. GEISEN: Yes, it would. I'm not sure
15	I can even read that off of here.
16	SENIOR SPECIAL AGENT ULIE: Well, we can
17	look at the sketch.
18	MR. GEISEN: Yes, that would surprise me
19	based on what was being reported.
20	SENIOR REACTOR INSPECTOR GAVULA: I've
21	gone back and I've mapped this stuff. I evidently
22	don't have a lot to do.
23	I'll show you. This is a sketch I
24	generated. It's based on what was presented, and I
25	think this sketch shows up in the October 30th because
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111 it is specifically for the 11RFO. 1 2 MR. GEISEN: Okay. SENIOR REACTOR INSPECTOR GAVULA: Anyway, 3 4 basically, anything that is shown with an orange dot is said to have no leak recorded, so that means it 5 showed up on the videotape. Then the ones that I 6 7 circled were pictures that were actually supplied in the October 30th submittal that was 2744. 8 9 MR. GEISEN: Okay. SENIOR REACTOR INSPECTOR GAVULA: 10 Everything that you said that there was a leak was 11 12 recorded was supplied except for Nozzle 64. Were you aware of that? 13 you go through that October 14 If 30th transmittal, there is no nozzle labeled as Nozzle 64. 15 16 MR. GEISEN: I'm not sure I can explain that. I mean, I don't think our intent with providing 17 18 pictures was intended to say this is every single 19 nozzle. SENIOR REACTOR INSPECTOR GAVULA: Except 20 21 the table said, if it's no leak recorded, that means 22 that the interpretation was that it's on the videotape 23 and we can supply a picture of it. 24 MR. GEISEN: Correct. I think that's 25 probably true, but what I'm saying is, when we **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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112 1 provided pictures, that was meant to be representative 2 sample pictures. We were not saying this is a picture 3 of every single drive. SENIOR REACTOR INSPECTOR GAVULA: Right. 4 5 MR. GEISEN: Right. SENIOR REACTOR INSPECTOR GAVULA: б If you 7 go into the October 30th letter -- this is 2744. That's the one that has all the pictures in it, and 8 9 apparently you were the one that generated or was 10 responsible for putting the pictures into it. 11 MR. GEISEN: Yes. SENIOR REACTOR INSPECTOR GAVULA: That was 12 13 from Andrew's work? 14 Uh-huh. MR. GEISEN: 15 SENIOR REACTOR INSPECTOR GAVULA: Was 16 there any verification of the pictures at that point? 17 As far as the numbers or MR. GEISEN: 18 anything? 19 SENIOR REACTOR INSPECTOR GAVULA: Right. 20 MR. GEISEN: No. 21 SENIOR REACTOR INSPECTOR GAVULA: So you took it, and I don't know if he had generated all of 22 23 those pictures --He generated the pictures 24 MR. GEISEN: with the nozzle numbers next to them, typed into them, 25 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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	1	and I just put them in a format that would put them
*	2	in here, for lack of a better term.
	3	SENIOR REACTOR INSPECTOR GAVULA: Had you
	4	re-reviewed any of the tapes at that point to check
	5	any of that?
	6	MR. GEISEN: No. Like I said, what I did
	7	was I reviewed, with him present, how his thought
	. 8	process was going through these, how was he doing the
	9	evaluation, how was he doing the review, and that's
	1.0	the only review that I ended up doing.
	11	SENIOR REACTOR INSPECTOR GAVULA: How much
	12	time did you spend in that process? Do you remember?
	13	MR. GEISEN: Just maybe an hour, hour and
	14	a half.
	15	SENIOR REACTOR INSPECTOR GAVULA: Okay.
	16	How much time had he spent doing the whole
	17	MR. GEISEN: Many.
	18	SENIOR REACTOR INSPECTOR GAVULA: Was he
	19	using videotape itself or was he going off
	20	MR. GEISEN: He started with videotape,
	21	and the problem, he couldn't pause it fast enough and
	22	it was skipping over. So we ended up converting
·	23	everything over to a CD format so that he could go
	24	frame by frame.
	25	SENIOR REACTOR INSPECTOR GAVULA: Was that
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eventually	how	all	the	pictures	were	generated,	was
based on th	ne CI)s?					

MR. GEISEN: Correct.

4 SENIOR REACTOR INSPECTOR GAVULA: Okay. 5 If you go back into the tapes for 11RFO, I mapped them 6 all out with respect to what actually was supplied in 7 that document. This is the 2744. So anything with the yellow highlight, a picture was provided in that 8 9 Anything that I highlighted in orange I'm document. 10 labeling was nozzles which the picture was said to 11 have been included but weren't. So anything in orange 12 is incorrect in that when I go back and look at the 13 videotape, those nozzles that you labeled or that were 14 labeled as a specific nozzle in 2744, those aren't the 15 nozzles. 16 MR. GEISEN: Okay. Meaning we have the 17 labels wrong or --18 SENIOR REACTOR INSPECTOR GAVULA: They

don't appear anywhere.

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20 MR. GEISEN: They don't appear, period? 21 SENIOR REACTOR INSPECTOR GAVULA: Yes. In 22 and I've drawn pencil marks from some cases --23 nozzles, and I spent some time looking at the tapes. It's not enjoyable, is it? 24 MR. GEISEN: 25 SENIOR REACTOR INSPECTOR GAVULA: It's not

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1	easy. I'll give you that; however, if you are off
2	if it's an adjacent nozzle, maybe. In some cases I
3	have nozzles that are in the north part of the head
4	when in fact they are the actual nozzle that is being
5	supplied in that document is from almost on the other
6	side of the head from where the nozzle actually was.
7	MR. GEISEN: Okay. I can't give you an
8	explanation as to why that occurred.
9	SENIOR REACTOR INSPECTOR GAVULA: In some
10	cases, the exact same picture is used.
11	MR. GEISEN: Okay. I would be surprised,
12	but okay. I'll take your word for it.
13	SENIOR REACTOR INSPECTOR GAVULA: Let's go
14	into 2744 and
15	MR. GEISEN: Where do you want me to look?
16	SENIOR REACTOR INSPECTOR GAVULA: You'll
17	have to give me a second here. I'm sorry. We are
18	going to be in the 11RFO inspection results. The
19	pages aren't numbered, so it's going to be difficult.
2.0	MS. PENNY: You want the head diagram?
21	SENIOR REACTOR INSPECTOR GAVULA: We can
22	start there and everything behind that.
23	MR. GEISEN: So that would be everything
24	dated '98 from the pictures?
25	SENIOR REACTOR INSPECTOR GAVULA: Right.
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1	MR. GEISEN: Okay.	
2	SENIOR REACTOR INSPECTOR GAVULA: I need	
3	to find the specific example.	
4	SPECIAL AGENT JANICKI: If you want some	
5	time, I will ask some questions.	
6	We are going to go back to September 4th	
7	for a moment.	
8	MR. GEISEN: Okay.	
9	SPECIAL AGENT JANICKI: As a manager, you	
10	would have been reviewing the September 4th, the 2731	
. 11	serial number, for directors, is that correct?	
12	MS. PENNY: Do you have that here? I'm	
13	getting a little confused.	
14	MR. GEISEN: That's the first one.	
15	MS. PENNY: The first one?	
16	SPECIAL AGENT JANICKI: It's my	
17	understanding you would have been reviewing that for	
18	the directors, is that correct?	•
19	MR. GEISEN: The directors are also on the	
20	same Green Sheet Review.	
21	SPECIAL AGENT JANICKI: Right. But you	
22	would have been doing that I guess you would have	
23	been a line above or below, however you want to look	
24	at it, the directors? You would have been reviewing	
25	it, but I guess maybe giving information to your	
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1	directors, or input?
2	MR. GEISEN: I review it from I would
3	have to say no to that. What I do is, I would get it
4	from Green Sheet Review, and I would review it from my
5	discipline, which was the engineering design. Was the
6	information in there factual relative to design
7	engineering.
8	SPECIAL AGENT JANICKI: Which director
9	would you have reported to?
10	MR. GEISEN: Steve Moffitt.
11	SPECIAL AGENT JANICKI: Here's an August
12	23rd, 2001. It's an e-mail from Rod Cook to the
13	various directors, and he mentions this is an advance
14	copy of the response and it's on a Green Sheet Review
15	and should be coming from the managers today.
16	MR. GEISEN: Correct.
17.	SPECIAL AGENT JANICKI: Do you recall
18	getting an early, advance copy of this response?
19	MR. GEISEN: To be honest, Rod sent me so
20	many things that it got to the point where I just
21	simply said, I'll wait for Green Sheet.
22	SPECIAL AGENT JANICKI: Okay. That's a
23	draft of the September 4th. Like I said, it is dated
24	August 23rd.
25	MR. GEISEN: Okay.
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1	SPECIAL AGENT JANICKI: In the top	
2	response in 1C and 1D, it talks about the 2 inch gap,	
3	and at first, it mentions it will not impede a visual	
.4	inspection. Later, that changes to does not impede a	
5	visual inspection.	
б	MR. GEISEN: Yes.	
~ 7	SPECIAL AGENT JANICKI: To me, the "will	
8	not" is referring to a future.	
9	Do you know why that was changed?	
10	MR. GEISEN: Not specifically. I would	
11	guess that the reason is just pure grammar. I don't	
12	claim to be the best grammar expert. My wife would	
13	vouch for that, but the first part of the sentence is	
14	written in present tense and the last half being in	
15	the future tense, and by changing it, you make it all	
16	present tense. That would be my guess.	
17	SPECIAL AGENT JANICKI: There is also in	
18	the 2000 inspection results it talks about	
19	approximately 90 percent of the nozzles. I think it's	
20	on the next page. Approximately 90 percent of nozzles	
21	were viewed.	
22	Let me see the exact wording.	
23	MR. GEISEN: Okay.	
24	SPECIAL AGENT JANICKI: You got that part?	
25	Approximately 90 percent of nozzles were inspected in	
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2	That subsequently was not included in the
3	final copy of September 4th. Do you know why that
4	particular section was taken out or that sentence?
5	MR. GEISEN: I don't know, but I could
6	hazard a guess.
7	SPECIAL AGENT JANICKI: Go ahead.
8	MR. GEISEN: My guess would be that our
9	reg affairs group doesn't like to put any numbers into
10	submittals unless you've got some sort of
11	substantiation behind it, even if you do put
12	"approximately" in front of it. That's just how they
13	operate.
14	If you are going to put a percentage in
15	there, you've got to know where that percentage came
16	from. That would be my guess.
17	SPECIAL AGENT JANICKI: Okay. But I guess
18	to me it also says that not all the head was inspected
19	either, not all the nozzles were inspected.
20	MR. GEISEN: It does say that, yes.
21	SPECIAL AGENT JANICKI: But it's very
22	subtly referred to in the final, and this one, to me,
23	more subtly in the final, it says, to the best extent,
24	the head was cleaned. There was no visible evidence
25	of nozzle leakage.
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120 It doesn't really say that there were 1 nozzles that weren't inspected in the final version. 2 3 I guess what I'm trying to find out is why it doesn't say that in the final September 4th version more 4 5 clearly. MR. GEISEN: I don't know. 6 SPECIAL 7 AGENT JANICKI: Was it 8 intentional, do you know? 9 MR. GEISEN: Not that I'm aware of, but that would be just a guess on my behalf. 10 SPECIAL AGENT JANICKI: Would you have 11 been responsible for any role in removing that 12 13 particular sentence? 14 MR. GEISEN: No. SPECIAL AGENT JANICKI: Do you know who 15 16 would have been? 17 MR. GEISEN: It could be any of the people 1.8 that reviewed it, so I don't know. It would be purely 19 a guess on my behalf at this point. 20 SPECIAL AGENT JANICKI: But regulatory affairs would do that? 21 22 MR. GEISEN: They own the document. Ι quess I would say, ask them. They would be able to 23 provide who told them to remove it. 24 25 SENIOR REACTOR INSPECTOR GAVULA: Let's go **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealroross.com

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1	back to the one document. It's Serial No. 2744. We
2	are going to be back in the 11RFO section, and it's
3	the eighth page back from the head map.
4	MR. GEISEN: Okay. I got the head map
5	here. All right.
6	SENIOR REACTOR INSPECTOR GAVULA: Go back
7	eight pages.
8	MR. GEISEN: Okay.
9	SENIOR REACTOR INSPECTOR GAVULA: If we
10	look at the time on this, this is Nozzle 60. It's got
11	a time of 11:58:19.
12	MR. GEISEN: Okay.
13	SENIOR REACTOR INSPECTOR GAVULA: If you
14	look at that picture, looking at the stains, et
15	cetera, if you flip the page now, Nozzle 4, it's not
16	the exact time.
17	MR. GEISEN: Sure are identical.
18	SENIOR REACTOR INSPECTOR GAVULA: It's the
19	exact picture?
20	MR. GEISEN: Yes, it is.
21	SENIOR REACTOR INSPECTOR GAVULA: Had your
22	review identified that?
23	MR. GEISEN: No. My review did not
24	identify that.
25	SENIOR REACTOR INSPECTOR GAVULA: Who was
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1	supposed to check the accuracy of the information that
2	was being presented?
.3	MR. GEISEN: Well, that probably I
4	could have obviously caught that, but I didn't.
5	SENIOR REACTOR INSPECTOR GAVULA: That may
6	be the most egregious, if you will, but there are
7	significant other discrepancies in that document with
8	respect to which nozzles are being labeled, and in
9	fact they are significantly distant from what the
10	actual nozzle is.
11	Do you have any explanation on how that
12	could have occurred?
13	MR. GEISEN: No. I've got to be honest.
14	I took the nozzles as they were noted. I don't
15	believe that I created any errors in adding my boxes;
16	and when I say, "adding my boxes," what I got was a
17	file with all of the pictures on them and then these
18	boxes with the description in here is what I added.
19	I didn't think that I had created any errors by adding
20	that.
21	SENIOR REACTOR INSPECTOR GAVULA: I've
22	gone back to the documents that Andrew submitted, and
23	supposedly there was a CD. They generated a CD, and
24	it was supposedly the file that he turned over, and
25	what is presented in the transmittal is consistent
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1	with that file with respect to pictures and nozzle
2	labeling. So I would agree that you didn't introduce
3	any
4	MR. GEISEN: Okay. I feel good that I
5	didn't introduce anything, but I guess I don't feel
6	good that I didn't catch this.
7	SENIOR REACTOR INSPECTOR GAVULA: Okay.
8	You did mention, though, that you wrote the
. 9	information on the side of the pictures.
10	MR. GEISEN: That's correct.
11	SENIOR REACTOR INSPECTOR GAVULA: If we
12	can go back a little bit into that document, if you go
13	back to we now have to go to the Spring '96
14	inspection, and they don't have a head map, but it
15	does have a single sheet labeled as such. This is
16	back toward the front.
17	MR. GEISEN: Okay.
18	SENIOR REACTOR INSPECTOR GAVULA: So we go
19	down to the third page in that section, and that
20	information under that picture, was that something
21	that you had added?
22	MR. GEISEN: Yes.
23	SENIOR REACTOR INSPECTOR GAVULA: Okay.
24	The one sentence starts, "Because of its location on
25	the head, it could not be removed by mechanical
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1	cleaning, but was verified not to be active or wet,
2	and therefore did not pose a threat to the head from
3	a corrosion standpoint."
4	Where did you get the information that the
5	cause had been verified not to be wet?
6	MR. GEISEN: I'm trying to remember. I
7	thought it was from conversations with the individual
8	that did this inspection, which would have been Ed
9	Chimahusky, I believe it was.
10	SENIOR REACTOR INSPECTOR GAVULA: Okay.
11	Could it have been Prasoon Goyal?
12	MR. GEISEN: I don't remember talking to
13	Prasoon about the visual inspections on this one. I
14	know he was involved in inspections in 1996 as well.
15	I think my conversation was more involved with people
16	that were removing the boron. This was focusing more
17	on the removal of the boron.
18	SENIOR REACTOR INSPECTOR GAVULA: Okay.
19	Were you familiar at all with the Condition Report of
20	Peacock that was issued in 1996 with respect to
21	MR. GEISEN: I am now.
22	SENIOR REACTOR INSPECTOR GAVULA: It would
23	be 96551. Were you aware of it at the time?
24	MR. GEISEN: No.
2.5	SENIOR REACTOR INSPECTOR GAVULA: And the
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125 statements that were in that Peacock basically say 1 that we can't inspect 50 percent of the head and can't 2 verify whether we have an active leak or not? 3 4 MR. GEISEN: Correct. I know that Prasoon 5 knows that in that particular CR. SENIOR REACTOR INSPECTOR GAVULA: When did 6 7 you learn that? MR. GEISEN: This past fall -- or past 8 -9 spring I became very knowledgeable of all of the past 10 CRs. SENIOR REACTOR INSPECTOR GAVULA: 11 Okay. So the information that was put in here, based on what 12 you recollect, was maybe through a discussion with Ed 13 Chimahusky? 14 15 MR. GEISEN: I think that's where it came 16 from, yes. 17 SENIOR REACTOR INSPECTOR GAVULA: Okay. 18 Let's go to the 11RFO head map again. Sorry to run 19 you back and forth. 20 MR. GEISEN: Okay. 21 SENIOR REACTOR INSPECTOR GAVULA: It's 22 going to be several pages --MR. GEISEN: 11RFO? 23 24 SENIOR REACTOR INSPECTOR GAVULA: 11RFO, 25 yes. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	MR. GEISEN: Okay.
2	SENIOR REACTOR INSPECTOR GAVULA: On that
3	head map, there are five nozzles that have stars
4	around them that area apparently indicating that those
5	are leaky flanges.
6	MR. GEISEN: Uh-huh.
7	SENIOR REACTOR INSPECTOR GAVULA: Is that
8	true in 11RFO? Were there five leaky flanges in that
9	outage?
10	MR. GEISEN: I believe that's correct.
11	Yes.
12	SENIOR REACTOR INSPECTOR GAVULA: Where
13	would that information have come from?
14	MR. GEISEN: The individual who was doing
15	the inspections during that year.
16	SENIOR REACTOR INSPECTOR GAVULA: Who
17	would have generated this?
1.8	MR. GEISEN: This would have been
19	generated from Mark McLaughlin.
20	SENIOR REACTOR INSPECTOR GAVULA: Where
21	would he have gotten that information from?
22	MR. GEISEN: I would have assumed that
23	information would be part of his natural memory since
24	he was involved with a lot of the head repair work for
25	the last several outages.
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1	Mark has been involved with working with
2	Framatome and others with doing the gasket replacement
3	for quite some time. So when that showed up on here,
4	Mark was the one that generated these graphs or these
5	schematics, whatever. I didn't question it.
6	SENIOR REACTOR INSPECTOR GAVULA: Would it
7	surprise you to know, if you go back to the '98
8	Peacock, there was just one flange that was identified
9	was leaking?
10	MR. GEISEN: Yes, it would, based on what
11	I see here.
12	SENIOR REACTOR INSPECTOR GAVULA: Would it
13	also surprise you that that one leaky flange was
14	determined to be minor leakage?
15	MR. GEISEN: Interesting concept. What's
16	"minor leakage"?
17	SENIOR REACTOR INSPECTOR GAVULA: Minor
18	leakage that
19	MR. GEISEN: In other words, we didn't
20	repair it?
21	SENIOR REACTOR INSPECTOR GAVULA: Yes.
22	MR. GEISEN: I guess that would disturb
23	me.
24	SENIOR REACTOR INSPECTOR GAVULA: Would it
25	be consistent that, if you had a minor flange leak,
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1	that between '96 and '98 that you would lose
2	visibility of 19 nozzles? Nineteen nozzles would be
3	obscured by boric acid?
4	MR. GEISEN: It would not surprise me. I
5	mean, you are talking a two-year period of time. It
6	doesn't take that substantial of a leak rate to build
7	up a pretty large volume of boron.
8	SENIOR REACTOR INSPECTOR GAVULA: Okay.
9	Let me go back to the question.
10	In 1998, when they first did the flange
11	inspection, they said, we have one flange leaking, but
12	it's a minor leak.
13	MR. GEISEN: Okay.
14	SENIOR REACTOR INSPECTOR GAVULA: But the
15	difference between what's being portrayed from 1996,
16	which is, I can't see four nozzles, to 1998, which
17	says, I can't see 19 nozzles, there seems to be an
18	inconsistency there that if it's a minor leak, then
1,9	where did all of this boric acid come from?
20	MR. GEISEN: I would agree that would be
21	probably a you would probably wonder why that is.
22	I don't have an answer for you, Jim. I was operating
23	under the basis that I had five.
24	SENIOR REACTOR INSPECTOR GAVULA: When the
25	statements were made that the boric acid that you saw
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1	on the head were clearly attributed to flange leakage,
2	who was making those determinations?
3	MR. GEISEN: I believe that was Andrew
4	with working with Mark McLaughlin and the other people
5	that had done the inspections. I believe that to be
6	the case. I can't state for sure.
7	SENIOR SPECIAL AGENT ULIE: Who were the
8	other people that were involved that you do know with
9	respect to, you say, doing the other inspections?
10	MR. GEISEN: Over the years, the
11	inspections have been done by Pete Mainhardt, Ed
12	Chimahusky, and Prasoon Goyal and Andrew himself.
13	SENIOR SPECIAL AGENT ULIE: And were all
14	of those individuals involved in this information that
15	was provided to the NRC last fall?
16	MR. GEISEN: I don't know if every single
17	one of them was, but the majority of them were.
18	SENIOR SPECIAL AGENT ULIE: Who do you
1,9	know was?
20	MR. GEISEN: I know for a fact Prasoon was
21	on the Green Sheet Review. I know Andrew was involved
22	with it. I know Mark was involved with it. I don't
23	know that it actually went back to Mainhardt and
24	Chimahusky for review, but I know they were consulted
25	by Andrew because he had told me so.
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1	SENIOR SPECIAL AGENT ULIE: Do you recall
2	what specifically he said he consulted with them
3	about?
4	MR. GEISEN: He asked them regarding the
5	visual inspections. He talked to them about those and
6	what was their recollection of the inspections and
7	what did they remember of it.
8	SENIOR SPECIAL AGENT ULIE: Would that
9	have been head inspection versus the flange inspection
10	or was he specific when he, Andrew, provided you that
11	input?
12	MR. GEISEN: No. I just knew that with
13	regard to the videos that he was reviewing, he had had
14	conversations with those guys. As far as the actual
15	details of what questions were asked or anything, I
16	don't know.
17	SENIOR SPECIAL AGENT ULIE: Jim, do you
18	have more questions?
19	SENIOR REACTOR INSPECTOR GAVULA: Yes.
20	It may have started in the October 17th
21	submittal. There was a statement that the main source
22	of leakage was flange D-10. Do you remember that
23	discussion?
24	MR. GEISEN: I believe D-10 is the one
25	that we went and machined. I think that's correct.
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131 SENIOR REACTOR INSPECTOR GAVULA: Do you 1 know why there would be a change in attributing the 2 main source of leakage from D-10, which is stated in 3 the letter, to F-10, which is stated in the Condition 4 5 Report that documents this in 1037? I don't know. I would have 6 MR. GEISEN: 7 to look at that. Do you have that CR? I'm not sure why we 8 9 jumped to that. SENIOR SPECIAL AGENT ULIE: (Handing). 10 SENIOR REACTOR INSPECTOR GAVULA: This is 11 2000-1037. This is the third paragraph down. "Main 12 source of leakage can be associated with F-10." 13 MR. GEISEN: Okay. 14 SENIOR REACTOR INSPECTOR GAVULA: How can 15 16 you change this main source of leakage from what the 17 Condition Report says now to something different in 18 the transmittal? Was there any discussion in that 19 reqard? I don't know other than the 20 MR. GEISEN: fact that when we talked about main source being 21 identified as F-10 and then the next several pages 22 talk about nothing except D-10. 23 SENIOR REACTOR INSPECTOR GAVULA: 24 They 25 also talk about F-10. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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MR. GEISEN: There is extensive discussion about D-10. I could see where they come up with a D-10 leaked as well and then D-10 was machined, whereas F-10 was not.

SENIOR REACTOR INSPECTOR GAVULA: Okay. Would it be feasible, though, that D-10 may have had some steam cutting in the past, but in fact wasn't leaking at all during that outage?

MR. GEISEN: Well, I mean, in the initial 9 10 discussion here, they talk about F-10 being the 11 predominant leaker or the main source, but the subsequent review and everything they went through, 12 13 they came to a conclusion in here that both Systems 14 Engineering and Framatome recommend that F-10 be 15 accepted as-found because the pitting and everything on there was believed to be from initial installation. 16

The fact that the event description up here talked about it being a significant source, but then all of the subsequent analysis under the CR points to D-10 would have to lead me to believe that they changed, that the analysis didn't support the claim that was made initially in the event description.

You put a CR out. That person says, you know, I think this is the predominant cause, and then

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1	your subsequent analysis under that CR says, no, it
2	appears D-10 is the predominant cause.
3	SENIOR REACTOR INSPECTOR GAVULA: How do
4	they determine the source of leakage when they are
5	doing the flanges?
6	MR. GEISEN: They do a video around the
7	flanges from up above. They do it on a stick.
8	SENIOR REACTOR INSPECTOR GAVULA: So based
9	on that, they, in the past, have always been able to
10	identify the source of leakage?
11	MR. GEISEN: Boy, that's a rhetorical
12	question, isn't it? I would like to think that we
13	were able to.
14	SENIOR REACTOR INSPECTOR GAVULA: In the
15	past when flange inspections were performed, that was
16	how they determined which flanges needed to be
17	repaired?
18	MR. GEISEN: Correct.
19	SENIOR REACTOR INSPECTOR GAVULA: So from
20	a historical perspective, the flange inspection would
21	really determine it would be a good indicator of
22	the source of leakage and, I would think, would also
23	tell you where the main source of leakage was?
24	MR. GEISEN: I would agree with that
25	statement; however, you asked the question of why the
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submittal wasn't changed to D-10, and I don't know 1 exactly, but I would say, if I went back -- if I was 2 a reviewer providing information into that, using this 3 as my basis, the way this CR is written, I would have 4 5 to come to the conclusion that based on the system engineering and Framatome review that D-10 was the 6 7 predominant cause just because of the way this CR was 8 written. SENIOR REACTOR INSPECTOR GAVULA: Okav. 9 10 Do you know if anybody went back and reviewed the 11 flange inspections at all during the 2001 time frame with respect to which flanges were leaking with 12 13 respect to the boric acid on the head? I was under the impression MR. GEISEN: 14 15 that Mark McLaughlin had done that when he generated these graphs, these schematics or whatever. 16 SENIOR SPECIAL AGENT ULIE: Why were you 17 under that impression? 18 MR. GEISEN: Just from a standpoint he 19 20 generated these. He's got them annotated as leaky 21 flanges, and he was the person that during those 22 outages would have been overseeing the Framatome contract that repaired the flanges. 23 SENIOR SPECIAL AGENT ULIE: Did he ever 24 25 indicate to you that he had reviewed the past NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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135 inspection flange inspections for purposes of this? 1 I just came to that MR. GEISEN: No. 2 conclusion based on what was presented here. 3 4 SENIOR SPECIAL AGENT ULIE: Okay. 5 MR. GEISEN: Knowing the people that put it together. 6 7 SENIOR REACTOR INSPECTOR GAVULA: I'm going to show you three different pictures. I don't 8 know if you would recognize any of it, but this was 9 taken off of a --10 11 MR. GEISEN: That's looking up at the bottom side of a flange, and this would be the nut .12 13 ring and these are the bolts.coming down through the 14 flange. 15 How did I do? 16 SENIOR REACTOR INSPECTOR GAVULA: 17 Excellent job. 18 You'll have to trust me when I say that's 19 Flange D-10. 20 MR. GEISEN: Okay. 21 SENIOR REACTOR INSPECTOR GAVULA: When 22 they go through and do the flange inspection, they have audio and they basically will report on specific 23 flanges. 24 25 MR. GEISEN: Okay. Not a very good NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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1	picture.
2	SENIOR REACTOR INSPECTOR GAVULA: I have
3	to tell you, that's one of the better ones.
4	During that videotape, when they see that
5	white streak underneath the flange, that's what they
6	are talking about as far as flange leakage.
7	MR. GEISEN: Okay.
8	SENIOR REACTOR INSPECTOR GAVULA: Any
9	impression, just looking at the picture?
10	MR. GEISEN: Well, clearly there is a
11	foreign streak there. That would appear to be boric
12	acid, based on the color.
13	SENIOR REACTOR INSPECTOR GAVULA: Okay.
14	Just as far as how much boric acid that would result
15	in actual leakage ended up on the underneath, any
16	impression?
17	MR. GEISEN: No. I would say, since this
18	stuff flows downhill, it could be substantial; it
19	could be minimal. I would have to look down below.
20	SENIOR REACTOR INSPECTOR GAVULA: Okay.
21	Next picture I'm going to show you is a picture from
22	the mid-cycle in '99 of the Flange D-10.
23	MR. GEISEN: Same stuff. Same trace.
24	SENIOR REACTOR INSPECTOR GAVULA: Does it
25	appear that it's been leaking since '99?
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1	MR. GEISEN: I would have to say no.
2	SENIOR REACTOR INSPECTOR GAVULA: This is
3	a picture from D-10 from '98. Same flange; same view.
4	MR. GEISEN: I would have to say this even
5	looks heavy.
6	SENIOR REACTOR INSPECTOR GAVULA: So it
7	got better with time?
8	MR. GEISEN: Well, we know that's not the
. 9	case. Nothing ever gets better with time.
10	SENIOR REACTOR INSPECTOR GAVULA: Based on
11	that, would you like to draw any conclusions with
12	respect to whether D-10 was a leaking flange or not?
13	MR. GEISEN: I guess I would have to say,
14	no, it probably was not, at least not here. Granted,
15	I'm only looking at one quadrant of the drive.
16	SENIOR REACTOR INSPECTOR GAVULA: True.
17	If you look at the other sides
18	MR. GEISEN: I'll preface it, based on
19	these three pictures
20	SENIOR REACTOR INSPECTOR GAVULA: I agree.
21	It's my understanding that the way that they
22	identified D-10 as a leaker was from this view as
23	opposed to any of the other views.
24	MR. GEISEN: Okay.
25	SENIOR REACTOR INSPECTOR GAVULA: If you
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1	look at it from the other side, it's basically clean,
2	and you need to take my word on it, but it's only at
3	this point in that tape when they see that deposit on
4	the nozzle under the flange and they say this is a
5	potential leaker; this is no other discussion of other
6	views of the flange?
7	MR. GEISEN: It's apparent we repaired
8	this flange over and over again for no reason.
9	SENIOR REACTOR INSPECTOR GAVULA: You only
10	repaired it once.
11	MR. GEISEN: Machined it.
12	SENIOR REACTOR INSPECTOR GAVULA: Well,
13	somebody needs to talk to Framatome but
14	MR. GEISEN: Repaired it once and machined
15	it.
16	SENIOR REACTOR INSPECTOR GAVULA: Do you
17	think anybody went back and reviewed the videotapes
18	from the flange inspections to determine the source of
19	the leakage?
20	MR. GEISEN: Gosh, I would hope they did,
21	but I can, honestly saying, look at this, I don't
22	know. It sure didn't look like it.
23	SENIOR REACTOR INSPECTOR GAVULA: You
24	didn't direct anyone to do that review?
25	MR. GEISEN: No. That would have been
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1	probably within Systems Engineering.
2	SENIOR SPECIAL AGENT ULIE: Anything
3	else, Jim?
4	SENIOR REACTOR INSPECTOR GAVULA: Not at
5	this time.
6	SENIOR SPECIAL AGENT ULIE: Last fall, did
7	you have knowledge of the control outdrive flange and
8	reactor vessel head inspections that had occurred in
9	1996 and 1998 time frame?
10	MR. GEISEN: I knew that we had done
11	inspections in every one of those outages. I'm not
.12	sure I'm answering your question, though.
13	SENIOR SPECIAL AGENT ULIE: Did you know
.14	that for the 1996 inspection no flanges were
15	identified to have been leaking during the 10RFO
16	flange inspection?
17	MR. GEISEN: No.
18	SENIOR SPECIAL AGENT ULIE: You say you
19	just learned that this past spring?
20	MR. GEISEN: Well, I never really delved
21	that much into which flanges were leaking. I knew
22	that we had a history of leaky flanges. To me, I
23	guess I chalked it up as being it's not the best
24	design that's out there; but if I were to design it,
25	I probably would have designed it with a welded
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1	design.
2	SENIOR SPECIAL AGENT ULIE: And with
3	respect to this Peacock, had you reviewed that prior
4	to the end of last year, that document?
5	MR. GEISEN: No.
6	SENIOR SPECIAL AGENT ULIE: There is an
7	indication in there that up to one half percent of the
8	head was not able to be inspected.
9	Were you aware of that last fall?
10	MR. GEISEN: Up to one half?
11	SENIOR SPECIAL AGENT ULIE: One half of
12	the head had not been inspected in the reactor vessel
13	head inspection.
14	MR. GEISEN: No. I was under the
15	impression we had gotten all but well, it's close
16	to one half. When you say 24 out of 69 were not able
17	to be
18	SENIOR SPECIAL AGENT ULIE: The 10RFO I'm
19	referring to, 1996. It said, 4 of 69 were viewed.
2.0	MR. GEISEN: I believe that well,
21	that's what I thought was the truth, yes, was that 4
22	were obscured.
23	SENIOR SPECIAL AGENT ULIE: Okay. So with
24	respect to that inspection, it said up to half the
25	actual inspection record shows up to half of the head
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. 1	was not able to be inspected.
2	MR. GEISEN: Okay.
.3	SENIOR SPECIAL AGENT ULIE: So there is no
4	correlation there, do you understand?
5	MR. GEISEN: I understand.
6	SENIOR SPECIAL AGENT ULIE: All right. Do
7	you have any understanding or explanation of why that
8	inconsistency exists?
9	MR. GEISEN: No, I don't.
10	SENIOR REACTOR INSPECTOR GAVULA: Can I
11	jump in, Joe?
12	SENIOR SPECIAL AGENT ULIE: Go ahead.
13	SENIOR REACTOR INSPECTOR GAVULA: We are
14	going to go back to 2744, and this is going to be in
15	the table.
16	MR. GEISEN: Okay.
17	SENIOR REACTOR INSPECTOR GAVULA: The note
18	at the bottom, Note 1, has an additional sentence
19	added compared to even 2741, which that note isn't
20	there.
21	MR. GEISEN: That's correct.
. 22	SENIOR REACTOR INSPECTOR GAVULA: Who
23	added that note, do you know?
24	MR. GEISEN: I believe I did on the basis
25	that we had then subsequently gotten our SIA analysis
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1	back that indicated that it would not matter. I mean,
2	you are saying I don't see anything visually, but I
3	want to make sure that was understood that Nozzles 1;
4	2, 3, 4 we wouldn't expect to see anything visually.
5	SENIOR REACTOR INSPECTOR GAVULA: The
6	first part, though, was what's a little bit curious to
7	me. It says, in 1996 the nozzles were examined, but it
8	says, "Since the video was void of head orientation
9	narration, each specific nozzle view could not be
10	correlated by nozzle number."
11	MR. GEISEN: Correct.
12	SENIOR REACTOR INSPECTOR GAVULA: So this
13	tells me when you are looking at the nozzles, you
14	don't know exactly which nozzles you are looking at,
15	so you know just general areas, but you don't know
16	MR. GEISEN: Absolutely correct.
17	SENIOR REACTOR INSPECTOR GAVULA: Okay.
18	Then I need to ask the question. How do you know that
19	it was Nozzle 5 that you could see and not Nozzles 2,
20	3, or 4, because they have all the same relative
21	location?
22	MR. GEISEN: We didn't say that you could.
23	I guess I'm not following.
24	SENIOR REACTOR INSPECTOR GAVULA: If you
25	look at what it says for Nozzle 5 in '96, it says, "We
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143 could see everything except Nozzles 1 through 4." 1 2 MR. GEISEN: No. We are actually saying we could see everything. What we can't take credit 3 4 for are those Nozzles 1 through 4 because they don't 5 have enough gap. INSPECTOR GAVULA: 6 SENIOR REACTOR т 7 believe the memo says that "We can see 65 of 69 nozzles." 8 9 MS. PENNY: Show him that. Do you have 10 that reference? 11 SENIOR REACTOR INSPECTOR GAVULA: "During 12 10RFO, 65 of 69 nozzles were reviewed." So somebody 13 says, I saw all except four nozzles. MR. GEISEN: Okay. 14 SENIOR REACTOR INSPECTOR GAVULA: 15 If you don't have any head orientation narration, then how do 16 17 you know that you saw Nozzles 1 through 4? If you didn't see Nozzles 1 through 4, how come you thought 18 19 you saw Nozzle 5? It seems to be inconsistent. 20 MR. GEISEN: That's an excellent question. I wish I had an excellent answer for it. 21 22 I guess I didn't -- right at the time, I 23 wasn't thinking about it from that perspective. I was 24 thinking of it from a perspective that I can't take 25 credit for those four nozzles and say 65. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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144 SENIOR REACTOR INSPECTOR GAVULA: 1 Okay. 2 This is something out of Andrew's file. The number of nozzles that had been stated in that letter changed 3 from -- it originally stated 64 out of 69, which means 4 5 we didn't see the center five. MR. GEISEN: Okay. 6 7 SENIOR REACTOR INSPECTOR GAVULA: Somehow it got changed to 65 out of 69. 8 9 MR. GEISEN: I can't explain how that happened. 10 11 SENIOR REACTOR INSPECTOR GAVULA: Do you know who made the change? 12 13 MR. GEISEN: No, no idea. Sorry. 14 SENIOR REACTOR INSPECTOR GAVULA: Okay. 15 SENIOR SPECIAL AGENT ULIE: We will come back to the documents, but I just wanted to ask, with 16 17 respect to the video inspection tapes, you said you viewed last fall some of the video inspections. 18 19 MR. GEISEN: Portions, yes. SENIOR SPECIAL AGENT ULIE: All right. Do 20 you recall which outages and which inspections, 21 22 whether they were a head or flange? I didn't view any of the 23 MR. GEISEN: 24 flange inspections. My reviews were directly of the 25 head under the insulation. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	SENIOR SPECIAL AGENT ULIE: Okay.
2	MR. GEISEN: I had viewed portions of '96,
.3	the 1998 and 2000 when I was reviewing it with Andrew
4	to see how he looked at each one.
5	SENIOR SPECIAL AGENT ULIE: Were they of
6	the as-found or as-left or both?
7	MR. GEISEN: These would all have been the
8.	as-found.
9	SENIOR SPECIAL AGENT ULIE: Do you recall
10	the time frame on that?
11	MR. GEISEN: It would have been early
12	October.
13	SENIOR SPECIAL AGENT ULIE: Did you also
14	show NRR of the Nuclear Regulation Commission reactor
15	vessel head inspection tapes and/or CD-ROMs?
16	MR. GEISEN: I didn't show them any
17	CD-ROMs. I showed them some VCR tapes. I had all
18	three outages to show them, but I didn't. I don't
19	think we got that far. The bottom line is that we
20	went to D.C. to make a presentation.
21	For personal reasons, I had to fly out at
22	a different time. I got to D.C., and during our first
23	morning meeting, I was informed here are the tapes.
24	By the way, you are presenting them to the NRC at 5
25	o'clock today. So I wasn't sure exactly what I had
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So I just started popping them in, and it was uncomfortable, at best, but the rest of my team went back to the hotel, and I stayed there late that night to present to approximately a dozen, 15 NRC staff and just popped in a tape, and they just started saying, well, how did you call that one, what did you call this one, what did you call that one?

9 Time out. I didn't make these calls. You 10 are talking to the wrong person. I said this is how, 11 and I talked how we would have done the calls, the 12 thought process we used; but to go and actually pop in 13 a tape and immediately point to a frame and this frame 14 and this frame, which one did you pull, that's not how 15 we did the review, and Andrew ended up looking at some 16 of these nozzles under multiple tapes from multiple 17 directions to come to some of these conclusions that 18 he came to.

19 So that's how I presented to them. It 20 didn't meet their expectations. We ended up bringing 21 back Andrew at the next meeting. I don't remember if 22 someone sat down with the staff. I thought someone 23 was at the Doubletree Hotel, with CD-ROMs, to go 24 through those, but I'm not sure on that point.

SENIOR SPECIAL AGENT ULIE: As far as who

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1	told you to present the tapes, who was it that gave
2	you the tapes?
3	MR. GEISEN: That would have been Dave
4	Lockwood, but I think he was operating under Mr.
5	Campbell's direction.
6	SENIOR SPECIAL AGENT ULIE: And which
7	tapes were they?
8	MR. GEISEN: I only went through one of
9	them. I don't remember which one it was. I think it
10	was the 2000. I think it was the 12RFO tape.
11	SENIOR SPECIAL AGENT ULIE: 12RFO as-found
12	tape?
13	MR. GEISEN: Correct. I believe that's
14	the first one we went to.
15	SENIOR SPECIAL AGENT ULIE: And you showed
16	that to the dozen NRC people?
17	MR. GEISEN: (Witness nods head)
18	SENIOR SPECIAL AGENT ULIE: You are
19	shaking your head, but we need
20	MR. GEISEN: I'm sorry. Yes.
21	SENIOR SPECIAL AGENT ULIE: How confident
22	are you that it was the 12RFO tape?
23	MR. GEISEN: I'm not confident at all at
24	this point. It wasn't a good experience. I'm trying
25	to wipe it from my memory, because it was like the
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NRC002-1404

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1	lamb to the slaughter.
2	SENIOR SPECIAL AGENT ULIE: Was there any
3	others besides the 12RFO.
4	MR. GEISEN: I had three with me. I had
5	the 12, the 11, and the 10.
6	SENIOR SPECIAL AGENT ULIE: But you're not
7	sure it was the 12 RFO?
8	MR. GEISEN: That's what I thought, I
9	started with that one, but I can't be a hundred
10	percent sure. I'm saying maybe I'm 80 percent sure.
11	SENIOR SPECIAL AGENT ULIE: Okay. Did you
12	show either the 10 or the 11RFO tapes?
13	MR. GEISEN: There wasn't a lot of
14	interest in seeing it after they realized that I
15	wasn't the individual that did the review.
16	SENIOR SPECIAL AGENT ULIE: So the answer
17	is
18	MR. GEISEN: No. I went through one tape.
19	SENIOR SPECIAL AGENT ULIE: Okay.
20	MR. GEISEN: Didn't even go through the
21	whole tape.
22	SENIOR SPECIAL AGENT ULIE: And was that
23	on the I believe it was I forget the date.
24	MR. GEISEN: It was in October.
25	SENIOR SPECIAL AGENT ULIE: It was in
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MR. GEISEN: Yes.

SENIOR SPECIAL AGENT ULIE: It was only one occasion that you recall that you were involved with that type activity?

MR. GEISEN: Yes. I pretty much swore up and down I would never do that again. They could find someone else to do it after that.

9 SENIOR SPECIAL AGENT ULIE: What was the 10 bad experience?

MR. GEISEN: Well, I was the only person there. I kind of felt like my team had kind of abandoned me. I was the only person there. I expected it to be kind of like a one-on-one, and it ended up being like a one-on-a-dozen, and I wasn't prepared to talk about it, and it caught me cold that day. I would have liked to have been able to actually go through the tapes and know what was going to be asked of me instead of just being handed to me.

The ultimate insult was then going back to the hotel and my team is sitting there finishing their nice steak dinners, so it was not a pleasant day for me.

SENIOR SPECIAL AGENT ULIE: Okay. You said that it was your understanding that Andrew had

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NRC002-1406

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1	looked at the tapes from different views or different	-
2	angles.	
3	MR. GEISEN: Yes.	
4	SENIOR SPECIAL AGENT ULIE: How did you	
5	get that impression that he had looked at the tapes in	
6	that detail?	
7	MR. GEISEN: Because he told me sometimes	:
8	he would have to go through one mouse hole and have to	
9	look at the same thing coming from another mouse hole	
10	to look at both sides.	
11	SENIOR REACTOR INSPECTOR GAVULA: When you	
12	looked at the tapes, were you surprised at the amount	
13	of boric acid that you saw?	
14	MR. GEISEN: Yeah. I wasn't overly	
15	pleased with it.	
16	SENIOR SPECIAL AGENT ULIE: Did it ever	
17	raise any question in your mind with respect to	
18	exactly how Andrew had made some of his calls?	
19	MR. GEISEN: In some cases, no, because	
20	what a lot of the stuff that I was looking at was the	
21	stuff that we weren't taking credit for anyway.	
22	That's the problem, is when you go in and throw the	
23	tape in and the first picture that comes up is really	
24	ugly, it creates this image that, you know, this is	
25	going to be garbage; but when you pull back from that,	
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NRC002-1407

151 you say, okay, those are the drives that we are saying 1 we can't take credit for being able to inspect; let me 2 focus more on the peripheral drives that I can 3 4 inspect. Then it's a little bit easier. 5 You can understand the viewpoint. Of course, the fact that 6 7 all of the problems that we had on our subsequent head were that completely obscured area doesn't help. 8 9 SENIOR SPECIAL AGENT ULIE: Was there any 10 remark made by you that the tapes you were viewing was 11 crap? 12 MR. GEISEN: I don't think I called it 13 crap. I think the word was garbage. 14 SENIOR SPECIAL AGENT ULIE: What were you 15 referring to? MR. GEISEN: The overall quality of them. 16 17 Jim has had a chance to go through them. The visual 18 clarity of them, the lighting, there is a lot of 19 aspects to it that is not good and you are trying to 20 make a call based on those. If you were doing this 21 inspection and were doing it real time, you have the 22 luxury of, well, I see something I don't like. Let me 23 hone in on it, let me steer around it, whatever. You don't have that ability when you are 24 25 looking at these history tapes. Then what you have to **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

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152 do is try to find, well, did we go in through a 1 different mouse hole at a different angle; would I get 2 better light, this sort of thing. So the quality of 3 the tapes was not that great. There is no question 4 5 about that. SENIOR SPECIAL AGENT ULIE: Were 6 any 7 remarks made about the quality of the inspection itself because there was such a large amount of boric 8 acid deposits around the nozzles that the quality was 9 10 being questioned or not? MR. GEISEN: Well, I mean, when I made the 11 12 comment that the quality of these tapes was admittedly 13 garbage, that was to the NRC staff in D.C. after being constantly asked questions as to this, this, this, and 14 So I think there was a certain amount of 15 this. 16 uneasiness with this media that we were using. SENIOR SPECIAL AGENT ULIE: I'll make a 17 distinction though with the quality of the tape versus 18 19 the quality of the inspection. 20 MR. GEISEN: They go hand in hand, don't they? 21 22 SENIOR SPECIAL AGENT ULIE: No. From my standpoint, the quality of the tape is the inability 23 24 to have a clear picture of viewing whatever that's on 25 the tape versus seeing the inspection because there **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

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was so much deposit that was around you couldn't 1 2 perform an adequate inspection. So there are two 3 different distinctions. 4 MR. GEISEN: I would say that's probably 5 true, but we were trying to look at it from a nozzle-by-nozzle standpoint. Yes, there were clearly 6 7 some nozzles we weren't going to be able to inspect, 8 Yes. I mean, that quality of being able to period. 9 inspect for those particular nozzles was not going to be there. There is no question there. 10 SENIOR SPECIAL AGENT ULIE: So it was the 11 12 quality of the inspection that you were making the comment to then? 13 MR. GEISEN: No. I was making the comment 14 to the visual quality of the tapes that we were 15 16 seeing. 17 SENIOR SPECIAL AGENT ULIE: All right. SENIOR REACTOR INSPECTOR GAVULA: What was 18 19 your understanding of the purpose of those inspections back in 2000 and '98 and '96? 20 21 MR. GEISEN: Well, when we did the 22 inspections, we were looking for boric acid buildup in 23 accordance with 9805. 24 SENIOR REACTOR INSPECTOR GAVULA: Was 25 there ever an intent that it be a nozzle-by-nozzle **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	inspection at that time?
2	MR. GEISEN: No, not to the degree that we
3	would do them today.
4	SENIOR REACTOR INSPECTOR GAVULA: In your
.5	limited review, how adequate were those inspections on
6	a nozzle-by-nozzle basis?
7	MR. GEISEN: I would say that on the video
8	inspection, there is an advantage to video inspection
9	in that you can go back and look at the same picture
10	with a different perspective, a different calibrated
11	eyeball, so to speak, and that's what we were trying
12	to do.
13	The inspections that were done and how
14	they were documented, written, their analysis, was
15	followed up in the video. I mean, we didn't just do
16	a video inspection. There are individuals who
17	reviewed those videos. Well, the review they were
18	doing in 1996 of that video compared to the review
19	they were doing in 2001 was different.
20	We were just looking at it. At least we
21	have the advantage that we saved this in a video
22	format so we could go back and relook at this, like I
23	said, with different set of eyeballs, so to speak, a
24	different threshold that we were looking for.
25	SENIOR REACTOR INSPECTOR GAVULA: Do you
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NRC002-1411

think that those inspections from 2000, 1998, and 1996 gave a thorough view of all of the nozzles that were not obscured by boric acid?

To qualify for a VT-2, I MR. GEISEN: 5 would say no. That's why we were saying, no, we are 6 only taking credit for the CT format because I think to really do a qualified -- when you say, "qualified," you know, that term, to me, means you've got a 360 degree look all the way around that nozzle, very clear optics, by someone who is a VT-2 qualified individual. At no point did we meet that requirement in any of our inspections.

SENIOR REACTOR INSPECTOR GAVULA: But you had sufficient confidence to tell the NRC that you are sure that you don't have nozzle leakage up there based on those videotapes?

MR. GEISEN: Of those drives we could see, 18 I don't necessarily know that you have that's true. to have a 360 degree look all the way around the nozzle to say this nozzle is leaking, not leaking because of capillary action you are going to get up along the nozzle and the fact that boron tends to run downhill. As long as you can see the downhill side of a nozzle, which we have even put into one of our submittals was the basis of our looking, if you could

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1	see the downhill side of the nozzle, then that nozzle
2	is credited with having its gap open up, and I think
3	you could take credit for that nozzle.
4	SENIOR REACTOR INSPECTOR GAVULA: Did you
5	look at the 1996 tape to ensure that in fact you could
6	see all the way up into the top center portion of the
7	head?
8	MR. GEISEN: I looked at portions of the
9	1996 tape. I won't say that I looked at all of the
10	1996 tape.
11	SENIOR REACTOR INSPECTOR GAVULA: Did you
12	look at the tape sufficiently to know that the
13	inspection would allow a view of the top center
14	nozzles on the head?
15	MR. GEISEN: No, because I wasn't even
16	worried about the top center nozzles because they are
17	not going to leak.
18	SENIOR REACTOR INSPECTOR GAVULA: How
. 19	about the
20	MR. GEISEN: You know, I realize that's
21	not a good answer. There is no question about it.
22	It's not a good answer. Hindsight being 20/20, I
23	would love to do that differently, but at the time, I
24	was not even focusing on those drives because our
25	analysis shows they wouldn't leak.
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157 SENIOR REACTOR INSPECTOR GAVULA: 1 How 2 about not the top center five, but how about the center nine, how about those? Did you think those 3 were inspected at the time? 4 I did think those were 5 MR. GEISEN: inspected at the time. 6 7 SENIOR REACTOR INSPECTOR GAVULA: Based on 8 what? . 9 MR. GEISEN: Based upon what Andrew had told me and submitted to me. 10 SENIOR REACTOR INSPECTOR GAVULA: And you 11 12 looked at the tapes to verify this? MR. GEISEN: Not to the same degree that 13 14 he did, no. I wish I had, but, no. 15 SENIOR REACTOR INSPECTOR GAVULA: Were any 16 video inspection tapes left with NRC? 17 MR. GEISEN: I don't think we gave them 18 copies of tapes. I thought we gave them copies of 19 CDs, but I'm not sure. I would have to ask the reg 20 affairs guys. SENIOR REACTOR INSPECTOR GAVULA: You 21 22 don't know even if the CD-ROM was left with them, 23 though? 24 MR. GEISEN: I didn't personally leave 25 anything with them, no. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 SENIOR REACTOR INSPECTOR GAVULA: Okay. With respect to the photos that went 2 into the submittals, could you reiterate what your involvement was?

5 MR. GEISEN: What I had done is I had 6 gotten a copy of -- basically, they had been compiled 7 by Andrew off of the CD-ROMs that we had created, and 8 I took those as representative pictures, and I put a 9 verbiage next to them describing them, because in some 10 cases, they weren't even labeled as to which outage 11 they applied to, and obviously you can pull that out 12 of the dates that are assigned to them on the 13 pictures, but I tried to create a text block to 14 describe what we were actually showing, instead of 15 just dumping pictures into the presentation.

16 SENIOR REACTOR INSPECTOR GAVULA: How did 17 you determine which outage they were from?

18 MR. GEISEN: In some cases, it was because 19 of the text stamped right on it. In other cases, it was talking to Andrew. In looking, there is a marked 20 21 difference between the 1996 and the 1998 or 2000 just 22 in the color of the frames because of the different 23 lighting, different camera arrangement that was used. The later ones have a much more orange 24 25 lighting to it, not as bright a lighting. The 1996 is

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1	much more, I guess, gray would be the term that I
2	would use for them.
3	SENIOR REACTOR INSPECTOR GAVULA: Do you
4	know what involvement the ISI Group had with respect
5	to the photos?
б	MR. GEISEN: What I had asked is the ISI
7	look at not necessarily the photos, but look at the
8	videotapes and make their assessment on whether they
9	could do any kind of inspection of those, and that's
10	when they came back and said unless they have a 360
11	look all the way around and a good, accurate focus all
12	the way around, they would decline to declare that a
13	VT inspection.
14	SENIOR REACTOR INSPECTOR GAVULA: So do
15	you know then, were they assigned to do anything
16	further after that or as a result?
17	MR. GEISEN: No. That was the only
18	assignment that I had given them, was asking them,
1.9	"Can you do this? Work with Andrew. Can you do
2.0	this?" And they came back and said, "Not doable."
21	SENIOR REACTOR INSPECTOR GAVULA: Who did
22	you speak with?
23	MR. GEISEN: I spoke to two different
24	individuals: Chuck Daft initially and Mike Shepard.
25	Chuck works for Mike, and Mike is the one that came
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1	back to me and said, "We can't give you any kind of
2	credit for VT inspection of these."
3	SENIOR REACTOR INSPECTOR GAVULA: Let me
4	show you, this was given to the NRC as part of the
5	subpoena. It was represented that Chuck Daft had
6	indicated these were pictures that he had given to
7	Andrew.
8	MR. GEISEN: Okay.
9	SENIOR REACTOR INSPECTOR GAVULA: I think
10	the nozzle numbers identified underneath some of them.
11	My question is: Are you aware of
12	pictures, photos that the ISI Group provided to
13	Andrew?
14	MR. GEISEN: No. These actually look like
15	photos Andrew would have provided to them or visa
16	versa. These look like they would have come right out
17	of the CD-ROMs or the CDs that we burned.
18	SENIOR REACTOR INSPECTOR GAVULA: Is there
19	a reason, though, that if they if the ISI folks
20	were reviewing the CD-ROMs they couldn't have burned
21	the pictures versus the other way around?
22	MR. GEISEN: No. They could have done
2.3	that. I wasn't aware that this was provided by them,
24	so I don't know.
25	SENIOR REACTOR INSPECTOR GAVULA: Now,
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1	these photos had more boric acid deposits on them or
2	on the nozzles than were the photos that were
3	submitted to the NRC, and I just was wondering if you
4	know why none of these photos ended up being submitted
5	to the NRC?
6	MR. GEISEN: No, I don't. Sorry.
7	SENIOR REACTOR INSPECTOR GAVULA: Did you
8	have a decision in which photos that Andrew provided
9	that ended up getting submitted to the NRC?
10	MR. GEISEN: He gave me the file, and like
11	I said, I tried to put text boxes next to all of these
12	things. I don't remember really cleaning that up
13	other than aligning them all in a column and adding
14	text boxes to them.
15	SENIOR REACTOR INSPECTOR GAVULA: And the
16	text boxes, how were you making write-ups and what was
17	that based on?
18	MR. GEISEN: It was basically based on my
19	knowledge of what had gone through the inspections,
20	what we were trying to provide, to try to go and we
21	were just answering the question of, hey, we would
22	like to see pictures, like to see video of this, and
23	we provided the pictures, and the pictures were not
24	very good.
25	I mean, it was very difficult to look at
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· 1	a picture by itself and get an image of a vessel
2	that's got 69 different penetrations, and so that's,
3	I think, what drove to eventually having to present
4	the videos.
5	SENIOR REACTOR INSPECTOR GAVULA: All
6	right. Let me show you, this is Page 7 of an overhead
7	slide. This was from the presentation that was made to
8	the commissioners, NRC Commissioners' technical
9	assistants.
10	Do you recall being at a presentation in
11	October?
12	MR. GEISEN: Yep.
13	SENIOR REACTOR INSPECTOR GAVULA: What was
14	your role in that presentation?
15	MR. GEISEN: It was generated on my
16	laptop.
17	SENIOR REACTOR INSPECTOR GAVULA: And who
18	was in attendance from FENOC.
19	MR. GEISEN: Guy Campbell, Steve Moffitt,
20	Dave Lockwood, myself. I believe that's it.
21	SENIOR REACTOR INSPECTOR GAVULA: What was
22	the purpose of meeting with the Commissioners'
23	technical assistants?
24	MR. GEISEN: Damage control.
25	SENIOR REACTOR INSPECTOR GAVULA: Please
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MR. GEISEN: Okay. We had gotten a phone call on the 28th.

SENIOR REACTOR INSPECTOR GAVULA: Of September?

MR. GEISEN: September 8th. I should say Guy Campbell got a phone call from Bob Saunders. Bob Saunders had gotten a phone call from Brian Sheron saying you guys need to shut the plant down; not a lot of other detail than that. Obviously, then Mr. Saunders was a little bit concerned, called Guy Campbell. Ι participating wasn't in that conversation, but based on as hot as Mr. Campbell was when he came in to talk to us, I'm sure that conversation didn't go well.

16 There was another conversation was going 17 to occur as a phone conference. This was on a Friday, and we had just finished our INPO exist. 18 So we were 19 all there, and when I say, "we," the managers, directors, and everyone above, and we were debriefing 20 as a result of the INPO exit.

Mr. Campbell came into the conference room, fourth floor conference room, and grabbed Mr. Moffitt and said, "We need to talk about this," and Steve immediately grabbed me on the way out, and Mr.

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Lockwood, and I'm not sure if there was anyone else in that particular conversation or not; but bottom line is that we were being told, "You need to shut your plant down, and we are not providing any other details other than that."

So every conversation we had with the staff at that point was, "We can't provide you information. It's predecisional," and the fear was that we were going to be judged before we actually presented our side of our conclusions, our case study and everything. So we went to the Commissioners and specifically, or their tech advisors specifically, asking that should a -- we just wanted to be heard. We want to hear everything, and that started the ball rolling on a lot of our meetings.

It was immediately right after that meeting we met with most of the tech staff in a different floor of the building, and in that meeting, there was a lot of people in there; probably 30 people in the room, but the predominant conversation was between Guy Campbell and John Swolwinski.

SENIOR REACTOR INSPECTOR GAVULA: Was it your understanding that if the NRC was going to issue a shutdown order -- and this is back at that time frame -- that the Commissioners would have to concur

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1	with that?
2	MR. GEISEN: That was my understanding.
3	SENIOR REACTOR INSPECTOR GAVULA: So that
4	was the rationale for going to the Commissioners'
5	technical assistants to provide the technical
6	arguments of FENOC?
7	MR. GEISEN: Right.
8	SENIOR REACTOR INSPECTOR GAVULA: Okay.
9	With respect to the first bulletin, do you know who
10	authored that first bullet on Page 7?
11	MR. GEISEN: I'm not sure who authored it.
12	We all sat up late the night before working on this.
13	SENIOR REACTOR INSPECTOR GAVULA: All
14	right.
15	MR. GEISEN: Sounds like verbiage I would
16	have used, so I don't know.
17	SENIOR REACTOR INSPECTOR GAVULA: Just for
18	the record, the bullet states, "All control rod drive
19	mechanism penetrations were verified to be free from
20	popcorn-type boron deposits using video recording from
21	11RFO or 12RFO."
22	If penetrations weren't able to be
23	inspected, then how could the popcorn deposits have
24	been seen?
25	MR. GEISEN: They couldn't initially, and
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1	that's why we ended up we said 11 or 12. In reality,
2	it should have been 11 or 12 or 10, and it wasn't
3	until we started really getting into a lot more detail
4	on that in our subsequent submittal.
5	SENIOR REACTOR INSPECTOR GAVULA: Okay.
6	But if this was the October 11th time frame, wasn't it
7	already known, based on the e-mail and the
8	consultant's report that we have talked about earlier,
9	that there were areas of the head that weren't
10	viewable, weren't inspectable?
,11	MR. GEISEN: I think that's true, yes, and
12	we were trying to pull together what exactly all of
13	that was, and we didn't have all of that ready to go
14	until the 17th submittal.
15	SENIOR REACTOR INSPECTOR GAVULA: Was
16	there a deliberate attempt to mislead the
17	Commissioners' technical assistants with this
18	particular bullet?
19	MR. GEISEN: I don't think we were
20	deliberately trying to mislead them at all. We are
21	just trying to show that we have got we were trying
22	to educate them on the crack size, the crack
23	propagation rates, the whole issue behind this and
24	what we were going to we have got a finite element
25	analysis. We are trying to put together on all that.

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I think that the predominant reason we 1 were talking to them was to try to get information 2 3 back, try to establish a two-way communication going on, and at that point, we didn't have a two-way 4 5 communication qoing We hađ one-way on. а communication going on, saying, you are going to shut 6 7 down and we are not going to tell you why. We are not going to tell you what we know, what you don't know, 8 because that was predecisional, and we were trying to 9 10 get around that. 11 SENIOR REACTOR INSPECTOR GAVULA: But does 12 this not portray that the inspection verified more than the past inspections had actually verified? 13 MR. GEISEN: I think once we finished with 14 15 all of our analyses and reviews, that was true. That 16 was the case, but I don't think it was a deliberate 17 intent at this point to mislead them.

What we were doing is we were in the process of -- initially this table was going to start out as two columns. There wasn't going to be any 1996 data in there, and as we started really going on a drive by drive, we found that, no, we really need to go all the way back into 1996, which is beyond what the bulletin initially asked for.

The bulletin only asked for the last four

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168 1 years or two outages worth. As we started delving more and more into that, we found that this is 2 probably not an accurate portrayal anymore and that we 3 4 really need to go back further, but we had already 5 made this presentation. SENIOR REACTOR INSPECTOR GAVULA: But 6 7 wasn't it known prior to this presentation that that information wasn't accurate? 8 Should it have been known? . 9 MR. GEISEN: 10 Probably, yes, but I've got to be honest with you. I 11 was operating under the premise that between 11 and 12 12RFO we had good data, and it wasn't until we started 13 laying it out drive by drive that we submitted on the 14 17th that we started saying, no, that isn't the same. 15 SENIOR REACTOR INSPECTOR GAVULA: And what 16 about with respect to 12RFO itself, realizing that you 17 had the opportunity to read over or review the Gibbs 18 report, the consultant's report, that explained that 19 there were areas of the head that had deposits? 20 MR. GEISEN: I didn't get a chance to read 21 that Gibbs report until after we came back from this 22 meeting. 23 MS. PENNY: I'm not sure we established on the record that he had received the Gibbs's report. 24 25 I was cc'd on it, but I MR. GEISEN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	didn't get a chance to read it until after this
2	meeting. I couldn't even tell you what that Gibbs
.3	report what it's even dated.
4	SENIOR SPECIAL AGENT ULIE: It's September
5	14th of 2001.
. 6	Michele, do you have any questions?
7	SPECIAL AGENT JANICKI: No.
8	SENIOR SPECIAL AGENT ULIE: Jim, anything
9	else?
10	SENIOR REACTOR INSPECTOR GAVULA: Can we
11	go to the Green Sheets quickly?
12	SENIOR SPECIAL AGENT ULIE: Yes, I was
13	going to say, that's a good question. I don't know if
14	this was what you were going to ask, but can you go
15	through those Green Sheets and confirm those are your
16	initials on the pages that I've got marked? It's four
17	serial numbers.
18	MR. GEISEN: No. 2731, that's my initials
19	on the 28th of August, and then these are my initials
20	for 2735 for the 17th of October, and for Serial 2741,
21	it's actually my signature, not my initials, for the
22	30th of October. The Green Sheet Review for the 2744,
23	once again, is my signature on the 30th of October,
24	2001.
25	SENIOR SPECIAL AGENT ULIE: Jim?
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SENIOR REACTOR INSPECTOR GAVULA: If I go to the back sheet, and I think that's like every other sheet in there is the backside of that, if you review the portion for Block 14 for review and approval, who was then responsible for the accuracy of the information that was being presented, and maybe we need to go through each letter, or maybe they are all the same? I'm not quite sure.

MR. GEISEN: I guess --

SENIOR REACTOR INSPECTOR GAVULA: Let's go through specifically the October 17th when the table was generated by Andrew. According to that statement for Block 14, there was supposed to be a review and approval and the technical adequacy of the information was supposed to be performed, and, I guess, who was supposed to verify the accuracy of that table?

MR. GEISEN: Well, every individual that I review it from, it is their frame of reference and their area of responsibility. In my case, my area of responsibility was the design engineering organization as well as the fact that Andrew had submitted stuff. So what I did is I go through and I look at this and I say, are there appropriate people designated as stipulated in the requirements.

It talks about the initiator checks and

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enters desired reviewers. I go through there and make sure that they have got all the right reviewers in there for what I feel and the information is in there that's pertinent. So with that, then I go through and I review it and does it make sense to me from my frame of reference.

SENIOR REACTOR INSPECTOR GAVULA: Let's go to specifically 2735.

MR. GEISEN: Okay.

SENIOR REACTOR INSPECTOR GAVULA: I would like to know who was responsible -- from those names that were listed on that page, who was responsible for the accuracy of the information that was presented in that table?

MR. GEISEN: Well, Andrew Siemaszko signed 15 off on it, and he's a seasoned reviewer. Everybody 16 that -- I mean, you could make the argument that 17 everybody that signed off on the Green Sheet is 18 responsible for the documentation that's in there. 19 20 That's a given, but, you know, when I do a review like 21 that, I verify that the person that's providing the technical information is actually reviewing it to make 22 sure that that technical information got included 23 correctly into the document. 24

SENIOR REACTOR INSPECTOR GAVULA: But the

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1	information itself is not being verified?
2	MR. GEISEN: Well, it's verified to the
3	best of my knowledge by looking at it; but if you are
4	going to ask me, did I go back and look at every
5	single thing that Andrew looked at, no, I did not.
6	Is it the table that he put together?
7	Yes, it is. I'm not necessarily going through and
8	verifying every single thing that he did for me.
9	That's why we chose him, was based upon his
10	background, his system ownership, and his reviews that
11	he had participated in at other plants. He would be
12	the best person to perform those reviews.
13	SENIOR REACTOR INSPECTOR GAVULA: Is that
14	typical from a calculational perspective, that he was
15	the best person?
16	MR. GEISEN: Yes.
17	SENIOR REACTOR INSPECTOR GAVULA: The
1.8	initiator is the final call with respect to accuracy,
19	or is there usually a second-level review that occurs?
20	MR. GEISEN: Well, when you have other
21	things such as a calculation that are governed by
22	other documents which have a specific review
23	methodology, whether they are required to be a checker
24	and approver and everything, yes, those things will
25	have that; but when you are just gathering information
11	4

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together, as is this case, you know, we don't have 1 that firm of a review procedure for that. But for a 2 calculation, we wouldn't have -- on the Green Sheet 3 4 Review, we wouldn't have put the checker and the approver and all that. We would simply have said, 5 here's the calculation, and whoever is providing that 6 7 calculation to the review that decided this needs to be part of that would be on the Green Sheet, and it 8 may not even be the original developer of that. 9 10 SENIOR REACTOR INSPECTOR GAVULA: But in 11 this case, I don't have a document. That table is not a document that was generated as part of a separate --12 MR. GEISEN: You are correct. 13 SENIOR REACTOR INSPECTOR GAVULA: 14 15 process. 16 So the question is: Who was supposed to 17 check to ensure the accuracy of that information? 18 MR. GEISEN: That would probably have been 19 Had I done probably a better job of checking me. that information, I probably would still be in my job 20 21 that I was in previously. **JANICKI**: 22 SPECIAL AGENT How much 23 experience did Andrew have before he came to Davis-Besse with the RCS? 24 I don't believe he had -- I 25 MR. GEISEN: NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701 (202) 234-4433 www.neatroross.com

NRC002-1430

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1	believe he was an EDG excuse me operator system
2	engineer at Arkansas. I don't know. I've got to be
3	honest. I don't know his whole history of where he
4	worked and all that. I wasn't the individual that
5	hired him into the company. Somebody like Glenn
6	McIntyre, who is a supervisor, that hired him would
7	probably better answer that question. I don't want to
. 8	come across as being flip on this. I just don't know.
9	SPECIAL AGENT JANICKI: I'm not going to
10	ask you to look at the document, but just referring
11	back to where I had asked you to look at the I
12	think it was the September 4th draft where it says,
13	"approximately 90 percent of the nozzles have been
14	inspected," was there some concern at the time that
• 15	you are aware of that Andrew had been coming up with
16	various numbers and, therefore, couldn't pinpoint a
17	number to put into that particular document as to how
18	many nozzles were inspected?
19	MR. GEISEN: I wasn't aware of that at the
.20	time, but I've been hearing rumors of that over the
21	last couple of months.
22	SENIOR SPECIAL AGENT ULIE: Could you go
23	to the Serial No. 2735. That's the October 17th
24	letter.
25	MS. PENNY: Can we take a break?
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SENIOR SPECIAL AGENT ULIE: Off the record 1 for a second. 2 (Recessed from 12:41 to 12:44 p.m.) 3 SENIOR SPECIAL AGENT ULIE: Back on the 4 5 record. Dave, if you would, look at Page 3 of б 7 Attachment 1 to the Serial No. 2735. That's the 8 October 17th, 2000 letter. Under the section 9 "Analytical Work Performed" section, second paragraph, it states that "Davis-Besse felt assured in operating until the next scheduled refuel outage, based on the worse case scenario that a visible nozzle axial crack leak developed immediately after start-up from 10RFO in May of 1996." First question: Did you provide the input for this section or paragraph? MR. GEISEN: Some of it, yes. SENIOR SPECIAL AGENT ULIE: Did you provide the specific input to this, what I just read? MR. GEISEN: Right. What we were trying to do is explain that some of the drives that -- if you go all the way back to 10RFO, we said worse case scenario is these drives that were inaccessible on 11 12, if they went through wall and started and manifesting themselves immediately following start-up

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176 from 10RFO and now they have had six years to grow 1 2 cracks versus only two years, what would that do to 3 your model. So what we were doing is we are applying 4 5 the crack growth rate because we felt that was the most conservative assumption we could come up with. б 7 SENIOR SPECIAL AGENT ULIE: But if those same nozzles not only were inaccessible for 11 and 12, 8 9 but were inaccessible for 10, the worse case would 10 have actually been prior because there were certain nozzles that had been inaccessible even during 10RFO? 11 12 MR. GEISEN: Right, and the nozzles that 13 we felt were inaccessible during 10RFO were the ones that SIA was telling us we couldn't take credit for 14 15 being cracked anyway -- not cracked, but they would 16 not have had sufficient clearance to show leakage. 17 Moreover, those nozzles were at the very 18 top of the head, and what we were seeing in the rest 19 of the industry was that your predominant -- once 20 again, we were talking circumferential cracking, and 21 where seeing circumferential you were cracking 22 those nozzles occurring was on that were not 23 penetrating the head directly perpendicular to the 24 head, but further out on the edges where you had hoop 25 stresses that would drive the crack qo

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177 circumferentially. So that's what we were focusing 1 on, was these are the drives that are of most concern. 2 SENIOR SPECIAL AGENT ULIE: All right. 3 .4 One is, I'll take you back to that Two things. 5 November 17th, 2001 e-mail that Michele had showed you б earlier. 7 The last paragraph, about the middle of 8 it, says, "Most of the Oconee cracks were on the top 9 section of the head." 10 Ι don't know if that's axial or circumferential. 11 MR. GEISEN: These are all axial cracks, 12 13 correct. SENIOR SPECIAL AGENT ULIE: But the 14 15 inference is that the top of the head was where they were finding their cracks. 16 Yet, you knew at 17 Davis-Besse the top of the head was the inaccessible 18 area. 19 Did that cause any additional concern or heightened concern? 20 MR. GEISEN: It probably should have, but, 21 22 once again, we were focusing on circumferential cracks and going back and looking at the data what was 23 driving circumferential cracks, and that's how we came 24 up with saying that we are more concerned with the 25 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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outer drives because that's where we were seeing it in the industry at that time.

SENIOR SPECIAL AGENT ULIE: All right. With respect to the comment about that it was the nozzles that wouldn't leak, my understanding, though -- I mean, you had looked at the reactor vessel head inspection tape from 10RFO as part of your fall review and there were more than just those top center nozzles that were obscured.

10 So did that not cause concern because 11 there were more nozzles than just those nozzles at the 12 center of the head?

MR. GEISEN: I was operating off of what I had gotten from Andrew Siemaszko with regard to that table; and with regard to that, we were saying only the very top nozzles were uninspectable.

17 SENIOR SPECIAL AGENT ULIE: All right. 18 Let me refer you then to Page 4, same serial number 19 letter, same letter, Page 4 of Attachment 1, under the "Finite Element Gap Analysis" section. Referring to 20 21 the center nozzle or nozzles, it states, in part, that 22 "Based on the verification of inspection results conducted at Davis-Besse," and then continues on. 23 "It is concluded that no leakage from the 24

CRDM nozzle-to-head interface has previously occurred

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at Davis-Besse and through-weld cracking was not present."

Based on the note from the e-mail from the August 11th meeting that since it was not possible to inspect certain head areas and no clear determination could have been made whether an active nozzle leak existed or not, how could any of the inspection results have been used as a basis to conclude that no leakage from the center nozzles was verified?

MR. GEISEN: Well, I mean, you are getting back to the issue of if you're -- it's kind of a Catch 22. If your finite analysis is saying you're not going to get interference opening up enough to see a visual inspection, that you're not going to get leakage there, then, you know, how do you say then that you should have seen it?

17 I quess that's what we are getting at, is 18 that you've got -- yes, you may not be able to see 19 your drives, those top five drives or top four drives, whatever, because of the boron that's piled on top, 20 21 but even if you could, our finite element analysis is 22 telling us they wouldn't have been a source for 23 leakage because they wouldn't have opened up, so you can't even credit them. 24

Armed with that, did we make probably the

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180 false assumption that any boric acid on top of there 1 was obviously deposited from elsewhere because your 2 finite element analysis tells you it can't come from 3 That's kind of the conclusion we 4 the nozzles, yes. 5 came to. SENIOR SPECIAL AGENT ULIE: All right. If 6 7 you would, go to Serial No. 2741. That's one of the 8 October 30th letters, so it's one of the other 9 On Page 1 of Attachment 1, it's the documents. 10 response to RAIBR-1. Okay. 11 MR. GEISEN: SENIOR SPECIAL AGENT ULIE: The part that 12 states, "The inspections performed during the 10, 11, 13 and 12 refueling outages consisted of a whole head 14 visual inspection of the reactor pressure vessel head 15 accordance with the Davis-Besse Boric Acid 16 in 17 Corrosion Control Program, pursuant to generic letter 88-05, " do you see those words? 18 MR. GEISEN: 19 Yes. SENIOR SPECIAL AGENT ULIE: Based on the 20 21 information that you had from the August 11th e-mail 22 on the consultant's report, wasn't it known that a portion of the head was never accessible; and, if so, 23 why since you reviewed those documents wasn't this 24 25 verbiage correct? NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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MR. GEISEN: What we did is we came down and said during the 10RFO, 65 out of 69 were viewed; 11RFO, 50 out of 69 were viewed; and 12RFO, 45 out of 69 were viewed.

I'm not sure what you would be asking us to correct.

SENIOR SPECIAL AGENT ULIE: Well, consisted of a whole head visual inspection. Since those areas were inaccessible, it wasn't a whole head visual inspection.

MR. GEISEN: Well, that's true, but I guess the way we are trying to -- what we are saying in this paragraph is, hey, these inspections were done during these time frames for this purpose.

Now, the reason a 10RFO inspection was done was for a whole head visual inspection. I'm not going to lay claims to how accurate that was or anything in that statement. All I'm trying to do in the second statement is saying this is what we feel we could actually see in those inspections.

I mean, what else are you going to call it if you're not going to call it the whole head? That's the title of the inspection. We are just trying to say, later on in the paragraph, this is what we could actually see from that.

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SENIOR SPECIAL AGENT ULIE: 1 Was it your 2 understanding that every time the reactor vessel head 3 was inspected, as far as during those outages, it was intended to be a whole head inspection? 4 I believe that's the case, 5 MR. GEISEN: but I also believe that our Boric Acid Corrosion 6 7 Control Program was really deficient in this area in that it didn't come right out and specify that the 8 9 head was a vulnerable area of inspection. That was 10 one of the things that was identified as a root cause 11 going forward. I think we had some glaring holes in our 12 13 program as to how we approach the head and the acceptability of leaving boric acid on the head. 14 If 15 we were truly going to include the head underneath the 16 8805 process, our program would not have allowed us to 17 leave the deposits there, and yet our program did. 18 I think all that statement is saying is we 19 did the inspection per our program. I'm not going to 20 say our program was iron clad and this is what we can pull from those inspections. 21 22 Does that answer your question? SENIOR SPECIAL AGENT ULIE: 23 Yes. 24 Any other questions, Jim or Michelle? 25 SPECIAL AGENT JANICKI: Only thing that I NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1	have, the cleaning of the head after the as-found
2	condition, what was your understanding of the head
3	condition after it had been cleaned?
4	MR. GEISEN: Following 12RFO?
5	SPECIAL AGENT JANICKI: Following each
6	RFO, was it your understanding that the head had been
7	completely cleaned?
8	MR. GEISEN: No. No. Following 10RFO and
9	11RFO, I knew that the deposits had been left on the
10	head and that our mechanical cleaning was not as
11	successful as we wanted it to be. That's what drove
12	us to do the water cleaning in 12RFO; and initially
13	coming out of 12RFO, I was under the impression that
14	was successful.
15	That was based upon a briefing that I had
16	seen, based on words that were put into the work
17	order; "no deviations noted," whatever, and it wasn't
18	until late last year, Fall of 2001, that I found out
19	that, no, we had not cleaned the head completely.
20	SENIOR SPECIAL AGENT ULIE: All right.
21	Is there anything else that we haven't asked you that
22	you want to add?
23	MR. GEISEN: No.
24	I was talking to Jim in the hallway, and
25	I was pleased to see that The Plain Dealer has
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indicated that this issue as far as what inspections 1 are necessary is not over with. 2 3 I think that as an industry we have got a lot to learn, and I think one of the things we need to 4 5 learn from an industry is that visual inspections are not adequate. It's not an acceptable. 6 We've talked a lot about what we saw here 7 on the drives and what we could see, what we could .8 9 take credit for. I'm a firm believer that had we been 10 able to see the top of the head in earlier outages, we still would not have seen leakage. 11 I do believe that the interference fit is 12 an issue that has to be dealt with because I think 13 what we saw on Drive 3 and on Drive 2 was what I 14 15 believe is boric acid corrosion below the surface. That's how it manifests itself first. 16 17 No one seems to want to listen to that 18 argument, but that's what I believe. So just because 19 it's not visual doesn't mean that you don't have a 20 problem; and if that's the case, I feel that the 21 plants that are in high susceptibility category, they shouldn't be allowed to do visual inspections. 22 They 23 should do EDG inspections. 24 That's my 2 cents. 25 Jane, do you SENIOR SPECIAL AGENT ULIE:

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1	have anything?
2	MS. PENNY: I can't think of a single
3	thing to add.
4	SENIOR SPECIAL AGENT ULIE: We have two
5	closing questions.
6	Have we threatened you in any manner or
7	offered you any rewards in return for this statement?
8	MR. GEISEN: No.
9	SENIOR SPECIAL AGENT ULIE: Have you given
10	your statement freely and voluntarily?
11	MR. GEISEN: Yes, I have.
12	SENIOR SPECIAL AGENT ULIE: The interview
13	is concluded at approximately 12:55 p.m.
14	Thank you, and we are off the record.
15	(Whereupon, at 12:55 p.m., the proceedings
16	went off the record.)
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This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

N/A

Name of Proceeding: Interview of

David C. Geisen

Docket Number:

Location:

Port Clinton, Ohio

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

Scott Gamertsfelder Official Reporter Neal R. Gross & Co., Inc.

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