Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION

Title:

Georgia Power Company: Vogtle Electric

Generating Plant: Unit 1 and Unit 2

Docket Number:

50-424-OLA-3; 50-425-OLA-3

ASLBP No.: 93-671-01-OLA-3

Location:

Rockville, Maryland

Date:

Thursday, September 14, 1995

Work Order No.:

NRC-322

Pages 13826-14056



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1	UNITED STATES OF AMERICA		
2	NUCLEAR REGULATORY COMMISSION		
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4	ATOMIC SAFETY AND LICENSING BOARD		
5	HEARING		
ϵ	X		
7	In the matter of: : 50-424-OLA-3		
8	GEORGIA POWER COMPANY, et al. : 50-425-OLA-3		
9	: Re: License Amendment		
10	(Vogtle Electric Generating : (transfer to		
11	Plant, Unit 1 and Unit ?) : Southern Nuclear)		
12	: ASLBP No.		
13	X 93-671-01-0LA-3		
14	Thursday, September 14, 1995		
15	Hearing Room T 3B45		
16	Two White Flint North		
17	11545 Rockville Pike		
18	Rockville, Maryland		
19	The above-entitled matter came on for hearing,		
20	pursuant to notice, at 9:00 a.m.		
21	BEFORE:		
22	PETER B. BLOCH Chairman		
23	JAMES H. CARPENTER Administrative Judge		
24	THOMAS D. MURPHY Administrative Judge		

APPEARANCES:

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On behalf of the NRC:

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2	WITNESS	DIRECT	CROSS	REDIRECT	RECROSS	BOARD
3	Ken Stokes					13847
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5		13856		14016		13863
6		13861				13874
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25			14047			14049
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EXHIBITS

2	EXHIBIT NO.	DESCRIPTION	IDENT	REC'D
3	INTERVENOR E	XHIBIT 240 BOUND INTO THE RE	CORD FOL	LOWING
4	PAGE 13830.			
5	GPC-II-188	Schematic, Sheet 2 of 9	13855	
6	Int-II-242	Notes: Mr. Domby	13910	
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8		Response	13922	
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13	GPC-II-189	PRB Meeting Minutes	13991	
14	Staff-II-70	Filter Picture	14003	14006
15	GPC-II-190	Chenault Qualifications	14020	14021
16		(Bound into the record		
17		following page 14021.)		
18	REBUTTAL TES	TIMONY OF MR. CHENAULT BOUND	INTO THE	E RECORD
19	FOLLOWING PA	GE 14020.		
20				
21				

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DEMONSTRATIVE AID # 138

UNIT 1 A TRAIN DIESEL GENERATOR

AIR RECEIVER DEW POINT MEASURMENTS

MWO NO.	DATE	RECEIVER KO1	RECEIVER KO2	
190001651	4/8/90	34 F	33 F	data 4/9/9
	4/7/90	75 F	78 F	the state of the state of
	4/7/90	75 F	80 F	
	4/6/90	75 F		
	4/6/90	80 F		
	4/6/90	80 F	70 F	
	4/6/90	85 F	85 F	
	4/6/90	85 F	85 F	
	4/5/90	83 F	35 F	
	4/5/90	78 F	77 F	
	4.5/90	86 F	67 F	
19001513	3/31/90	80 F	60 F	
19000899	3/12/90	48 F	45 F	
	3/9/90	61 F	66 F	
19000465	2/11/90	37 F	37 F	
18906445	1/18/90	44 F	44 F	
18906199	12/19/89	40 F	37 F	
18905007	11/20/89	40 F	47 F	
18904442	10/20/89	38 F	45 F	
18903652	9/27/89	45 F	45 F	
18903214	8/24/89	37 F	35 F	
18902798	7/30/89	45 F	49 F	
8902453	6/28/89	48 F	KO2 was tagged out	
			for maintenance	
18901066	5/18/89	39 F	78 F	
				Tyear back
18900984	3/16/89	22.6 F	20.1 F	
8901008	3/13/89	-	53.9 F	
	3/3/89	********	70 F	
	3/1/89		78 F	
18309080	3/1/89	27.3 F		
8806224	10/4/88	17.1 F	12.6 F	
8802991	5/10/88	43.9 F	- Mariana	

DATA KEY: Black: On original Exh. #82 given to IIT

Blue: On Exh. #26 (Steele Memo)

Red: Demon. Aid #4

NUCLEAR REGI	ULATORY COMMISSION
Docket No. 50-424/425-OLA-3	EXHIBITNO. 71 -240
In the matter of Georgia Power C	
Staff Applicant Interv	enor Other
[9 Identified Received	
Date 9/12/98 Williams	17

P-R-O-C-E-E-D-I-N-G-S

CHAIRMAN BLOCH: Good morning. The hearing

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(9:05 a.m.)

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will come to order.

Whereupon,

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KEN STOKES

was recalled as a witness by counsel for the NRC and, having been previously duly sworn, resumed the witness stand, was further examined and testified further as follows:

CHAIRMAN BLOCH: Welcome back, Mr. Stokes. It isn't in every way a great pleasure for you?

THE WITNESS: I figured that you guys came to see me, I'd have to come back and see you.

CHAIRMAN BLOCH: I'd like to remind you that the testimony you're about to give should be the truth, the whole truth, and nothing but the truth, and that it is subject to possible penalty for perjury.

THE WITNESS: Yes.

MR. BLAKE: Judge Bloch, I've distributed to the parties and I've left three copies for the Board of just a half a dozen pages or so. These are extracts from Mr. Stokes' prior testimony on June 3rd, June 5th, and June 6th. And I wanted to make copies for everybody so that he will be able to follow through them and the

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parties will be able to as well.

DIRECT EXAMINATION

BY MR. BLAKE:

Q Mr. Stokes, I've provided you a couple of documents to just aid you in following the questioning.

The first is extracts from when you previously testified here. If you'd look at the top of each page, you'll see a date. That's the date of the transcript, like the first page says "June 3rd," next one "June 5th."

A Yes.

Q And these are called minuscripts. Four pages appear on each page. And you read left to right at the top and then left to right at the bottom. And there are page numbers.

I've also provided you in a black binder a copy of the complete transcripts from those days so that to the extent you want to read around portions that I cite to you, you'll have an opportunity to do that.

Now, let me ask you to review some of these.

First, on the first page, take a look at the bottom two pages, 7,021 and 7,021, particularly beginning with the Board examination at Line 17 on 7,020, reading through the end of that page and the top of the next page, through Line 9 if you would, please. You don't have to read it out loud.

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1	A (Perusing document.)
2	Q Okay.
3	A Okay.
4	Q Mr. Stokes, do you see there that Judge Bloch
5	was questioning you and saying, "I'm sorry. I didn't
6	understand that. At no time did you have poor air quality
7	going into the control systems? How did you know that?";
8	your answer being, "I've been in the diesels for a long
9	time. To my knowledge maybe too long. But, to my
10	knowledge, there's never been I've never witnessed any
11	moisture at or inside the controlled air system at all
12	other than something that I know. There was that one
13	instance I can talk about"?
14	I want you to look at the next page, if you
15	would. This page is dated June 5th, '95. Look at the
16	upper left-hand page, 7,161, and read Lines 4 through 7,
17	your answer there.
18	A (Perusing document.)
19	Q Okay. And you see there that you've said, "I
20	mean, we've never we haven't seen water, I mean, in the
21	past, if that's what you're saying. There's not been any
22	indication of water in the control system or anything of
23	that nature"?
24	A That's correct.
25	Q Now, look at the next page, if you would,

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1	please, in this package, which is also dated June 5th.
2	Look at the upper right-hand page, which is transcript
3	Page 7,170, and read through Lines 3 through 22, please.
4	By way of orientation, I believe this is Judge
5	Carpenter asking you questions, Mr. Stokes.
6	A Okay. You said 3 through 6?
7	Q Three through 22, please.
8	A Twenty-two. Okay. (Perusing document.)
9	Okay.
10	Q Now, you see at the end of that where the
11	questioner says, "And you know it's frivolous to sit here
12	and speculate are we talking about 1 milliliter or water
13	or 10 milliliters of water or what have you because we
14	haven't seen any."
15	And your answer, "That's correct."
16	Now, take a look at the next page, if you
17	would, please, also on June the 5th, the bottom right-hand
18	page on this copy, which is transcript Page 7,284. Read
19	the bottom of that, starting the questioning here by Mr.
20	Hull, the NRC counsel, at Line 15, 7,284. And read, if
21	you would, please, onto the next page through transcript
22	Page 7,285 and then 7,286, all the way to the middle of
23	7,286 about Line 14-15.
24	A (Perusing document.) Okay.
25	Q Now, to ensure you understand that portion of

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1	what you were testifying to, Mr. Hull said, "Have you
2	yourself ever found any water in the diesel pneumatic
3	system at Vogtle?"
4	You said, "No, I haven't."
5	Mr. Hull continued, "And have you ever been
6	made aware that anybody else has found any water within
7	that system?"
8	Your answer, "No, I haven't."
9	Mr. Hull continued, "And given your position
10	at Plant Vogtle, would you think it's highly unlikely that
11	there ever was any water found and that you were not made
12	aware of it?"
13	Your answer, "I think that's pretty unlikely,
14	very unlikely."
15	Mr. Hull's question, "Have you ever been made
16	aware of whether any water was ever found within the
17	diesel logic board?"
18	Answer, "No. We not to my knowledge. I
19	think I had speculated at one time back during start-up we
20	may have found some water in a logic board. And there may
21	have been some water in there, but we never found any,
22	no."
23	And Mr. Hull continues, "And by 'start-up,'
24	are you referring to the initial plant start-up period in
25	the mid 1980s?"

1	Your answer, "That's correct."
2	Continuing to the middle of 7,286, where I
3	asked you to read, Mr. Kohn at the end said, "Your Honor,
4	the questions I was asking referred to April 1990."
5	And you indicated, "I've never seen any
6	moisture in 1990."
7	Take a look at the bottom left-hand page
8	reprinted on this copy, which is transcript Page 7,287.
9	See Lines 6 through 8, where there's a question to you and
10	an answer? Read those, please.
11	CHAIRMAN BLOCH: You mean 7,387, sir?
12	MR. BLAKE: Seven-two-eight-seven.
13	THE WITNESS: (Perusing document.)
14	BY MR. BLAKE:
15	Q Do you see that, Mr. Stokes, where you said,
16	"Were you ever made aware of any water ever being found in
17	any of these surveillance tests?"; "Oh, no, absolutely
18	not" was your answer?
19	A Right.
20	Q Look at the last page now, if you would,
21	please, of this document. This is your testimony on June
22	the 6th, '95 transcript. Would you look at the upper
23	left-hand corner on transcript Page 7,385 and read Lines 2
24	through 5?
25	And you see there where you were questioned,

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1	"And I think, as you've reiterated several times already,
2	you never saw any evidence of actual moisture or water in
3	the diesel pneumatic lines, did you?"
4	And your answer, "No, sir. No, sir, I
5	haven't."
6	Mr. Stokes, in the course of working with Mr.
7	Johnston from Cooper, we learned and divulged to the Board
8	and the parties that in February or March of this year
9	during an outage, Mr. Johnston had found water or moisture
10	in one particular portion, a T-fitting inside the control
11	board and inside the control panel. And he's also
12	indicated that he believed you were there.
13	So the questioning today is: What explanation
14	do you have for your prior testimony if, in fact, you were
15	aware of or involved in this disclosure in February or
16	March of this year?
17	And before I ask you more questions, I want to
18	confirm with you that you understand that the company has
19	waived its privilege on this subject. That is, we're not
20	maintaining an attorney-client privilege or confidential
21	communications on this topic.
22	And I believe Mr. Domby informed you of that,
23	but I want to confirm that you understand that.
24	A Yes.
25	Q And I also want to confirm with you that you

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1	understand that, particularly given that what we're
2	talking about is the accuracy of your prior sworn
2	talking about is the accuracy of your prior sworn
3	testimony and your sworn testimony today, I want to
4	confirm again that you have an opportunity to seek your
5	own counsel in this setting.
6	I understand Mr. Domby talked with you about
7	that, that you opted simply to talk with him and are
8	prepared to talk today about it.
9	A That's correct.
10	Q I don't want to leave any doubt about it
11	because this is serious.
12	A Yeah. That's correct.
13	Q All right. Now, if you would, please, given
14	your past testimony and our review of that and if you
15	want more time to review it, go ahead and take that time.
16	If you don't, then, please, if you would, tell
17	us whether or not you were aware of water or moisture
18	being found in some portion of a pneumatic care system in
19	February or March of this year. And then, if you would,
20	describe how you could have given the answers that you did
21	when you previously testified in June of this year.
22	And if you want to take a break, that's fine,
23	too. It's up to you.
24	A No, I don't think I need to take a break. I
25	don't know how to start off on this one other than to

other than to say, first of all, I mean, obviously I was wrong.

Nothing was intentional there. It's this water or moisture that Mr. Johnston had I guess notified

myself of in February was -- obviously I was notified of
it and considered -- this may sound crazy, knowing all the
proceedings here, but it just never entered my mind in the
hearings because it was -- to me at that time was so

9 | insignificant maybe.

It's not that I ignored it, but it just -- I didn't think of it. It really at the time was insignificant and was analyzed as a technical issue and nothing to the rest of the control air system.

I mean, it's like we were talking about a normal check of the logic system, its sensors, the receivers inside the panel, where we normally do moisture checks.

I guess I had all of that on my mind. And this just didn't even register with me. I mean, all I can say is I apologize for it. But it was in no way a conscious effort to not reveal some knowledge that I had. It was not that at all.

So I don't know what else to say at this point other than, you know, I'm sure I'm going to get a lot of questions on it. But it was not intentional.

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1	Q Well, let me carry it back. Now that your
2	memory has been refreshed on this topic, when did this
3	occur?
4	A It was sometime during the past, a Unit 2
5	outage, I guess towards the end of it. I don't really
6	remember.
7	Q Would February or March of this year
8	A Yeah.
9	Q be the correct time frame?
10	A Yes.
11	Q And what was your knowledge at that time or
12	involvement in this detection of water or moisture? Were
13	you involved in it? Were you there?
14	A I think I was out there. I don't I think
15	Johnston had actually maybe opened one of the T's or
16	something. I'm not I don't actually remember seeing
17	the water myself, but or whether he just I mean, he
18	notified me.
19	I know Mr. Burr was out there also. But at
20	least I was notified of the water situation. And I know
21	where it was located and where he said he you know, how
22	much he said he saw there.
23	The thing that I can possibly recall is that,
24	you know, he may have opened up a little valve or whatever
25	and he said he saw a little fog or something of moisture
AL .	NEAL R. GROSS

Is that the only description that you had of 2 the amount of water, some fog come out? 3 It's in my recollection that that's what it 4 5 was. And what did you do with this information? 6 Well, like I said, as I recall it, again, Burr 7 and myself both were aware, made aware, of it. And it was 8 almost like from Johnston's part that they had, you know 9 -- you know, "We noticed something here." It's a "No. 10 11 Never mind." And once I looked at it and saw where it was, 12 I mean, my opinion is the same thing or was the same thing 13 then. And it is the same thing now. It's really a dead 14 leg, if you will, inside this panel. And going through 15 the whole system and knowing how it should work, there's 16 17 just no way. 18 You know, I guess my initial thoughts then were the same as they are now, too, that it was introduced 19 by some -- at some point. I'm not saying at this 20 particular outage. I'm saying it could have been several 21 outages ago that this water was in there and introduced by 22 INC personnel during the calibration process. I'm saying 23 they possibly could have used water for the calibration or 24 they could have had -- a little less likely, they could 25

to come out of this T line. But that's it.

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have had water in the tygon tubing or something of that 1 nature. 2 But it was very small amount of water in --3 but, yet, large enough that one would think it wouldn't 4 come from the system because there's nothing -- I mean, as 5 I said before, there was still no evidence that at the 6 filter, which is down at the bottom of the panel -- this 7 same air goes right through the filter. 8 And then it tees off and goes about, let's 9 say, four or five feet up the panel and across the panel 10 and over to these particular gauges through 11 one-quarter-inch line. And it's just not -- you know, 12 that's not enough line there to create this much or -- it 13 was only a few drops, two to five drops, I guess, or 14 whatever, but to create pretty much moisture in the lines. 15 Did you pass this information on to anyone 16 else in Georgia Power other than you and Mr. Burr 17 discussing it? 18 Actually, I don't believe we did. I think we 19 took the issue and essentially resolved it and said that, 20 at least among ourselves, there's -- you know, this is not 21 22 a problem. You know, that was discussed with also the 23 vendor, Mr. Johnston, and that's -- I think that's as far 24 as it went, at least from my -- I didn't discuss it with 25

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1	anyone else.
2	Q Was there any written analysis or evaluation
3	done of this?
4	A No, not at that time.
5	Q And your analysis of all of this was what,
6	that it was insignificant?
7	A Insignificant.
8	Q No deficiency card, no other kind of paperwork
9	was generated about this?
10	A No.
11	Q And why, given the discovery of water or
12	moisture or vapor in this, was there not a need to
13	generate any sort of paper in your mind to have this
14	further evaluated by people?
15	A It's like I said. We I didn't, didn't then
16	and still don't, consider it a deficient condition. I
17	mean, there was a DC written, you know, later this year
18	and some subsequent investigations performed, but, like I
19	said, it's it was just something that to me and to
20	Cooper seemed I mean, if I wrote a DC, you know,
21	essentially, it would have to be dispositioned not a DC.
22	It's a you know, it's effectively not a deficient
23	condition.
24	Q And had you ever seen anything like this
25	previously

2	Q in the control board system or the control
3	panel or any other portion of the system?
4	A No, sir.
5	Q Now, you just said that subsequent to this
6	there was a DC written, an additional. Tell me about
7	that.
8	A After I spoke to Mr. Domby, I believe it was,
9	at the plant, just immediately after that, I guess our
10	plant management was notified. And a DC was written. And
11	subsequent checks were made on the Unit 2 diesels and the
12	Unit 1 diesels at these particular ports that we're
13	talking about.
14	No water or moisture was found in the Unit 2
15	lines. And we found anywhere from a trace of moisture I
16	think on one of the banks on 1A to like one and a half
17	millimeters or something on one bank on 1B.
18	And so we did that check. And once they found
19	the moisture in those particular gauges, those particular
20	lines, T's, if you will, INC personnel then took dew point
21	measurements at the air receivers.
22	And also I had requested that they take a dew
23	point measurement inside the panel at the there's a
24	test connection right there on the downstream side of the
25	pressure regulator on the 60-pound side. So we had them
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take dew point measurements there also. And all the dew points on each of the ones with -- that had moisture checked out within spec, you know, just -- there's no problem with dew points.

Additionally, not at the same time, but I think it was the week after we -- the NRC had a special representative come down and check out the situation also. And so we went back out with him and repeated the same tasks. I think it was just on 1A and 1B, where we found the water before.

And I think they -- I'm not sure what Randy found there. I think he was -- I wasn't with him for these particular tests. But the one he found just like a, if you will, trace of moisture in one that still just had not been blown out, properly blown out. So he noted that. They took additional dew point measurements again, and which again checked out to be within spec.

And I suggested to Randy that we also -there's another dead leg there on the pneumatic side,
where the pneumatic 60-pound air gauge is located on the
same front of the panel. I suggested that they may want
to just pull that line off also and take a look in that T
or pull the cap off and take a look inside the T and see
what it's like on the -- you know, on the 60-pound side.
And they did that and found no moisture there.

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And also I think they went in and checked the filter again. On each instance I think I forgot to mentioned we actually opened up the petcock on the bottom of the filter and -- to see if we got any moisture coming out of that point. And we did not.

So then I had somebody independent, if you will, from our Southern Company Services design group come down and disposition that deficiency card. And that's been completed.

And what was the disposition?

A Essentially it's like I said. I asked him to do a calculation as to how much area I guess it would actually take to produce that amount of moisture in the line. And, you know, I think he came up with something like 1.7 cubic feet or something. These numbers are just a guesstimation on top of my head. I don't have a copy of this DC.

And then the amount of line between, say, the filter and these particular gauges, it comes out to like 1-3 cubic feet. So, you know, you could hardly get a trace of moisture from that amount of air if you were saying it's coming from the system and you don't see any moisture in the filter and you don't see any moisture anywhere else.

So his conclusion was that it was very likely

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1	that it was introduced at some point in time during the
2	calibration process.
3	Q Who is "his" in that sentence?
4	A The person doing the disposition? His name is
5	David Lisenby.
6	Q And he's an engineer?
7	A Yes, he's
8	Q Where?
9	A He works in Southern Company Services now. He
10	has had prior experience with start-up on the diesels
11	also. He helped me as a start-up engineer.
12	But he also now I believe he's on the
13	Farley project as of right now. He was transferred over
14	to there in not really a QA position but something
15	relating to QA. But he is a design mechanical engineer.
16	ADMINISTRATIVE JUDGE CARPENTER: Mr. Blake, if
17	I can interrupt?
18	MR. BLAKE: Yes, please.
19	BOARD EXAMINATION
20	ADMINISTRATIVE JUDGE CARPENTER: Twice, Mr.
21	Stokes, you made reference that your thought is that this
22	water got in during a calibration procedure?
23	THE WITNESS: Yes, sir.
24	ADMINISTRATIVE JUDGE CARPENTER: What was
25	being calibrated?
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1	THE WITNESS: Just those gauges, the starting
2	
3	ADMINISTRATIVE JUDGE CARPENTER: Not the
4	calgons.
5	THE WITNESS: No, sir. I'm sorry.
6	ADMINISTRATIVE JUDGE CARPENTER: So tell us
7	exactly what your thought is.
8	THE WITNESS: That the these are 2
9	300-pound gauges that sit on the face of the panel. And
10	my specific thoughts are and surely they're just
11	thoughts because the people that calibrated these gauges
12	in those times are long gone, but in start-up.
13	You know, this water could have been could
14	have been in there for several outages the way I see it.
15	It doesn't have to be it didn't have to be introduced
16	in the previous outage because of the way they do the
17	calibration.
18	The system is always depressurized when they
19	calibrate these gauges. So, you know, you open up the T.
20	And if the T is sloped like this, maybe you get a little
21	water run out if they install water in there.
22	But otherwise if '.'s like this or, you know,
23	up a little bit, then the small amount of water that we're
24	talking about, it just could stay there. And it could
25	collect over a couple of outages or several outages.
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ADMINISTRATIVE JUDGE CARPENTER: How is water involved in the calibration?

THE WITNESS: Well, they -- like I said, these are kind of high-pressure gauges. They actually -- they're not required by procedure or were not required by then. They may be now from this point on, but they were essentially able to use water for calibration instead of air, you know.

So you could actually -- it's just a diaphragm-type fitting in there. In other words, you know, you'd connect the water to the back of the gauge. You're talking about a length of maybe one-quarter or three-eighths-inch tubing that's about like this to go to the back of the gauge so they would just connect on there, isolate from the system here. And they could actually use water there if they wanted to. Now, it's not necessarily usually done on instrumentation systems, but surely they could.

And, next of all, which is more than likely, I would say, is that they had moisture, a little bit of moisture, inside the tygon tubing that they would connect to the back of this gauge. But it's still I guess a possibility.

DC, these are the most likely methods of the water

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1	entering into the gauges.
2	ADMINISTRATIVE JUDGE CARPENTER: I'm still not
3	clear when you say they "calibrate" the gauge. Do they
4	compare it with a referee gauge or what?
5	THE WITNESS: I don't
6	ADMINISTRATIVE JUDGE CARPENTER: That's not a
7	deadweight operation, is jt?
8	THE WITNESS: No, no. They would I haven't
9	witnessed their calibration procedures as to if they
10	connect another you know, they'll pump it up to each
11	particular you know, they'll probably check it at maybe
12	6 or 8 different locations along the gauge range from zero
13	to 300. I gu ss it is a comparative type thing, but, you
14	know, with a known calibrated gauge.
15	ADMINISTRATIVE JUDGE CARPENTER: So it's your
16	testimony you don't know?
17	THE WITNESS: Yeah 1'm not the one doing the
18	calibration and I'm not I can't really speak as to how
19	they do it.
20	ADMINISTRATIVE JUDGE CARPENTER: Do you happen
20	ADMINISTRATIVE JUDGE CARPENTER: Do you happen to bring the procedure with you, a copy of the procedure?
21	to bring the procedure with you, a copy of the procedure?
21	to bring the procedure with you, a copy of the procedure? THE WITNESS: A copy of the calibration

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1	ADMINISTRATIVE JUDGE CARPENTER: Thank you.
2	ADMINISTRATIVE JUDGE MURPHY: Do you know how
3	often those gauges are calibrated?
4	THE WITNESS: Yes. Every 18 months.
5	ADMINISTRATIVE JUDGE MURPHY: Every outage or
6	
7	THE WITNESS: Yes, sir.
8	ADMINISTRATIVE JUDGE MURPHY: every 18
9	months?
10	THE WITNESS: That is every outage, every 18
11	months, every refueling outage.
12	CHAIRMAN BLOCH: Do you know I'm sorry. I
13	thought you were done.
14	ADMINISTRATIVE JUDGE MURPHY: Did you talk
15	with anybody to find out how those gauges are calibrated?
16	THE WITNESS: Now I know how they're
17	calibrated. Generally they use a nitrogen boutle to make
18	the connections. We talked to several of the INC people
19	who have done them in the past, maybe at the past outage.
20	And they typically would use a nitrogen bottle.
21	ADMINISTRATIVE JUDGE MURPHY: Were you able to
22	find in your investigation by talking with anyone that
23	they did use water?
24	THE WITNESS: No. No, sir.
25	CHAIRMAN BLOCH: And do you know whether it's

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1	feasible with the equipment that they use to use water?
2	THE WITNESS: Yes, absolutely.
3	CHAIRMAN BLOCH: Would you like them using
4	water in that location?
5	THE WITNESS: To be honest with you, it would
6	not bother me if it was put in there if they were
7	controlled in a fashion to make sure that they take it
8	back out; blow it out, in other words, water on this
9	calibration, particular calibration.
10	I guess this is my personal opinion. It would
11	not bother me that much as long as the controls were there
12	to make sure the water is removed because it would be an
13	easy way to calibrate these gauges.
14	CHAIRMAN BLOCH: You wouldn't be concerned
15	about the possibility that a valve could be partially
16	opened?
17	THE WITNESS: No. I mean, the fact is that
18	it's like I say. If you go through the proper motions of
19	making sure the water is back out of there, which could
20	mean opening a valve and blowing it out after the system
21	is pressurized, then I wouldn't have a problem because the
22	tubing comes up. It comes up, goes over. It goes down
23	and then over to the gauges like this. And, you know,
24	anything that would
25	CHAIRMAN BLOCH: You might want to redescribe

1	that because the hand motion isn't even something I can
2	describe.
3	THE WITNESS: This is good for the courtroom.
4	It's just that the tubing will go maybe this has no
5	bearing anyway, but
6	CHAIRMAN BLOCH: If you want, you can draw it
7	on the blackboard behind you. And, with luck, we can
8	print a copy of it.
9	THE WITNESS: Well, I think I can describe it.
10	Just at the bottom
11	ADMINISTRATIVE JUDGE CARPENTER: Which tubing
12	are /ou talking about?
13	THE WITNESS: This well, the
14	one-quarter-inch tubing that would go up to the back of
15	these pressure gauges, like the 300-pound pressure gauge.
16	MR. BLAKE: May I interrupt just for a minute?
17	We have distributed previously to the parties and I can
18	put in front of Mr. Stokes a schematic. And maybe by
19	reference to the schematic, he can say, "This is going
20	vertically. This is going horizontally. This is going,"
21	et cetera, and we'll have something that the record will
22	be able to follow.
23	CHAIRMAN BLOCH: But we'll have t mark it for
24	the record.
25	MR. BLAKE: Yes. I can mark it as GPC's next

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1	exhibit, which would be II-188.
2	CHAIRMAN BLOCH: How will we find it?
3	ADMINISTRATIVE JUDGE MURPHY: What is it that
4	we're marking?
5	MR. BLAKE: It's the second sheet in the
6	package which was distributed yesterday to the Board,
7	earlier to the other parties. It's an engine control
8	panel schematic by Transamerica Dilavalve. This is
9	actually indicated as
10	THE WITNESS: Can I
11	MR. BLAKE: a Sheet 2 of 9.
12	THE WITNESS: Can I say something now?
13	MR. BLAKE: Yes.
14	THE WITNESS: This whole thing may be
15	irrelevant anyway, though, because you're asking what my
16	personal feelings were. And they seem to differ from the
17	plant's. So they're not going to be able to use water in
18	the future.
19	The way I understand it on this DC, they have
20	dispositioned part of it to not use water at all. So the
21	you know, the proper the steps would be added to
22	whatever procedures to require them not to use water.
23	So we probably really don't need to describe
24	this.
25	MR. BLAKE: Judge Bloch, this one-page

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1	document that I'm going to show the witness is a
2	schematic. I understand in the lower right-hand corner of
3	it the number is 09-500-76021. And this is actually Sheet
4	2 of 9 from that drawing.
5	CHAIRMAN BLOCH: I can't tell that it's 21.
6	Are you sure?
7	MR. MICHAEL KOHN: May I ask what the purpose
8	is of showing it to the witness?
9	MR. BLAKE: Simply to determine for sure on
10	this schematic what the T is, that we're all in the same
11	agreement and then, to the extent he can use this, to
12	describe what's a vertical line, what's a horizontal, as
13	he was trying to do earlier.
14	CHAIRMAN BLOCH: I'd point out that this one
15	page is an unusual one page in that it's equivalent to 2 8
16	and a half by 11 pages, just in describing it.
17	MR. BLAKE: I need to make three copies during
18	a break for the court reporter.
19	ADMINISTRATIVE JUDGE MURPHY: What did we mark
20	it as?
21	MR. BLAKE: GPC II-188.
22	CHAIRMAN BLOCH: It may be marked.
23	(Whereupon, the aforementioned
24	document was marked for
25	identification as GPC Exhibit Number
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II-188.)

FURTHER DIRECT EXAMINATION

BY MR. BLAKE:

Now, Mr. Stokes, if you look at the bottom of this schematic, it was our prior understanding that the T we were talking about appeared, the two T's, actually, for one control panel --

MR. MICHAEL KOHN: Excuse me. The witness has testified about numerous times water had been coming out of certain T's. So you said "the two T's we have been talking about." Are you referring to the Johnston -- the initial finding of it or --

MR. BLAKE: I don't even know at this point, Michael, whether or not it's Johnston or just our own conversations subsequent to this, but I wanted to just confirm with him that wherever it was found on any of these --

MR. MICHAEL KOHN: Thank you.

BY MR. BLAKE:

Q In the lower portion of this schematic, Mr. Stokes, down, the T's that we believe that were involved here were between the Number 40 in the circle and the gauge symbol just to its right. And the little t that's indicated there we believed was what we're talking about. Is that correct?

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1	A That's correct.
2	Q And so this is actually before the regulator
3	and filter
4	A Yes.
5	Q and in the 250-pound portion of the system?
6	A Yes.
7	Q Now, does this schematic aid you in trying to
8	describe what you were saying to Judge Carpenter about the
9	portions of the lines which run up vertically, where air
10	would be coming into the system by going up vertically,
11	and another portion horizontal run and then a vertical
12	down run to what you described as the gauges.
13	Were you able to say with regard to this
14	schematic what portions of these lines run up and down or
15	sideways?
16	A Yeah. I can try here. These two valves just
17	to the left of where you're looking, speaking about,
18	earlier, they're labeled "81," both of the isolation
19	valves coming from E31L and E31R.
20	Those are the three-eighths-inch lines that
21	come into the panel at the lower left-hand side. Those
22	lines will come up vertically. And the isolation valves
23	will it will then go through the isolation valves.
24	And at that point, actually, the lines tee off
25	and the three-eighths-inch line goes over to the filter
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1	regulator. And at the same time a smaller
2	one-quarter-inch line will then go up the side of the
3	panel to a few of these pressure switches that you see
4	along the line and then continue
5	Q Pressure switches are indicated on this as
6	Number 40s?
7	A The 4Ns, 4N, 4N2, 4, the P5s, those type
8	pressure switches.
9	So, anyway, the quarter-inch line will go up
0	the side of the panel, all the way to the top of it,
1	essentially. Then it will cross, go at a horizontal run
2	across the face of the panel and then up.
3	There's a little collection box in the back of
4	in the back of the panel that houses some of the oils
5	and waters that may come into the panel so that if you
6	were to spring a leak, then it would kind of collect in
7	this little box.
3	So then this run would kind of go up and over
9	that box, if you will, and then back down vertically
0	downward, on the other side of the panel face, and then
1	across, horizontally across to these two pressure gauges,
2	one for the right bank and one for the left bank, through
3	their own isolation valves, if that helps at all.
4	BOARD EXAMINATION

CHAIRMAN BLOCH: These physical descriptions

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25

1	are not on this table, which this is a schematic and
2	doesn't show the physical changes. Is that correct?
3	THE WITNESS: Correct. That's correct.
4	CHAIRMAN BLOCH: I take it pressure switches
5	are "PS"?
6	THE WITNESS: Yes, sir.
7	CHAIRMAN BLOCH: Mr. Blake?
8	MR. MICHAEL KOHN: Your Honor, we have an
9	understanding of the witness' testimony that the line went
10	by the pressure switches. On the diagram that we're
11	looking at, the line does not go by the pressure switches.
12	It taps off before the pressure switches.
13	THE WITNESS: Yeah. It's I was going to
14	say this is a schematic, you know, and it's as they go
15	up the side, you can't I mean, as they go up, then
16	they're going to tap off to these pressure as that one
17	particular line will go up, then it will tap off.
18	VOIR DIRE
19	BY MR. MICHAEL KOHN:
20	Q So, then, you're saying the schematic is
21	wrong?
22	A No, I'm not. I'm saying the schematic doesn't
23	show you precise runs of how equipment is connected. This
24	is not an ISO. An ISO would show you precisely.
25	Q I understand that. My question is: Is the
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1	tap before the pressure switch or after the pressure
2	switch?
3	A That particular tap that goes to these lines,
4	if you want to call it that way this is just a
5	convenient place to put it on the drawing. None of this
6	stuff lines up as it is in the panel. I mean, this is
7	just a schematic drawing.
8	BOARD EXAMINATION
9	CHAIRMAN BLOCH: If it comes off there, the
10	schematic isn't useful at all. The only thing I think you
11	can get from a schematic is where things come off the
12	line. You don't get the physical condition.
13	But I don't understand how this seems to tap
14	before the pressure switches. If it taps after the
15	pressure switches, it's just wrong.
16	THE WITNESS: Yeah. What would it matter if
17	it tapped after the pressure switches?
18	CHAIRMAN BLOCH: I have no idea except that
19	it's not an accurate schematic if it does.
20	THE WITNESS: Sure. I mean, pressure is
21	pressure, pressure before or pressure after. I mean, what
22	does it matter?
23	CHAIRMAN BLOCH: Well, I imagine we could find
24	some problem for which it would matter, but I don't know
25	one right now.

1	THE WITNESS: I'm just saying now it's
2	irrelevant. You're not trying to place particular tap-off
3	connections or for anything on these schematics.
4	I mean, it doesn't show you either that it
5	taps off and goes over to the reg to the filter.
6	ADMINISTRATIVE JUDGE MURPHY: Well, can we
7	confirm that the T that we're talking about
8	THE WITNESS: I thought that's what we were
9	doing.
10	ADMINISTRATIVE JUDGE MURPHY: is, in fact,
11	between the gauge and the isolation valve?
12	THE WITNESS: Yes.
13	ADMINISTRATIVE JUDGE MURPHY: And the gauge
14	isolation valve?
15	THE WITNESS: Yes.
16	ADMINISTRATIVE JUDGE MURPHY: That's a fact
17	true?
18	THE WITNESS: That's a fact.
19	ADMINISTRATIVE JUDGE MURPHY: Okay.
20	FURTHER DIRECT EXAMINATION
21	BY MR. BLAKE:
22	Q And they tap off after the isolation valve,
23	which is indicated to be Number 81 on the schematic, and
24	before the pressure regulator, before the filter and the
25	pressure regulator, which are indicated to be 19 and 20?
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1	The tap-offs to these gauges, which include the T's in
2	question, come between Isolation Valve 81 and Filter and
3	Regulator 19 and 20?
4	A Yes.
5	Q Mr. Stokes, the disposition
6	ADMINISTRATIVE JUDGE MURPHY: Just a second.
7	(Pause.)
8	ADMINISTRATIVE JUDGE MORPHY: Okay.
9	BY MR. BLAKE:
10	Q Your disposition of this initially with regard
11	to Mr. Burr's involvement and yourself was to describe it
12	as insignificant. Did Mr. Johnston play a role in that
13	determination?
14	A Well, obviously it's our determination, but
15	yes, we you know, we would obviously consult his
16	opinion also. And he to me the way I remember it
17	and I don't remember his words, but it's like well, to
18	him it was a "No. Never mind" also.
19	Q Did he also play a role in the subsequent
20	inspection of the additional T's that were done more
21	recently or the evaluation that followed?
22	A Mr. Johnston?
23	Q No, sir.
24	MR. BLAKE: Okay. I don't have any more
25	questions, Judge Bloch, on this. I don't know what order
F 34 15	NEAL B. GROSS

NEAL H. GHUSS

1	to suggest to you.
2	BOARD EXAMINATION
3	ADMINISTRATIVE JUDGE MURPHY: I have a quick
4	one. Earlier when you were talking about the NRC doing
5	their inspection, you mentioned a person by the name of
6	Randy?
7	THE WITNESS: Yes.
8	ADMINISTRATIVE JUDGE MURPHY: Is he an NRC
9	inspector?
10	THE WITNESS: I don't know what his title is,
11	but he's out of Atlanta.
12	ADMINISTRATIVE JUDGE MURPHY: Do you know what
13	his name, full name, is?
14	THE WITNESS: Yes, Randy Moore.
15	ADMINISTRATIVE JUDGE MURPHY: Mailor?
16	THE WITNESS: Moore.
17	ADMINISTRATIVE JUDGE MURPHY: Moore?
18	THE WITNESS: Uh-huh.
19	ADMINISTRATIVE JUDGE MURPHY: Thank you.
20	CHAIRMAN BLOCH: Mr. Kohn?
21	MR. MICHAEL KOHN: First, the witness has
22	testified about the disposition of the deficiency card
23	and, further, engineering analysis, none of which has been
24	produced to intervenor. And I request that that be
25	produced at this time.

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1	MR. BLAKE: I don't understand what you're
2	talking about. I thought we had already given you the
3	deficiency card.
4	MR. MICHAEL KOHN: Yes, but not the final
5	disposition of the deficiency and/or
6	MR. BLAKE: Well, okay. We can look and see
7	if there's more paper. I had understood that we had
8	provided whatever paper we had received. If there's
9	something more, I'll take a look.
10	MR. MICHAEL KOHN: I think there's also
11	documentation from a Mr. Lisenby. And the witness has
12	also mentioned an engineering analysis, I believe, none of
13	which has been produced.
14	MR. BLAKE: I understand the request. I
15	thought we had given whatever we had received.
16	ADMINISTRATIVE JUDGE CARPENTER: Would you
17	expect to provide this in this proceeding?
18	MR. BLAKE: Yes. I had anticipated, Judge
19	Carpenter, providing materials on this topic as soon as we
20	received them and just pass them on to the other parties.
21	And I thought we had done that. If there's something more
22	that was learned from this, then I'll obtain it and pass
23	it out.
24	ADMINISTRATIVE JUDGE CARPENTER: I might
25	apologize for my lack of attendance, but I'm not aware of

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-	seeing any or these papers, the engineering analysis.
2	MR. MICHAEL KOHN: No. Intervenor is certain
3	we have not seen copies of this material.
4	CROSS-EXAMINATION
5	BY MR. MICHAEL KOHN:
6	Q Mr. Stokes, can you go over with me now how
7	you originally learned that Mr. Johnston had provided
8	information about water being found in February or March
9	that was brought to the attention of this Licensing Board?
.0	A How Mr. Johnston had
1	Q How you learned that that issue had been
2	brought to the Board or had been detected.
.3	A I don't my first knowledge of that I guess
4	was with my meeting with Mr. Domby on site.
.5	Q What did Mr. Domby tell you?
.6	A Again, from my recollection, I think he just
7	went over again some of my previous testimony and then
.8	asked had I again, had I noticed or ever noticed or
9	been made aware of moisture inside the control panels.
20	And he said at any time, you know, including this year.
21	And then I forth came. I mean, I said, "Yes."
22	So we then went through the whole situation that we went
23	through here as to how I became aware of it.
24	Q And did Mr. Domby take notes of that meeting?
25	A I believe so.
Part of	

1	MR. MICHAEL KOHN: Intervenor also requests
2	that those notes be produced.
3	BY MR. MICHAEL KOHN:
4	Q Mr. Stokes, you said "then" you "forth came."
5	Did something happen between the time Mr. Domby confronted
6	you and that made you realize this or is it something that
7	Mr. Domby told you?
8	A I don't know, to be honest with you. I really
9	don't remember what spurred it.
10	Q You don't remember the triggering event?
11	A I don't.
12	Q Well, could it have been the fact that Mr.
13	Burr called you up?
14	A No.
15	Q Mr. Burr didn't call you and tell you what was
16	happening?
17	A No.
18	MR. BLAKE: You may be misremembering my
19	report. I hope that's what it is and that you're not
20	trying to mislead the witness. But what I reported was
21	that when Mr. Domby talked with Mr. Stokes, which was
22	first, and then he intended to go and talk with Mr. Burr
23	
24	THE WITNESS: It was the other way around.
25	MR. MICHAEL KOHN: Thank you.
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1	MR. BLAKE: just simply by coincidence that
2	
3	THE WITNESS: That's correct.
4	BY MR. MICHAEL KOHN:
5	Q So, then, Mr. Burr called you
6	A No. Well
7	Q after your conversation with Mr. Domby?
8	A Yeah, either one or the other. I don't
9	remember if I called him or he called me, but it wasn't
10	about this. It's just that, you know, we're constantly
11	exchanging information throughout the day in our normal
12	work process.
13	And, as an "Oh, by the way," I slipped out and
14	made the mistake of telling him about our conversation or
15	my conversation with Mr. Domby. So I was at fault there.
16	Q As I understand it, then, Mr. Domby came into
17	the room and said, "Can you tell me whether essentially
18	you have any recollection of finding water at any time,
19	including up to the present?"
20	And when he asked you that, you said, "Yes."
21	A Yes.
22	BOARD EXAMINATION
23	CHAIRMAN BLOCH: Is the way that Mr. Kohn told
24	it this is Judge Bloch. Is that a full version or did
25	he give you any preface as to why he was coming to speak
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+	to you before that?
2	THE WITNESS: I don't believe he did.
3	FURTHER CROSS-EXAMINATION
4	BY MR. MICHAEL KOHN:
5	Q You've had previous conversations with Mr.
6	Burr about whether water had been found in the system,
7	hadn't you?
8	A Oh, yes. Yes.
9	Q You had conversations with Mr. Burr about
10	whether he had recollection of fluid being drained out of
11	the system, out of the pneumatic system, hadn't you?
12	A Yeah. I mean, I don't remember the specific
13	conversations, but yeah, we, I mean, obviously talked
14	about had he any recollection of water in the system, in
15	the receivers, or, you know, anywhere else, like I said,
16	anywhere in the system.
17	Q And that happened back in when is the first
18	time you recall having that conversation with Mr. Burr?
19	A Well, at least before the I guess my
20	previous well, it's been off and on for five years, but
21	I mean, I don't know. I guess the last time is just
22	prior to my last testimony.
2.	Q And did Mr. Burr as I understand, you
24	talked to Mr. Burr after I played a tape for him where
25	there was that segment that water poured out of it?
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1	A Un-huh.
2	Q All right. And did you recall Mr. Burr
3	telling you at that time that he could hear the phrase
4	"Water poured out of it"? Did you discuss that with him?
5	A Yeah. I think this was prior testimony like
6	we went through before. If I remember right, I think at
7	first he had said that he remembered that when it was
8	suggested to him.
9	And then later when he listened to it, he
LO	wasn't sure. It was just something that you know, it's
11	just kind of garbled. And you can't really, really
1.2	understand it.
1.3	Q And what date did Mr. Burr tell you it was
14	garbled and he couldn't hear it?
15	A I don't remember. Sometime earlier this year.
16	That may not be his specific words, but, you know, I guess
17	what I'm trying to say is that he was unsure. You know,
18	the more you listen to it, he just became unsure.
19	Q So your understanding from Mr. Burr is the
20	more he listened to it, the less sure he became of what
21	was on the tape?
22	A The way I remember it. And it seems like he
23	said that it well, I don't remember his specific words.
24	Q Did you review
25	A You should probably ask him.

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1	Q the portion of Mr. Burr's deposition where
2	he went over what he heard on the tape?
3	A Yes, I remember going through that.
4	MR. MICHAEL KOHN: Okay. Your Honor, I would
5	like to mark as Intervenor's II-241 a segment of Mr.
6	Burr's deposition.
7	MR. BLAKE: Well, Judge Bloch, I'm really
8	quite troubled by taking advantage of this difficult
9	recall of Mr. Stokes to go back into an entirely different
10	substantive subject area, which has been subject of a good
11	deal of cross-examination, both when Mr. Stokes was
12	previously here and when Mr. Burr was here, this business
13	of water poured out and what that was all about, an
14	entirely different topic, covered previously and in my
15	view not appropriate for today's questioning.
16	CHAIRMAN BLOCH: Mr. Kohn, a question I want
17	to ask I'd like you to reflect before you answer is
18	whether the argument you're making is an argument for the
19	Board or whether you really need testimony about this in
20	order to make the argument later in findings
21	MR. MICHAEL KOHN: No.
22	CHAIRMAN BLOCH: new testimony.
23	MR. MICHAEL KOHN: No. I guess we could
24	simply just mark the document and admit it as an exhibit.
25	MR. BLAKE: Oh, no. We're not going to go
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1	along with that either. This is Mr. Burr's deposition.
2	Mr. Burr was here. Mr. Burr appeared as a witness. He
3	could have asked him about it at that point, but he ducked
4	asking Mr. Burr about his deposition and what the subject
5	was. He's now trying to put it into evidence through
6	another witness.
7	MR. MICHAEL KOHN: Mr. Blake is wrong.
8	Intervenor did not call Mr. Burr. Intervenor reserved his
9	rights to call Mr. Burr. And we said the reason we
10	weren't calling Mr. Burr was because right now, as we saw
11	our case, it was dealing with the Ajluni admissions and we
12	weren't sure whether we needed him for any other reason.
13	We have not rested our case. We still have
14	the right to call Mr. Burr. And the fact of the matter is
15	that Mr. Burr signed his deposition, corrected his
16	deposition. And Georgia Power submitted these portions of
17	it in the motion for summary judgment, I believe.
18	So it's not that there's any surprise or
19	anything else. It's a fact.
20	CHAIRMAN BLOCH: You haven't addressed why
21	it's related to this matter.
22	MR. MICHAEL KOHN: It's related because the
23	witness has testified that he didn't remember about water.
24	And now he's testified that he's had repeated
25	conversations with Mr. Burr about water and how did it
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1	you know, what about this jar. And he said for the past
2	five years he's had repeated conversations about water.
3	All of a sudden he and Mr. Burr find water and
4	it's not there's no testimony. He can't remember it.
5	And now we go and say Mr. Burr calls him up and says,
6	"Yeah. I listened to a tape, and I heard 'just poured out
7	of it.' And I think it might be water or something."
8	And now this witness testifies that Mr. Burr
9	is now changing his mind and that he can't hear "just
10	poured out of it." It goes to the credibility of the
11	witness with respect to the introduction and detection of
12	water in the system.
13	CHAIRMAN BLOCH: So you think your strategic
14	position has changed because of this new testimony? And
15	that tape is not in evidence?
16	MR. MICHAEL KOHN: The portion of the
17	deposition is not in evidence.
18	CHAIRMAN BLOCH: The portion of the deposition
19	shows what in your opinion?
20	MR. MICHAEL KOHN: That Mr. Burr heard "poured
21	out of it" on the tape.
22	CHAIRMAN BLOCH: He said that?
23	MR. MICHAEL KOHN: Yes, on three separate
24	occasions, and also submitted a signed correction to his
25	deposition, sworn under oath, and did not correct any of
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1	those statements.
2	MR. BLAKE: Why does he have to correct it?
3	If that's what he said in his deposition in 1994, before
4	any of this occurred, what do you mean "correct" it?
5	CHAIRMAN BLOCH: We believe that intervenor
6	has demonstrated enough so that he could call Mr. Stokes
7	if he chooses excuse me Mr. Burr if he chooses to do
8	so or the parties could arrange an agreement to have this
9	portion of the deposition admitted.
10	MR. MICHAEL KOHN: Thank you, Your Honor. I
11	guess we can discuss that during a break.
12	CHAIRMAN BLOCH: That's an excellent idea.
13	ADMINISTRATIVE JUDGE CARPENTER: Mr. Blake, I
14	think I misspoke. There's a large bunch of papers in my
15	office which I need to go retrieve.
16	MR. BLAKE: But I think you didn't entirely
17	misspeak because I don't know that we have seen the
18	evaluation which Mr. Stokes talked about today either,
19	Judge Carpenter. There are
20	ADMINISTRATIVE JUDGE CARPENTER: I looked
21	through them because I thought maybe Mr. Stokes was going
22	to lead me. I'm surprised.
23	MR. BLAKE: I think we still have some more
24	work to do.
25	CHAIRMAN BLOCH: Take a 10-minute break now.

1	(Whereupon, the foregoing matter went off the
2	record at 10:08 a.m. and went back on the
3	record at 10:20 a.m.)
4	CHAIRMAN BLOCH: While we were off the record,
5	Georgia Power has distributed a document to the parties
6	and the Board consisting of the notes of Art Domby, the
7	meeting he had with Mr. Stokes.
8	BOARD EXAMINATION
9	CHAIRMAN BLOCH: Mr. Stokes, before we go any
10	further, I'd like to clarify the extent of your memory of
11	what happened when Mr. Johnston first came to tell you
12	about the moisture. Do you have much recollection of
13	those events?
14	THE WITNESS: You mean after he told me or the
15	whole process?
16	CHAIRMAN BLOCH: Yeah, the process of his
17	telling you.
18	THE WITNESS: I just think we were out there
19	working on
20	CHAIRMAN BLOCH: Well, I just asked you if you
21	had much memory of it.
22	THE WITNESS: Very little. I mean, it's like,
23	like I said, we were out working on something. And he
24	says, "Oh, by the way," you know, "we found a little fog"
25	or whatever "coming out of the" you know, these
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1	particular gauges, that type thing.
2	So as far as having a lot of memory around
3	that, I guess that's about as
4	CHAIRMAN BLOCH: Did he say anything about why
5	he came to you about that fog?
6	THE WITNESS: He didn't say why he came, but,
7	I mean, it's just something out of the ordinary that
8	you know, that they don't first of all, I don't know
9	why he was checking that particular point, but because
10	I don't think it's a standard place. But, anyway, I guess
11	the fact that they did and he found something there in the
12	way of moisture. So I guess he let it be known to Georgia
13	Power personnel.
14	CHAIRMAN BLOCH: So did you have any
15	discussion about the possible significance of this find?
16	THE WITNESS: Like I said, I don't recall that
17	particular discussion other than the fact that he didn't
18	seem to think very much of it himself either the way I
19	remember it. And I
20	CHAIRMAN BLOCH: Did you have to do at least a
21	little mental gymnastics of whether or not the moisture
22	had come from within the control system?
23	THE WITNESS: Yes.
24	CHAIRMAN BLOCH: And what at that time led you
25	to believe that there was no possibility that the moisture
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could have come from within the control system?

THE WITNESS: As I stated sort of before, the location of the filter down at the bottom of the panel, that's where the air is going to enter. Nothing was found there. No evidence of moisture, no evidence of anything was -- related to moisture was found in the filter through the blowdown process or through the inspection process that occurred during the 18-month outage.

And it's -- like I was saying earlier, it's just a short run of tubing, one-quarter-inch tubing, from that point. By the way, that is the low point at the filter. And that's just maybe four or five feet of one-quarter-inch tubing from that point up and over to those gauges.

It's very unlikely that -- I mean, why would moisture tend to want to form in one place and not the other place, surely the higher place and not the lower?

It's just it made no sense.

And the rest of the system, our normal checks, checked out fine. We had no evidence of moisture-related problems in the rest of the system, where we always check. And this is a dead leg. And so it was introduced by we felt the most likely thing, as we still do, is it was introduced by calibration.

It's not going anywhere. It's just going to

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1	sit there, I mean, until somebody blows it out. There's
2	no way for it to travel throughout the system.
3	CHAIRMAN BLOCH: So you were so confident of
4	that at the time that you were convinced that a deficiency
5	report was not required?
6	THE WITNESS: Yes.
7	ADMINISTRATIVE JUDGE CARPENTER: Before we
8	resume, Mr. Blake, in this stack of papers which Mr.
9	Lamberski had provided to the Board, can you tell me
10	whether this engineering analysis of the yield of water
11	from some particular volume of air is included in there?
12	MR. BLAKE: I do not believe it is there. We
13	have just placed a call to the plant to find out about
14	this engineering evaluation that Mr. Stokes referred to
15	and whether or not there are any other pieces of paper
16	related to this event, Judge Carpenter. And I'll be able
17	to report back to you.
18	ADMINISTRATIVE JUDGE CARPENTER: Then I'll
19	stop looking for them.
20	FURTHER CROSS-EXAMINATION
21	BY MR. MICHAEL KOHN:
22	Q Mr. Stokes, can you tell me what documents you
23	reviewed let's break it into discrete areas since
24	you learned that you were going to be a witness and
25	testify again in this proceeding? Since you learned that
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1	the issue of water had been Mr. Johnston had identified
2	finding water and you knew that you were going to be
3	testifying again in this proceeding, can you tell me what
4	documents from that point forward you reviewed related to
5	this issue?
6	A The only thing that I did in relation to that
7	issue was to go through the actual inspections of the
8	other engines and then work with the disposition of the
9	deficiency card.
10	Anything related to that particular issue
11	you're talking about? That's all that I I didn't do
12	any other special reviews that I recall.
13	Q Do you have the completed deficiency card?
14	A Not with me, no.
15	Q And do you have the engineering report?
16	A No. I didn't bring any documents with me.
17	Q Did you know you were going to be testifying
18	about those documents?
19	A I knew I was going to be just testifying.
20	Nobody I mean, I can't anticipate what all documents
21	that may be required.
22	Q Did you talk about your testimony with anyone
23	before you took the stand today?
24	A No, sir.
25	Q Are you aware that Mr. Domby took notes during

1	his interview with you?
2	A Yes. He seemed to be taking notes.
3	Q Did you ever review those notes?
4	A No, sir.
5	Q Can you tell me now whether you recall Mr.
6	Johnston telling you about finding water in the pneumatic
7	system and then bringing you over to another portion of
8	the pneumatic system where he thought he may also find
9	water and opening it in your presence?
10	A Another portion of
11	Q Another T, a similar location as to the
12	initial location where Mr. Johnston had observed the
13	water.
14	A No. I mean, I don't recall it being exactly
15	that way. I mean, I'm not saying that it wasn't. I mean,
16	he no. I guess the bottom line is I don't recall that.
17	Q And you don't recall do you recall Mr. Burr
18	being at the plant site that time?
19	A Yes.
20	Q Do you recall if Mr. Burr did you hear that
21	Mr. Burr went out with Mr. Johnston and witnessed the
22	opening of the T?
23	A Maybe. I'm not sure if he actually witnessed
24	it or not.
25	Q Did you in any way indicate to Mr. Johnston
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that you were not pleased n the observation of water 1 being found in the system? 2 A Yes. Initially. You know, obviously it was 3 kind of, you know, before thinking or paying attention to 4 where it is coming from, I'm sure my initial reaction was 5 of surprise. 6 And so if your initial action was surprise, 7 you were sort of startled by the revelation? 8 I wouldn't say startled, but, I mean, it's --9 like I say, it's a place that's not normally checked. 10 It's realizing almost immediately it's a deadhead area, 11 you know, once thoughts are, you know, quite calm. 12 But initially, I mean, it's something that 13 obviously was new to me. And I hadn't noticed it before 14 or been made aware of it before nor was he at our plant. 15 Focusing on the initial reaction, then, you 16 would call it as being startled? Is that the word you 17 used? 18 No. 19 A But the initial reaction that you had to the 20 observation was striking until you checked further? 21 Yeah. I mean, as any other new, something 22 you're unfamiliar with, I guess, it's just different, you 23 know. So you have to let it soak in and then make an 24 engineering judgment on it. 25

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1	Q Would you I don't have much experience in
2	engineering matters, but I know if I went to the doctor's
3	and I'm going to get a test, I'm apprehensive. I get the
4	test results. I'm happy.
5	Is that the type of emotional range that was
6	going on?
7	A No, no. It wasn't very emotional, I mean, to
8	put it bluntly, I guess.
9	Q Did you take dew point measurements that day?
10	A I don't know that it was at what point the
11	dew point measurements came. You know, I don't think we
12	requested any special, you know, immediate measurement of
13	dew points at that particular time, but, you know, it's
14	part of our process. And it occurred.
15	So I don't think, you know, we requested
1.6	anything special at that point.
17	Q On transcript Page 7,281 you were asked, the
18	question was, on Line 6 do you have that in front of
19	you, sir?
20	A Let me
21	Q Seven-two-eight-one.
22	A Yes, I have it.
23	Q And the question was, "And would documentation
24	be required if water was obtained in the air receiver?"
25	And your response is, "Yeah. One would expect

1	them to document any finding of water in the air
2	receiver."
3	A Uh-huh.
4	Q In this same frame of mind, should I expect
5	anyone who found water in the pneumatic air system further
6	downstream than air receiver would document those
7	findings?
8	A I mean, to me I would still say I would expect
9	people to document what they find. Now, this one I'm not
10	so sure was documented. It's not a usual place they
11	check.
12	It's something that was handled immediately
13	and Georgia Power people were notified of. So maybe they
14	felt that there was not a need to document it. I can't
15	speak for the vendor.
16	Q So you were personally involved in the
17	decision not to document it, weren't you?
18	A Oh, no.
19	Q You didn't
20	A You mean specifically tell somebody not to
21	document it?
22	Q Well, are you aware of it being documented
23	anywhere?
24	A I think I've looked at the work orders, work
25	packages. Some of them I hope I think well not all
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1	of them, but I think the ones from the last outage of Unit
2	2. And I didn't see any documentation of it.
3	Q So might it be, then, that other persons would
4	find water and not document it?
5	A I can I mean, obviously I can't speak for
6	everyone. I think I've provided an explanation for this
7	particular case, though.
8	Q Did you inform the shift supervisor of the
9	finding of water?
10	A No, sir.
11	Q Did you inform your boss of the finding of
12	water?
13	A No, sir.
14	BOARD EXAMINATION
15	CHAIRMAN BLOCH: Did you call in Mr. Burr?
16	THE WITNESS: Pardon me?
17	CHAIRMAN BLOCH: Did you call in Mr. Burr?
18	THE WITNESS: Call in Mr. Burr?
19	CHAIRMAN BLOCH: Did you speak to Mr. Burr
20	about it?
21	THE WITNESS: It may have been the other way
22	around. I'm not sure if it was you know, both of us
23	were essentially there. And we were on the same shift
24	working this outage.
25	So, I mean, we discussed it, if that's what

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you're saying. Ken and I discussed it in the resolution 1 of the matter. But he's not my boss. 2 FURTHER CROSS-EXAMINATION 3 BY MR. MICHAEL KOHN: 4 And who was your boss at the time the water 5 was in February-March of '85? 6 Robert Moye. 7 Is there any reason you felt Mr. Moye should 8 not have institutional knowledge of what you found? 9 You know, it's as I said, and maybe not 10 comprehendible to anybody that's not working there, but 11 it's -- it just was handled like any other -- I don't tell 12 him of every particular technical issue that goes on or 13 comes up out at the diesel. 1.4 I mean, if we have a problem with the -- you 15 know, an inspection on a cylinder line or an inspection 16 on, you know, what other -- any other piece of equipment 17 out there is not my -- I don't have time and no desire to 18 go and tell him of every last problem or should I say is 19 not a problem finding or anything that may come up. 20 We handle it and make a judgment from there as 21 to whether -- you know, if it was a situation where we 22 found water in the receiver or we found water in the 23 control air system or at an obvious place that we thought 24

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could create a problem, then, you know, obviously, you

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1	know, a DC would be written and Mr. Moye would be notified
2	and that type stuff.
3	But this particular case was just handled as
4	another technical issue and was handled. There's no
5	reason to go tell him, in our estimation.
6	Q Did you isolate the diesel and take any type
7	of corrective action the day you learned of the water?
8	A No.
9	Q On transcript Page 7,066 on Lines 6 through 8
10	
11	A I don't think I have that.
12	MR. BLAKE: You may have to look in the black
13	binder I gave you, which is all the transcripts for those
14	days.
15	THE WITNESS: Okay. What date was that on?
16	MR. MICHAEL KOHN: This is June 3.
17	MR. BARTH: Which lines, Mr. Kohn?
18	MR. MICHAEL KOHN: The question begins on Line
19	3, and the answer ends on Line 8.
20	THE WITNESS: Okay.
21	BY MR. MICHAEL KOHN:
22	Q And I asked you, "And if I understand what
23	you're saying, then, if water is found within the diesel
24	air system, then the diesel is not operable?"
25	And your response is, "If we find water, we
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1	would isolate the diesel and then take steps to correct
2	it. But we have not found water."
3	This testimony, then, would not be accurate
4	because is that true because when, in fact, you did
5	find water, you've now testified that you did not take
6	steps to isolate it?
7	A Not entirely true. I think we still stick
8	with this in relation to where we normally I shouldn't
9	say even "normally" check it. I should even say where it
10	should be considered to create a problem, you know, within
11	the diesel system. And this one was not considered to be
12	in that type of location.
13	BOARD EXAMINATION
14	CHAIRMAN BLOCH: Just a minute. Mr. Stokes,
15	when you say "we," you're referring to yourself?
16	THE WITNESS: Myself and Mr. Burr, I think.
17	You know, we both discussed this issue and
18	CHAIRMAN BLOCH: Okay.
19	THE WITNESS: made our decisions together.
20	CHAIRMAN BLOCH: All right.
21	FURTHER CROSS-EXAMINATION
22	BY MR. MICHAEL KOHN:
23	Q So if you find
24	A Can I but, obviously, I'm speaking for
25	myself. I'm not I can't speak for Mr. Burr. So
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1	BOARD EXAMINATION
2	CHAIRMAN BLOCH: You're recalling that you
3	agree with that?
4	THE WITNESS: Yes.
5	CHAIRMAN BLOCH: And Mr. Burr you think also
6	agrees with you?
7	THE WITNESS: That's the way I recall it, yes.
8	FURTHER CROSS-EXAMINATION
9	BY MR. MICHAEL KOHN:
10	Q So if I understand how you think your answer
11	would more accurately be stated here: If we found water
12	in a portion of the pneumatic system that we thought was
13	significant, then we would isolate it?
14	A I think this particular testimony was well,
15	I don't know. I shouldn't say. You know, we have our
16	normal places for checking dew point. And I believe
17	that's what this was in relation to, checking dew point at
18	the receiver and checking dew point in the panel.
19	If it comes to that condition, yeah, if we
20	found water there, obviously there's steps to be taken for
21	diesel isolation and then correction of the problem.
22	In this case the diesel was already isolated.
23	The diesel was out of service. It was during an 18-month

checks and other checks that we go through before putting NEAL R. GROSS

inspection. You know, obviously there's a lot of leak

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1	A Yeah, yeah, the lines where the water was
2	found.
3	Q Well, I thought you told me that subsequent to
4	this you found more water in other lines of the various
5	diesels?
6	A It was just this particular diesel I'm talking
7	about, these two. It was a one diesel or two, I guess,
8	maybe both of them. I really don't remember, but, yeah,
9	the ones in question.
10	Q Then you said you took dew point measurements?
11	A Dew point measurements are always taken prior
12	to returning the diesel to operability.
13	Q And the dew point measurements are taken at
14	the receiver?
15	A Normally at the receiver.
16	Q And so those dew point measurements normally
17	taken at the receiver wouldn't tell you what the air was
18	on the other side of the receiver, would they?
19	A They should. That's where it's coming from.
20	Q Well, if you find water on the other side past
21	the receiver, could it be that the air in the receiver
32	could be less humid, more dry than the air on the other
23	side?
24	A Why would it be that way?
25	Q Well, is it possible that there may have been
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1	the diesel back into service, including dew point.
2	And if the dew point checked out fine, as it
3	did in this case, and also that the logic test was
4	completed satisfactorily, if we determined this to be a
5	dead leg, the water's not going anywhere.
6	So we felt that all of the essentially, we
7	would cover these statements in our actions, if you will.
8	Q I have some first, the scope of the
9	testimony on Page 7,066, I think you're not looking at it
10	carefully. If you look at 7,065, the Board asks you, "Do
11	you understand that the absence of moisture when you check
12	it does not assure a determinant dew point?"
13	And your response is, "That's right."
14	And then I ask you, "If I understand what
15	you're saying, then, if water is found within the diesel
16	air system, then the diesel is not operable?" And your
17	response is that you would isolate it and take steps to
18	correct it.
19	A The diesel was isolated. It was out of
20	service.
21	Q But you took no steps to correct it?
22	A They blew the lines down.
23	Q Every line
24	A No.
25	Q that water would have been in the system?
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1	a malfunction or something or the dryer had been turned
2	off and had been turned back on?
3	A During an outage, to try to explain it to you
4	carefully, during an outage, they are turned off. And
5	maintenance are maintenance is performed on the dryers.
6	And then the receiver is pressed up and verified to be in
7	good condition prior to emitting air into the system. So
8	no, you wouldn't really expect that.
9	Q Well, hasn't there been a problem with dryers
10	being found turned off?
11	A Yes.
12	Q Has that been a continuing problem since 1990?
13	A We've had an occurrence this past year is the
" 4	only one I know of in recent I mean, I don't know when
15	it was, a couple of months oh, probably in July, I
16	think. But that's all I know of for quite some time.
17	Q But wouldn't you say finding a dryer turned
18	off and turning a switch to turn it back on would be a
19	"Oh, never mind. We fixed the problem" in somebody's mind
20	in the organization?
21	A If the dryer was turned off and turned back
22	on?
23	Q If a person walked in and saw the dryer off
24	and said, "Oh, we must have left it off since our last
25	PM, " or whenever, "Let's just turn it back on, wouldn't
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1	that be just an "Oh, never mind"?
2	A No, not at all.
3	Q So, as you would understand the way the
4	organization works, a technician who turns on a dryer
5	let's say it had been off for a day. The next day they
6	had turned it on. That would be a big issue and some
7	paperwork would be written about it?
8	A At least now there is
9	Q Well, let's go back to 199^.
10	A You know, in 1990, of course, I'm talking for
11	other people here. And I can't you probably are asking
12	the wrong person, but, I mean, I know there have been
.3	instances where the dryers were left off for some period
4	of time.
.5	And obviously dew points were taken and
.6	checked and the system verified to be either operable or
.7	inoperable. But, you know, I can't really speak
.8	personally to what the plant would think.
9	Q What steps did you take to determine whether a
0	water was in the operating diesel in February and March of
1	1985?
22	A We didn't take any steps there.
3	Q Did you have any discussions about the
4	follow-up of the discovery of water?
25	MR. BLAKE: Excuse me. What was that

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1	question?
2	MR. MICHAEL KOHN: Let me rephrase it. It wa
3	poorly asked.
4	BY MR. MICHAEL KOHN:
5	Q After your initial discussion, were there any
6	subsequent discussions or did all the discussions that you
7	recall happen on the same day?
8	A Between myself and who?
9	Q Between yourself, Mr. Johnston, and Mr. Burr.
10	A I didn't talk to Mr. Johnston following my
11	conversation with Mr. Domby.
12	Q No. I'm talking the day the water was
13	detected.
14	A Oh. Discussions with anyone else? No.
15	Q And how many discussions do you recall
16	occurring that day?
17	A Just that one as far as I know.
18	Q One discussion?
19	A And you solved the and you answered the
20	question. And then it's answered.
21	Q So the discussion you're referring to, if I
22	understand it, was one where you, Mr. Burr, and Mr.
23	Johnston participated?
24	A That's the way I remember it.
25	Q Do you remember a Mr. Pesout?

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1	A Yeah, I know Mr. Pesout.
2	Q Was he there that day?
3	A He I'm not saying he wasn't. He could have
4	been. It just I think Johnston was our main point of
5	contact. Pesout was probably there. I think they had
6	overlapping shifts. So
7	Q Do you remember any conversations you had with
8	him?
9	A I'm not saying I didn't, but I don't recall a
10	particular conversation with Mr. Pesout.
11	Q And, if I understand it, no engineering
12	analysis was performed to determine how the fluid got into
13	the system back in February or March of 1995?
14	A That's you're correct, I mean, no
15	documented DC or MWO.
16	Q What triggered the engineering analysis that
17	followed? At some point you testified
18	A Just the oh, the following, the one that
19	just recently occurred?
20	Q Yes.
21	A The visit by I don't know who triggered the
22	plant personnel because I didn't initiate the process, but
23	it all occurred after my conversation with Mr. Domby. So
24	other plant personnel initiated the actions.
25	Q Would you consider finding water in the

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pneumatic air supply system a condition adverse to quality? Water in the wrong place. It could cause some 3 problems. 4 So in order to be adverse to quality, the water would have to have been found in the wrong place, not just anywhere within the pneumatic system? A In my opinion, it has to be able to get there, and it has to be noticed within a portion of the system where it could get into the Calcon sensors, into the logic 10 elements, or whatever else. This was not in that 11 12 location. 13 MR. MICHAEL KOHN: Your Honor, the next questions I have would be based on Mr. Domby's notes, 14 15 which I have not completed reading yet. And I'm not opposed whether -- Staff may want me to complete before we 16 17 do that -- before they start questioning. But I would 18 need sometime to review his notes. 19 BOARD EXAMINATION CHAIRMAN BLOCH: I could ask a few questions 20 21 before we take a break for that. Mr. Stokes, how carefully did you consider the possibility that there 22 could be some mechanism by which moisture could have 23 gotten into the dead end from the system itself -- the 24

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control air system?

25

1	THE WITNESS: How carefully?
2	CHAIRMAN BLOCH: Yeah.
3	THE WITNESS: I mean, I'll just put it that
4	CHAIRMAN BLOCH: At the time you first heard
5	about it.
6	THE WITNESS: Yeah, I know. I can only say
7	that in our minds it's I shouldn't say it's simple, but
8	it seemed obvious really I mean, looking at the system
9	and knowing the fact that, you know, we didn't find
10	moisture in the other places where you would expect to
11	find moisture. It just seemed obvious to me, and
12	something that was quickly and easily put to bed in my
13	opinion.
14	CHAIRMAN BLOCH: If there were, let's say, 80
15	degree dew point air in the system but it wasn't
16	condensing, do you know whether or not it would be caught
17	in the filter?
18	THE WITNESS: If there were 80 degree dew
19	point air and it wasn't condensing?
20	CHAIRMAN BLOCH: Yeah, it could be 80 degrees
21	in the room.
22	THE WITNESS: It's normally I don't know.
23	CHAIRMAN BLOCH: Do you know
24	THE WITNESS: even hot or in the panel
25	because you have a heater inside there that keeps it
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1	CHAIRMAN BLOCH: So let's assume that somehow
2	on the 60 degree side you had 80 degree dew point air. On
3	the 60 pound side, sorry.
4	THE WITNESS: I understand.
5	CHAIRMAN BLOCH: You're at 80 degree dew point
6	air, and the room was at 85 degrees, so there's no
7	condensation taking place would anything get trapped in
8	the filter?
9	THE WITNESS: No.
10	CHAIRMAN BLOCH: All right, now under those
11	circumstances, if the valve to the dead end was opened and
12	then closed, would that trap some moisture in the dead
13	end?
14	THE WITNESS: Why are we I guess I don't
15	understand the line of this.
16	CHAIRMAN BLOCH: Why what? What's the
17	question?
18	THE WITNESS: I guess I'll try to answer it
19	the best I can. Now, what you're saying at that point in
20	time if we open the cap there's a cap actually at the
21	T, is that what you're asking?
22	CHAIRMAN BLOCH: No, I thought there was a
23	valve that made it a dead end.
24	THE WITNESS: There's an isolation valve that
25	comes in like this. There's an isolation valve, then goes
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1	into a T connection. This side goes to the gauge, and
2	this side has a cap on it. So you'd have to remove the
3	little cap, and then they would connect their test
4	instrumentation there to actually pump up the gauge while
5	it's isolated from the system.
6	CHAIRMAN BLOCH: Okay, is there any way in
7	which the isolation from the system would be broken?
8	THE WITNESS: No.
9	CHAIRMAN BLOCH: No.
10	THE WITNESS: That's always open.
11	CHAIRMAN BLOCH: So it's always it always
12	is a dead end key, and there's no communication ever
13	between the inside of the system and that dead end?
14	THE WITNESS: That's right.
15	CHAIRMAN BLOCH: And there's no way that could
16	happen by accident either?
17	THE WITNESS: No.
18	CHAIRMAN BLOCH: Thank you. You mentioned dew
19	point measurements on the 60 pound side. Under what
20	circumstances are those measurements taken?
21	THE WITNESS: If you find moisture in the air
22	receiver and well, first of all, you have to find a
23	high dew point in the air receiver, and then actually
24	identify moisture in the receiver. Then, I believe,
25	they're instructed to isolate the receiver and then go to

1	the control panel on the 60 pound side and make some
2	measurements there also to make sure if you've got to
3	see if you've got water on the 60 pound side or not.
4	CHAIRMAN BLOCH: Moisture or water?
5	THE WITNESS: Even moisture. I mean, you want
6	to see if you have a higher than normal dew point, which
7	it runs normally about what, 17 degrees or so, 20 degrees
8	on the 60 pound side.
9	CHAIRMAN BLOCH: Do you know what the history
10	of dew point measurements has been on the 60 pound side?
11	THE WITNESS: I've never found any well,
12	there's not much call to go there, except in special
13	request situations. Generally we don't I mean, because
14	we haven't we've never found water in the receiver.
15	But you know, in certain requests, certain times just like
16	this one, for instance, the past time, we would ask them
17	to go in there and take a special measurement on the 60
18	pound side.
19	So there's no history of out of the ordinary -
20	
21	CHAIRMAN BLOCH: Can those records be
22	retrieved?
23	THE WITNESS: You'd have to know at what
24	instances they occurred, you know. I mean, you're talking
25	huge amounts of documentation that you may just have to
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1	shuffle through to see if it ever occurred or not.
2	CHAIRMAN BLOCH: You can't retrieve it by a
3	machine?
4	THE WITNESS: Well, if you did retrieve it by
5	a machine, I mean, there's still a lot of documentation to
6	filter through on the machine necessarily just to get to
7	that point. And then once you got to the point of
8	identifier a work order where it may be you know, where
9	they may have taken this measurement, then you'd have to
10	go and pull the actual document to make sure that there's
11	no discrepancies between what the operator typed in on the
12	computer and what's actually recorded on the work order.
13	So you're talking it's like searching
14	through a for a needle in a haystack really. It's so
15	few occurrences where they would actually take a
16	measurement on the inside of the panel that it's just
17	CHAIRMAN BLOCH: So that also is an advantage
18	if you have a Bolean search technique. I mean, if there's
19	so few of them, you can find it fast. Are your records
20	searchable by Bolean search techniques?
21	THE WITNESS: I don't know. I don't know.
22	CHAIRMAN BLOCH: And what do you know about
23	special requests for measurements on that side? How often
24	do the special requests happen?
25	THE WITNESS: You could probably count them on

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1	your hand. It's not there's not very many.
2	CHAIRMAN BLOCH: Do you recall any specific
3	instances of it?
4	THE WITNESS: Well, this past one is the most
5	recent, obviously.
6	CHAIRMAN BLOCH: But how about during 1990, do
7	you recall that happening during 1990?
8	THE WITNESS: Like I said, if we didn't find
9	anything at the receiver, you know, we may or may not have
10	gone in and checked inside there. I don't remember, to be
11	absolutely honest. I don't remember.
12	CHAIRMAN BLOCH: I remember in particular
13	there was a conversation about how the dew point would be
14	lower on the 60 pound side. Did anyone take measurements
15	at that point?
16	THE WITNESS: Would they or did they?
17	CHAIRMAN BLOCH: Did they, when they were
18	THE WITNESS: Well, if you don't I guess
19	what I'm saying is if you
20	CHAIRMAN BLOCH: Well, after April 6th, for
21	example, when you found high dew points at the receiver on
22	all eight receivers. Did anyone take measurements on the
23	60 pound side?
24	THE WITNESS: They may have.
25	CHAIRMAN BLOCH: I didn't see them on the

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MWO's.

THE WITNESS: Yeah, I'm not saying they did.

They may have. Like I said, that process -- that whole process there was as we exhaustively (sic) went through the -- is more of a personnel problem using their equipment and possibly even an erroneous or a bad piece of equipment in one case. But mostly it's -- I mean, it's just purely not knowing how to use your equipment.

CHAIRMAN BLOCH: I'd like to know if we have any records of dew points taken on the 60 pound side after April 6th in order to follow up on the high readings -- whether anyone thought to check on the 60 pound side.

MR. BLAKE: I will check -- double check. I think that that --

CHAIRMAN BLOCH: I think you probably could find it within a week of the event. I don't know how easy it is for you to search your records either. That's not something --

MR. BLAKE: I don't know the answer either,

Judge Bloch. I would guess at this point that all those
records have been provided in one way or another and
somebody would have come across it if it exists. But we
can double check.

CHAIRMAN BLOCH: It's not on the MWO's. But it sounds like there may be a special -- would there be

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1	any record made of these readings on the 60 pound side?
2	THE WITNESS: You know, if it's not documented
3	on the MWO, the only other place could be the rounds sheet
4	or the control room log. But I mean, obviously the
5	normal places if you've got a work order, you're going
6	out to do a check on the receiver, then you would document
7	whatever other steps someone may have told you to do
8	outside of that on there too. So I would expect it to be
9	there.
10	CHAIRMAN BLOCH: I have no further questions.
11	MR. BLAKE: I think you miscommunicated with
12	Mr. Stokes in some of your questions and answers.
13	CHAIRMAN BLOCH: Maybe you can straighten him
14	out.
15	MR. BLAKE: It had to do with the degree to
16	which this leg is isolated or not isolated, and I would
17	like to ask him a couple of questions.
18	CHAIRMAN BLOCH: Please do that.
19	REDIRECT EXAMINATION
20	BY MR. BLAKE:
21	Q Do you have that schematic still before you?
22	A Yes.
23	Q Is the isolation valve number 40 indicated on
24	that normally open or closed?
25	A It's open.

1	Q So when the system is in normal operation,
2	that isolation valve is open, and this entire dead end,
3	including the gauge, is open to the control system?
4	A Yes.
5	CHAIRMAN BLOCH: It was a miscommunication.
6	MR. BLAKE: Yes, that's what I thought. But
7	when the gauge is calibrated, is that isolation valve 40
8	closed?
9	THE WITNESS: Yeah, it's closed.
10	BY MR. BLAKE:
11	Q And there's no way to translate anything if
12	there were any water introduced in the course of
13	calibrating gauge nine, there would not be a way for it to
14	get back into the normal control system?
15	A That's right.
16	MR. BLAKE: I think, Judge Bloch, that it was
17	that miscommunication between the two of you.
17	that miscommunication between the two of you. CHAIRMAN BLOCH: I was actually looking for
18	CHAIRMAN BLOCH: I was actually looking for
18	CHAIRMAN BLOCH: I was actually looking for the possibility that when it's closed there could be
18 19 20	CHAIRMAN BLOCH: I was actually looking for the possibility that when it's closed there could be moisture trapped from the system on that side.
18 19 20 21	CHAIRMAN BLOCH: I was actually looking for the possibility that when it's closed there could be moisture trapped from the system on that side. THE WITNESS: That's what I thought you were
18 19 20 21 22	CHAIRMAN BLOCH: I was actually looking for the possibility that when it's closed there could be moisture trapped from the system on that side. THE WITNESS: That's what I thought you were looking for.

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would you -
it will trap

CHAIRMAN BLOCH: All right, when it's closed, it will trap a sample of air from the control air system, isn't that correct?

THE WITNESS: Correct.

CHAIRMAN BLOCH: And if there was high dew point in that sample of air, that would be trapped in the dead end, right?

THE WITNESS: Correct.

CHAIRMAN BLOCH: Now how do you know that that's not the source of the moisture that was found by Mr. Johnson?

you can't isolate it and then have wet air on one side and not on the other side. I mean, you've got to -- you know what I'm saying? The air has got to come through the filter and, you know, if you find moisture -- if it's going to precipitate out on this side, then it's going to precipitate out on the other side, is all I'm saying. So -- and plus there's such a little volume of air there that it could hardly produce anything visible.

BOARD EXAMINATION

ADMINISTRATIVE JUDGE CARPENTER: Mr. Stokes, you just make this qualitative statement. Have you ever calculated how much water you could get trapped in there?

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THE WITNESS: Yeah. 1 ADMINISTRATIVE JUDGE CARPENTER: How much? 2 THE WITNESS: I didn't calculate it. I was 3 saying it was calculated on that DC. And like I was 4 saying, it would take -- well, estimating the whole line, 5 not just that little bit, but the while line --6 ADMINISTRATIVE JUDGE CARPENTER: No, the 7 question relates to the volume down -- between the 8 pressure gauge and this isolation valve. 9 THE WITNESS: It's not calculatable. I mean, 10 it's not -- it's so small that you couldn't -- I mean, 11 there's -- I mean, you couldn't get any essentially --12 squeeze enough moisture out of there to see it. There's 13 just no volume there. 14 ADMINISTRATIVE JUDGE CARPENTER: Well, you 15 know, if there's a chance that what you're saying is the 16 truth, it just would be nice to make a straightforward 1.7 calculation. 18 THE WITNESS: Well, we took it a step farther 19 though and took it from the filter, you know, from the 20 whole line from the filter all the way up to there. And 21 there's -- I mean, even from that, it's like one to the 22 minus -- times ten to the minus three. 23

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MR. BLAKE: Ten to the minus three what?

THE WITNESS: Pounds -- I'm sorry, cubic feet,

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24

1	if I remember right. I mean, in other words, you could
2	produce it takes
3	ADMINISTRATIVE JUDGE CARPENTER: Mr. Stokes,
4	let's just wait until we get the piece of paper. That's
5	why we need the piece of paper.
6	THE WITNESS: That's right.
7	CHAIRMAN BLOCH: Let me finish up the
8	stupidity I started with before, because I want to know
9	that it's stupid. In the testing of the gauge, does the
10	process necessarily clear out any moisture that would be
11	in there before the testing?
12	THE WITNESS: No.
13	CHAIRMAN BLOCH: So after the testing is done,
14	the line is then opened. Do you know what would happen to
15	moisture that had been in the gauge area during the
16	testing?
17	THE WITNESS: It would stay there.
18	CHAIRMAN BLOCH: It would stay there. Now,
19	could there be a cycling effect where over several cycles
20	of testing there would be an increment of moisture each
21	time? Now why is that?
22	THE WITNESS: Well, that's what I was trying
23	to say. It's so small that it's just very I don't
34	intend to say unlikely. I guess we should go with what
25	Dr. Carpenter said and let's wait and see your
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1	calculations on this other thing. But you know, and then
2	you guys can read it an let it sink in as far as what
3	we're trying to say without me confusing you here.
4	But it was determined from that that it's
5	really not possible.
6	CHAIRMAN BLOCH: But intuitively, when you saw
7	this the first time, you were sure that there couldn't be
8	any accumulation of moisture in this dead end?
9	THE WITNESS: Very small. I mean,
10	CHAIRMAN BLOCH: Other than being introduced
11	during the testing process?
12	THE WITNESS: Yes.
13	CHAIRMAN BLOCH: All right, Mr. Kohn, how much
14	time will you need for the break to look at those notes?
15	MR. MICHAEL KOHN: Twenty minutes. There's
16	also I'm going to discuss some technical matters with
17	my client, so there will be questions on technical matters
18	as well.
19	CHAIRMAN BLOCH: So if there's no objection,
20	we'll recess until 11:25.
21	(Whereupon, the proceedings went off the
22	record from 11:07 a.m. until 11:30 a.m.)
23	CHAIRMAN BLOCH: Morning again. Mr. Kohn?
24	MR. MICHAEL KOHN: Thank you, Your Honor.
25	CROSS EXAMINATION

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BY MR. MICHAEL KOHN:

Q Mr. Stokes, did you have a discussion with Mr. Johnson how to figure out how the water got into the system that was detected in February/March of '95?

A I don't recall specifically our discussion.

Q And did Mr. Johnson tell you this was the first of a kind observation at Georgia Power at Plant Vogtle?

A Yeah.

Q Is the low point of the -- we were looking at the schematic diagram, and the 250 pound air supply to the control system would be the low point -- excuse me.

Between the -- starting where the starting air begins until the T, isn't it true that the low point in the system would be the lines running through the trench?

A Yeah, the absolute lowest point are the lines going through the trench, yeah. But as it comes in from the trench -- what I was saying earlier, as it comes in to a measurable point there to the trench and to the filter, then that's just, you know, several inches above the trench obviously.

Q Okay, and the filter is higher than the trench?

A Yes.

Q It's higher than the lines on the trench?

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1	A Yes.
2	Q And if you would look at the diagram, the tap
3	identified
4	CHAIRMAN BLOCH: We're talking about GPC II-
5	188.
6	MR. MICHAEL KOHN: Thank you, Your Honor.
7	BY MR. MICHAEL KOHN:
8	Q The tap identified on the bottom portion
9	between B81 and the 31 pressure switch the tap
10	identified on this drawing between that is lower in
11	elevation than the filter, correct?
12	A Yes.
13	Q Now
14	CHAIRMAN BLOCH: Is that independent
15	knowledge, or is that somehow on this diagram?
16	THE WITNESS: No, you can't tell on the
17	diagram. Maybe from your pictures that you have.
18	BY MR. MICHAEL KOHN:
19	Q Have you reviewed Mr. Domby's notes during the
20	break?
21	A Yeah, I just briefly went over them a few
22	minutes ago.
23	Q I guess we've will mark did you review the
24	handwritten and the typed or just the typed?
25	A No, just the typed.
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1	Q We will mark the typed notes as Intervenor's
2	11-242.
3	CHAIRMAN BLOCH: Granted. They are unnumbered
4	notes. The first page says meeting minutes, August 17,
5	1995; meeting with Bill Burmeister, Kenny Stokes, 7:50
6	a.m. They're all neatly typed, double spaced, with an
7	extra space between raragraphs. And some of the pages are
8	numbered. The pages are numbered after the first page.
9	The last typed page is page ten. And after that, there
10	are four unnumbered pages of handwritten notes.
11	(Whereupon, the above-referenced
12	document was marked as Intervenor's
13	Exhibit II-242 for identification.)
14	MR. MICHAEL KOHN: We're not including the
15	handwritten notes at this time.
16	CHAIRMAN BLOCH: Handwritten notes are being
17	ripped off.
18	MR. BARTH: Mr. Kohn, if you're going to use
19	them later, wouldn't it be more convenient just to make
20	them part of this exhibit, which is all together?
21	MR. MICHAEL KOHN: Certainly. All right,
22	let's remark it with the four pages of handwritten notes
23	as well.
24	CHAIRMAN BLOCH: Done.
25	BY MR. MICHAEL KOHN:

1	Q I thought earlier you mentioned to me that Mr.
2	you and Mr. Johnson did not talk about how the moisture
3	ended up at the location, is that
4	A At the time of the discussion?
5	Q Yeah.
6	A Like I say, I don't remember exactly, you
7	know, how that conversation went, to be honest with you,
8	you know, back during that time.
9	Q All right, then on so on page five of these
10	type written notes, the third paragraph down where you're
11	explaining what Mr. Johnson said, this is a sense more
12	speculative? It's not you don't really remember what
13	was said?
14	A That's really I don't have a real good
15	recollection of what was said.
16	Q And this is just some postulated
17	reconstruction in your mind right now?
18	A About what specific in response for the
19	question stated?
20	Q Excuse me?
21	A What part are you talking about here?
22	Q That Mr. Johnson explained the location at
23	issue was a stagnant place, and this whole conversation.
24	You don't really recall what the conversation was?
25	A Well, yeah, I mean, as far as that portion of
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it being stagnant and that type situation, yes. But what his speculations were on how it got there, I guess I don't have a clear recollection of what he may have speculated. BOARD EXAMINATION CHAIRMAN BLOCH: Mr. Stokes, at the time of 5 the incident, what was the best explanation you had of how 6 the water got there? 7 THE WITNESS: A couple of things. The best 8 explanation was like I said, I still felt within myself 9 that it was introduced through the calibration process. 10 But that didn't rule out the possibility like you guys are 11 saying or Dr. -- I think it was you that was saying that 12 yeah, maybe over a period of time, you know, the way they 13

calibrate this thing and they isolate the valve and then they open it up and you know, maybe you could introduce some moisture in there. But it's just very highly unlikely I thought

at the time because of the amount of tubing that was involved. I didn't do a calculation of sorts at that time, but it just didn't seem very likely. The bottom line was it least it was in a dead head area and not going to go anywhere, and it was a very small amount of moisture.

CHAIRMAN BLOCH: I noticed in your discussion with Mr. Domby on page seven you said you didn't know

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where the moisture comes from, and then you speculated 1 about a small leak to the atmosphere in the pressure 2 gauge. But I don't see anything -- you didn't say that? 3 THE WITNESS: But that's -- I said that. I 4 said that. And at that time, when I was talking to him, I 5 was speculating again. I guess off of my head at that 6 point in time, not that that's what I thought back then. 7 It's just -- I guess I was kind of taken off -- I didn't 8 say off quard, but you know, realizing that I had left 9 something out of my testimony unintentionally. I was a 10 little bit taken off guard here by the situation. 11 So I was speculating of how else right off the 12 top of my head that it might get there. But obviously 13 that's not a very good speculation, because you know, we'd 14 notice some sort of problem with the gauge if we were 15 having a leak there. 16 CHAIRMAN BLOCH: When was the first time you 17 speculated about the introduction of water through the 18 testing of the gauge? 19 THE WITNESS: Well, actually that's my initial 20 thought way back when. I don't guess it's documented 21 anywhere, but it's my initial thought when we first 22 discovered it. 23 CHAIRMAN BLOCH: Did you tell that thought to 24 25 Mr. Johnson?

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1	THE WITNESS: I don't recall.
2	CHAIRMAN BLOCH: Johnston.
3	THE WITNESS: Johnston, yes.
4	MR. BLAKE: I want to go back, Mr. Kohn, to
5	your questioning on five uninformed by Mr. Domby that the
6	he's in that paragraph he explained the location
7	those he's were Mr. Stokes.
8	ADMINISTRATIVE JUDGE MURPHY: Does that change
9	your understanding of his answer?
10	MR. MICHAEL KOHN: Your testimony is now that
11	your initial reaction was that the cause of the water was
12	probably due to this testing of the gauge that's what
13	you thought when you first learned about the water?
14	MR. BARTH: Excuse me, I didn't hear the
15	answer to the Judge's question. Perhaps I wasn't paying
16	close enough attention. The Judge's question, Mr.
17	Murphy's question, Judge Murphy's question.
18	MR. MICHAEL KOHN: Yes, he said does
19	CHAIRMAN BLOCH: It was a general question.
20	ADMINISTRATIVE JUDGE MURPHY: I was just
21	trying
22	MR. BARTH: Yes, I was waiting for the answer,
23	Your Honor.
24	ADMINISTRATIVE JUDGE MURPHY: I was asking
25	that of Mr. Kohn. And I presume that he is going to
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1	clarity it with his questions.
2	MR. BARTH: Thank you, Your Honor.
3	MR. MICHAEL KOHN: I hope so.
4	BY MR. MICHAEL KOHN:
5	Q Your initial thought was that you had water
6	that must have gotten in there through this testing of the
7	300 pound gauge, is that correct the calibration of the
8	300 pound gauge?
9	A That's the way I recall it, yeah. And that's
10	still my thought now.
11	Q And then you sat down with Mr. Domby to go
12	over, it looks, in a fair amount of detail what happened.
13	But it's my reading of these notes I didn't see
14	anything mentioned about this speculation about water
15	getting in through the 300 pound gauge. Did I miss it
16	when I read through this?
17	A Yeah, I mean, you know, I thought I had said
18	that, but I guess apparently I didn't. But obviously I
19	didn't. It's not here. But I mean, I don't have an
20	explanation for why it's not on here. It still was my
21	initial thought, and I went through another process of
22	here possibly how water may have gotten in there. And
23	that's it. I mean, to the best of my recollection.
24	Q So you can't explain then why your
25	speculations as to the source of the water did not include
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1	in these notes what you believe at the time was the
2	speculation which you apparently still believe today could
3	be the reason.
4	A I don't know why they're not in here, if
5	that's what you're asking.
6	Q There are plant records, are there not, that
7	you could Jook at to determine the process used to
8	calibrate the gauges? There's a procedure that was
9	employed at the time, wasn't there?
10	A Yes.
11	Q Did you ever bother to look at those
12	procedures?
13	A You mean during the last outage?
14	Q Back to '90, at any point to look at your
15	theory to see if it
16	A It may not necessarily tell what medium they
17	used to pressurize it with.
18	CHAIRMAN BLOCH: Well, that's true; but it
19	may. If you haven't looked at it, you don't know whether
20	it
21	THE WITNESS: I actually did look I mean, I
22	locked at some sheets, but I'm trying now to I don't
23	think it says. Like I say, I'm pretty sure it doesn't say
24	on there. At least on the data sheets that their
25	procedures leaves them open to use whatever they want to
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1	use. And their data sheet doesn't as I recall, it
2	doesn't specify what they used or you know, if it's a
3	nitrogen bottle or what.
4	BY MR. MICHAEL KOHN:
5	Q The M&TE the equipment used during these
6	procedures would all be M&TE equipment, correct?
7	A I don't know if they tagged the bottles of
8	nitrogen or what.
9	Q Well, not necessarily the bottle of nitrogen,
10	but the apparatus and assembly used would be M&TE
11	equipment, correct?
12	A The other gauges or whatever that
13	Q And all that would be logged in these work
14	orders or in the when they were performing the
15	procedures?
16	A Maybe. It should.
17	Q And based on the actual equipment and
18	apparatus used, don't you think you could determine
19	whether it was water or air?
20	CHAIRMAN BLOCH: Or some other gas.
21	MR. MICHAEL KOHN: Nitrogen.
22	THE WITNESS: I mean, you're speculating. I
23	don't know if you can or not.
24	BY MR. MICHAEL KOHN:
25	Q Is it true that when you testified here in
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this proceeding concerning water and the moisture that you 1 had a personal bent in slanting things away from moisture 2 because you were afraid that Mr. Mosbaugh was just going 3 to blow it out of proportion if you said something? 4 Absolutely not. I mean, if there was -- if 5 there's moisture out there and moisture into a place where 6 we thought it was a problem in 1990 or today, then I'd be 7 the first to stand up and say yeah, It's there. I mean, I have no reason -- I mean, if I thought he was right about 9 what he's speculating in 1990, I mean, I don't care. It 10 means nothing to me. If he's right, he's right. But he's 11 12 not. I mean, we went through an exhausted process 13 and we found the actual root cause of what happened in 14 1990. And I think that's proven out. So no, I don't have 15 anything against Mr. Mosbaugh or -- at all. 16 On page eight of the notes when you were asked 17 again why you didn't recall the event during the hearings, 18 in response to that question you state that this event is 19 irrelevant, but they'll (referring to Mr. Mosbaugh) --20 they'll take it as highly relevant. Maybe is the 21 "they'll" Mr. Mosbaugh and his counsel? Who is the 22 they'll? 23 Yeah, I mean exactly. I mean, after sitting 24

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through four and a half days of these proceedings in the

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1	past, I mean, I know how things are blown out of
2	proportion. And that's those are my remarks, and
3	that's what I meant by them.
4	Q And you knew that you knew the significance
5	of moisture and water to this licensing proceedings when I
6	deposed you. We had significant amount of discussion
7	about it, didn't we?
8	A Yes.
9	Q Okay. And I'm trying to get your mind set.
10	You now are told there is water found in the pneumatic
11	system. Do you believe that part of your motivation,
12	maybe subconsciously, was that Mr. Mosbaugh would blow
13	that fact out of proportion and it would just cause undue
14	havoc for your employer?
15	A No. I mean, no, not at all.
16	Q And so your sole motivation, as I understand
17	what you're telling me, for not testifying about it is you
18	simply forgot?
19	A Yeah, I don't have the motivation personal
20	motivation to sway to say anything that would help the
21	company or hurt the company. I'm just trying to basically
22	tell the truth and the way I remember it. And this was,
23	as I state here the best I can say, it just was not
24	something that stood out in my mind. I wasn't try to
25	conceal anything from you or anyone else.

1	Q Can you tell me whether the truth of the
2	matter is with respect to the blow down of the air
3	receiver that the air receivers are let me rephrase it.
4	(Laughter.)
5	Is it true, to the best of your knowledge,
6	that all the air receivers were blown down after the
7	original high dew point readings were obtained?
8	MR. BLAKE: Objection.
9	CHAIRMAN BLOCH: You're going to have to tie
10	it into this event. We'll give you a couple of questions.
11	MR. MICHAEL KOHN: Okay, Your Honor, it's
12	relevant to the new documentation the last supplement
13	to their interrogatory responses that was received
14	yesterday.
15	MR. BLAKE: So we've shifted gears. Are we
16	done now
17	CHAIRMAN BLOCH: Are you done with this aspect
18	first?
19	MR. MICHAEL KOHN: Yes, I'm done with this
20	aspect.
21	MR. BLAKE: Okay, and I think it is fair for
22	him to ask this is what we distributed yesterday on the
23	interrogatory response. Mr. Stokes is the supporter of
24	that. And therefore, to the extent there are questions
25	about it, I think it would be appropriate. So I don't

1	have an objection to this as long as I understand we're
2	moving to a new area.
3	BOARD EXAMINATION
4	CHAIRMAN BLOCH: Before we do that, I just
5	want to ask a couple of questions I've been thinking
6	about, the speculation here about the moisture in the test
7	and the calibration of the gauge. After the calibration
8	is done and the equipment is taken away, at that point the
9	valve is opened, isn't it?
10	THE WITNESS: It should be open, yes.
11	CHAIRMAN BLOCH: And how often are these
12	calibration tests done?
13	THE WITNESS: Every refueling outage every
14	18 months.
15	CHAIRMAN BLOCH: 18 months. Do you know what
16	would happen to moisture that was left in that dead end
17	over an 18 month period? It's a modeling question, isn't
18	it?
19	THE WITNESS: Yeah.
20	CHAIRMAN BLOCH: It could go back into the
21	system, right?
22	THE WITNESS: Well, I wouldn't expect it to go
23	back into the system. I mean, the way this thing is
24	located I mean, once you pressurize it, it's I mean,
25	there's essentially no flow to take any of that air or
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1	CHAIRMAN BLOCH: There's no molecular mixing
2	over 18 months? Do you know whether there's normal
3	processes of the movement of the molecules would get that
4	air that moisture out of there or not?
5	THE WITNESS: I mean, it shouldn't. I don't
6	think it would thoroughly mix.
7	CHAIRMAN BLOCH: So your opinion is that it
8	wouldn't go out? Are you an expert on that kind of
9	situation?
10	THE WITNESS: I wouldn't call my expert on
11	I wouldn't call myself an expert on that, no.
12	CHAIRMAN BLOCH: Well, I know I'm not also,
13	but
14	THE WITNESS: I wouldn't call myself an
15	expert.
16	CHAIRMAN BLOCH: Mr. Kohn, on the other
17	matters?
18	MR. MICHAEL KOHN: Okay. I've marked as
19	Intervenor's II-230 I think it was previously marked
20	excuse me, it was not marked on the record, but I think
21	this number was reserved. It is Georgia Power Company's
22	3rd Supplemental Response to Allen Mosbaugh's 3rd set of
23	interrogatories and request for documents. It is a nine
24	page document dated August 8, 1994.

CHAIRMAN BLOCH: It may be marked II-230 for

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1	Intervenor. Did you say the length of it?
2	(Whereupon, the above-referenced
3	document was marked as Intervenor's
4	Exhibit II-230 for identification.)
5	(Whereupon, the proceedings went off the
6	record briefly.)
7	CROSS EXAMINATION (continued)
8	MR. MICHAEL KOHN: Do you recall seeing this
9	document before?
10	THE WITNESS: Yes.
11	CHAIRMAN BLOCH: The witness was handed a copy
12	of Intervenor's Exhibit 230.
13	BY MR. MICHAEL KOHN:
14	Q I want you to look at page two of the
15	document, Interrogatory 6. Do you see that?
16	A Yes, sir.
17	Q And it says attached is a table which
18	identifies instances where Georgia Power obtained
19	unsatisfactory dew point readings on the Vogtle emergency
20	diesel generator air supply system. Then it says the
21	table also notes the corrective actions taken of which GPC
22	is aware. Do you see that?
23	A Yes.
24	Q Okay, and your name appears in brackets above
25	that answer. Do you know what that means? Your and Mr.
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1	Burr's name appears.
2	A I guess that's an maybe that I'm a sponsor
3	for that?
4	Q Well, do you remember reading this response?
5	A Yes, yes. I mean, I read the table, reviewed
6	the table, and updated some information on it.
7	Q Did you prepare the table?
8	A Oh, no.
9	Q Do you know who prepared it?
10	A The initial table?
11	Q Yes.
12	A Yeah, it was some other plant personnel. If I
13	remember, at the time when it was initially presented,
14	actually quite a few requests for information at that
15	time. And I, myself, was pretty overloaded, so we had a
16	meeting and dispersed some of the work out to other
17	individuals. So and then I reviewed the table to make
18	sure that it had the at least the pertinent stuff in
19	there.
20	Q And the table is attached to this exhibit
21	A Yes.
22	Q on page six.
23	A Yes.
24	Q And during the high dew point measurements
25	taken after the site area emergency in April of 1990, if
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you would look at the first page under MWO 19001651 on the
left, you'll see a notation of corrective actions taken
blew down the air receivers, do you see that?
A Yes.
Q And I've gone through this now and every time
the high readings were taken during that time period as
reflected in this chart, the corrective actions taken
always indicate that you blew down the air receivers. Is
that your best understanding of what occurred during that
time period?
A Well, you know, that would be a natural
response. I mean, that's something that they would do if
they had a suspected high dew point. So then they would
try to blow the receiver down and bring the dew point
down.
BOARD EXAMINATION
CHAIRMAN BLOCH: The question is, is that what
you expected was done during the time period?
THE WITNESS: I don't have specific memory of
everything, but I would expect at least through a portion
of it that they would do some blow downs. Now, if you at
some point in time realized you got a faulty
instrumentation or you got a faulty method, then you
correct those and you can go on. But it's I mean,

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it's a natural practice.

1	ADMINISTRATIVE JUDGE MURPHY: But the question
2	is, does the MWO say that that's what happens?
3	THE WITNESS: Some of them do and some of them
4	don't. They are not consistently documented to say that
5	they blew them down.
6	ADMINISTRATIVE JUDGE MURPHY: And so the
7	corrective actions column in this table does not
8	necessarily reflect what's in the MWO?
9	THE WITNESS: Yeah. In this particular table
10	here, if it says blew down the air receivers, then that's
11	either documented on the work order or in some rounds
12	sheet. If it doesn't say anything over there, then you
13	could find no documentation of a blow down. So you should
14	be able to go back to that work order or to the round
15	sheet and find that documentation somewhere for this
16	particular work order.
17	ADMINISTRATIVE JUDGE MURPHY: Now, does that
18	comment in the corrective actions column apply to all of
19	the dates under that work order all of the data? Let
20	me put it this say: does it apply to all of the data
21	under that work order?
22	THE WITNESS: I can't say that, that it
23	applies to each and every you're talking about each and
24	every instance that they took dew point readings that
25	they blew it down every time?
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1	ADMINISTRATIVE JUDGE MURPHY: That's what I'm
2	trying to understand, what that means.
3	THE WITNESS: Well, all I'm saying is here is
4	that it's documented on the work order that it was blown
5	down. And this let's see. It was retested on 4/8. So
6	I don't think it's repeatedly stated in there, as I
7	recall, that they blew down a receiver on 4/6 at, you
8	know, 10:00, or 4/7 at whatever time. I think it's just
9	generally stated that they blew down the air receiver, as
10	I remember. You may want to just check that one.
11	CROSS EXAMINATION (continued)
12	BY MR. MICHAEL KOHN:
13	Q On the next page under MWO 19001770, again
14	these are the high dew point readings obtained between
15	April 6th and April 7th, the corrective action says blew
16	down air receiver. Do you see that?
17	A Yes.
18	Q And is that currently still your best
19	recollection of the corrective action taken?
20	A If it's stated here in this column, then it
21	was apparently documented somewhere on the work order or
22	the round sheet.
23	MR. BLAKE: Is the witness looking at the
24	original response or the corrected response?
25	MR. MICHAEL KOHN: The original response.
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	[18] [18] [18] [18] [18] [18] [18] [18]
1	MR. BLAKE: That's what you gave him?
2	THE WITNESS: Oh, this is the original
3	response?
4	MR. MICHAEL KOHN: Yes, sir.
5	THE WITNESS: Oh.
6	CHAIRMAN BLOCH: I didn't understand that
7	either.
8	ADMINISTRATIVE JUDGE MURPHY: Yeah, it's two
9	different responses to the same question.
10	MR. MICHAEL KOHN: On the column you're
11	looking at, 19001770, on the MWO it states in Intervenor's
12	II-230 that you blew down air receivers as a corrective
13	action. Is that your best understanding of the corrective
14	action you took?
15	THE WITNESS: Well, knowing that this is the
16	original response and not the corrected version, I guess I
17	have to back up on what I was saying because apparently
18	you know, we found some errors when we went back and
19	looked at this because it's kind of apparent that the
20	individuals that put this together were using the computer
21	readout instead of some of the actual work orders.
22	And so we went back and I guess really
23	compared that to one of the Intervenor's interrogatories
24	and also the actual work orders. And we in a sense made
25	some corrections mainly to this particular thing, when the

receivers were blown down, and also to some of the actual people taking the readings and some of the actual dates were somewhat different.

BOARD EXAMINATION

CHAIRMAN BLOCH: Could you explain so I can understand it what the difference is between the computer record and the physical record so that there would be discrepancies between them?

THE WITNESS: Yeah, well, I mean, it's kind of obvious if you've got an operator that's entering in information from a series of documents, I mean, there's always chances that she's going to make errors -- typographical errors or even just leave out some information or whatever.

So -- and also, if you look at the NPMIS, a lot of times the guy who originally put this together, he may just look at the bottom line where it says person performing the work, and he may just put that date down versus going through each particular section either on the computer printout or the work order and saying well, this dew point was taken on this particular date and time by this person, and this dew point was taken at another time by another person rather than -- and that could be a different individual than the person that actually signed the work order off.

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1	So I guess simply stated, there can be some
2	discrepancies between the computer entries and then what
3	actually recorded on the work order. And it was my
4	understanding when this was developed originally that the
5	used the actual work order when in fact apparently they
6	didn't.
7	MR. BLAKE: That's actually what led to our
8	discussions earlier with Mr. Mosbaugh, who had used that
9	based on what we had given him in the course of discovery
0	and what we had used. And that's why Demonstrative Aid 4
1	took so long to go back to the initial maintenance work
2	orders and agree on it. It was the same problem.
3	BOARD EXAMINATION
4	CHAIRMAN BLOCH: My concern was for how you
5	can do accurate trending if there's that kind of variance
6	Does that affect the ability to trend past events so you
7	know what the problems are in the plant?
8	THE WITNESS: No, I don't think so.
9	CHAIRMAN BLOCH: Well, I don't understand why
0	but let's go on to something else.
1	THE WITNESS: I mean, it depends on what kind
2	of trending you're doing and how I mean, it's say
3	for instance, when I would do trending on dew point, for
4	instance, I'm going to give you just one example, then the
5	I&C people would just make me a copy of the work order

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and route it by my desk. So I actually do use the work order. You know, you can get --CHAIRMAN BLOCH: But suppose you wanted to 3 look at this history of dew point measurements and their 4 resolution. You'd have to go back to the actual documents 5 because your computer system is unreliable, isn't that 6 7 right? THE WITNESS: No, and most of the errors 8 really that were in this were not of dew point errors as 9 you'd see if you went back and made the comparison. Most 10 of them were just -- some of them were errors made by the 11 person putting this together and comparing the NPMIS and 12 the work order itself. And some of them were possibly the 13 process of not finding -- or not blowing down the 14 receiver. But you know, most of them were not actual 15 readings that were mistyped. 16 CHAIRMAN BLOCH: If a blow down occurred and 17 was documented on a round sheet rather than an MWO, is 18 there some difference in what you'd conclude about that 19 blow down? 20 THE WITNESS: I really don't know why they 21 would record it on a round sheet versus a -- other than 22 the fact that it's maybe taking place over some period of 23

CHAIRMAN BLOCH: You mean --

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time. You know, it's --

1	THE WITNESS: two shifts or something of
2	that nature.
3	CHAIRMAN BLOCH: Well, my understanding was
4	there was some regular procedure of blow downs in some of
5	these time periods, isn't that correct?
6	THE WITNESS: Well, their PM procedure now
7	would require them to do particular blow downs, you know,
8	when they do dew point measurements if the excuse me,
9	if the dew point reading was high. Now at that time in
10	the 1990 frame, I don't remember exactly how the procedure
11	was written. It's very specific right now in that area.
12	CHAIRMAN BLOCH: Was there ever a time where
13	there were just blow downs being done periodically without
14	being connected to a work order?
15	THE WITNESS: Should not have been. Not to my
16	knowledge. I mean, I'm not saying that there wasn't, but
17	really actual occurrence.
18	ADMINISTRATIVE JUDGE MURPHY: When you
19	testified earlier, or at least earlier in the proceeding,
20	there was a set of terminology which we were trying to
21	keep straight. We were talking about bleeding bleed
22	and feed of the receivers, and we were talking about blow
23	down of the receivers
24	THE WITNESS: Okay.
The latest to the	

ADMINISTRATIVE JUDGE MURPHY: -- as two

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use it interchangeably. What you're talking about is on

the operator's rounds where they would just go open the

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1	receiver drain and verify there's no moisture there. You
2	know, obviously they probably call that a blow down. But
3	you know, it's a loosely used term, I'm afraid. And you
4	know, blow down would in this particular case, means
5	bleed and feed.
6	CROSS EXAMINATION (continued)
7	BY MR. MICHAEL KOHN:
8	Q That is with respect to how it's used in the
9	interrogatory response?
10	A Yes.
11	Q The interrogatory first, is it my
12	understanding that every time a blow down or a bleed and
13	feed occurs it's not documented in the MWO's?
14	A It's not documented.
15	CHAIRMAN BLOCH: I think the question will
16	turn out to be ambiguous in the record. Could you reask
17	the question?
18	BY MR. MICHAEL KOHN:
19	Q It's my understanding that bleed and feed or
20	blow down as it's referred to when high dew point readings
21	are obtained are not always documented in the work orders.
22	A That's correct.
23	Q And in response to the interrogatories marked
24	as Intervenor's II-230, on page two it says the table also
25	notes a corrective action taken of which GPC is aware. NEAL R. GROSS

1	Now, GPC could be aware of bleed and feed and blow downs
2	that did not that were not put into the MWO's, correct?
3	A GPC could be aware of blow downs that were not
4	put in the MWO's.
5	Q And you knew that at the time you were
6	preparing and reviewed Intervenor's II-230, correct?
7	A Well, I mean, if they knew it, they would put
8	it in there, I guess. But I'm just saying I think this
9	documents everything that's known about this particular
10	these particular situations.
11	Q Right. And then if you'd look now at MWO
12	19001770, it states that you blew down the air receivers
13	as a corrective action.
14	A Is this the original?
15	Q Yes, the original. Can you tell me what steps
16	you took
17	CHAIRMAN BLOCH: Sorry, I don't know what that
18	dialogue was about, is this the original. You're talking
19	about the first the third set?
20	MR. MICHAEL KOHN: Yes, the original
21	CHAIRMAN BLOCH: This is the exhibit, Exhibit
22	230?
23	MR. MICHAEL KOHN: Correct.
24	IR. BLAKE: The only document that's been
25	provided to the witness to date is the original response
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	[20] - (1)
1	to this interrogatory, which has since been corrected. He
2	never has asked he's never given any copy yet to the
3	witness of the corrected interrogatory. That's why the
4	answers were mush, and that's why he got answers which
5	were not responsive to the questions he thought he was
6	asking. That's the way he's approaching it, so
7	MR. MICHAEL KOHN: The record will speak when
8	the witness is aware as to what document we were looking
9	at. What I'm saying if you're looking at the original
0	response to the interrogatories, Intervenor's Exhibit 230
1	at MWO 19001770, it states in there that the air receivers
2	were blown down, is that correct?
3	THE WITNESS: That's correct.
4	BY MR. MICHAEL KOHN:
5	Q And what factual review did you do to
6	determine whether or not the air receivers had or had not
7	been blown down after you submitted that interrogatory
8	response?
9	A Like I said earlier, on this particular one
0	some other plant personnel actually came up with most of
1	the stuff that was in here the information that's in
2	here, and I didn't go back personally and verify every

last bit of it after they did it. It looked like, you

pertinent information appeared to be there. It's just

know, they had done the right process and all. The

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24

1	that I physically didn't have time to go back and do every
2	last thing myself.
3	Q Well, are you suggesting that in the data base
4	that the words blew down the air receivers were typed into
5	the data base and that's how they got this?
6	A Either that or someone possibly in this case
7	told him that it was a normal practice, I would have to
8	suggest. If it's not in the NPMIS data base, then I would
9	have to say that well, this guy that put it together
10	worked with an I&C person and he said well, yeah, normally
11	if that's what we would do is go blow down the air
12	receivers if we get a high indication of a high dew
13	point.
14	BOARD EXAMINATION
15	CHAIRMAN BLOCH: Mr. Stokes, if I hear you
16	correctly, you don't know the source of the errors in this
17	first filing, is that correct? You don't know what the
18	source of the errors was?
19	THE WITNESS: What do you mean?
20	CHAIRMAN BLOCH: Well, initially you stated
21	that the source was because of a comparison between the
22	computer records and the actual records, is that correct?
23	THE WITNESS: That's mostly it. In this
24	particular case, I think the guy said that most probably
25	it came from someone telling him that that was the most
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1	that's the general thing that they did. And that's
2	probably why he put it in there.
3	CHAIRMAN BLOCH: So some
4	THE WITNESS: As he recalled.
5	CHAIRMAN BLOCH: So some of it came from
6	someone told me, is that right?
7	THE WITNESS: This particular the blow down
8	portion of this, as I understand it, that's how he
9	remembers it.
10	CHAIRMAN BLOCH: Now to what extent are errors
11	in the third supplemental filing, the one you've got
12	before you, the result of incorrect collection of
13	information from individuals around the plant?
14	THE WITNESS: Yeah?
15	CHAIRMAN BLOCH: To what extent was that the
16	source of the error? We found one here where you think
17	that the person was just told wrong, is that right?
18	THE WITNESS: Yes.
19	CHAIRMAN BLOCH: To what extent is that true
20	in other places on the table that people were told the
21	wrong thing?
22	THE WITNESS: Other places where?
23	CHAIRMAN BLOCH: In this chart.
24	THE WITNESS: I think this was the only one.
25	CHAIRMAN BLOCH: That's the only one where
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people were just told the wrong thing?

THE WITNESS: I believe so. The others were - as I went through before, just discrepancies in either
the way he put it together or he understood it was
supposed to go together or the fact that the NPMIS data
base differed from the actual work order.

CROSS EXAMINATION

MR. MICHAEL KOHN: Well, I'm confused now.

The original interrogatory response signed by you said

Georgia Power's -- the corrective actions Georgia Power is

aware of is that they blew down -- when you look under the

corrective action column -- they blew down the air

receivers every time they had -- during this April time

frame when they got high dew point readings.

That was the corrective action taken.

MR. BARTH: Objection, Your Honor, both to the question and to the line of questioning which does not seem to comport with the reason Mr. Stokes was brought back, which was to explain the Johnston find of water in February or March --

CHAIRMAN BLOCH: Mr. Barth, you missed that. We're talking now also about the supplement to the --

MR. BARTH: Your Honor, the original was not questioned by Mr. Stokes. It was just identified today. This is not part of any kind of testimony of Mr. Stokes.

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1	CHAIRMAN BLOCH: Well, the line of questioning
2	is I take it to bring out differences between the fourth
3	supplemental response and the third supplemental response.
4	MR. BARTH: The third was not introduced and
5	was not questioned about Mr. Stokes originally. This is
6	all new.
7	CHAIRMAN BLOCH: But that doesn't matter.
8	It's being questioned because of the fact that the fourth
9	is now introduced, which raises the new question of
10	differences between the two.
11	MR. BARTH: I was unaware that that was
12	related to Mr. Johnston find water and reporting it and
13	CHAIRMAN BLOCH: It's not. But Mr. Blake said
14	he was willing to have this other matter gone into because
15	it had been introduced and Mr. Stokes was part of that.
16	MR. BARTH: Withdraw the objection, Your
17	Honor.
18	CHAIRMAN BLOCH: But I only ask him about
19	timing, because the five minutes is now 20. So timing?
20	MR. MICHAEL KOHN: I'd like to spend another
21	five to ten minutes just to wrap this up.
22	CHAIRMAN BLOCH: Given the you think you
23	can wrap it up in five to ten minutes?
24	MR. MICHAEL KOHN: Or take lunch now? Is that
25	the
	1.W.1. W. A.W.A.A.

1	CHAIRMAN BLOCH: Well, you said you'd like to
2	take five to ten minutes to wrap it up. Do you mean that,
3	five to ten minutes?
4	MR. MICHAEL KOHN: It may take longer, Your
5	Honor. I was hoping (laughter) I know that was
6	startling.
7	CHAIRMAN BLOCH: Let's take a break until
8	1:45.
9	MR. MICHAEL KOHN: Thank you, Your Honor.
10	(Whereupon, the proceedings were recessed for
11	lunch at 12:20 p.m.)
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1	A-F-T-E-R-N-O-O-N P-R-O-C-E-E-D-I-N-G-S
2	1:53 p.m.
3	CHAIRMAN BLOCH: Good afternoon. Mr. Kohn.
4	CROSS EXAMINATION
5	MR. MICHAEL KOHN: Mr. Stokes, we left off
6	talking about the interrogatory response and the
7	differences in the responses.
8	We marked as an Intervenor Exhibit 243, excuse
9	me. There it is, earlier response to Georgia Power's I
10	think it was the third supplemental response of Georgia
11	Power's response to Mr. Mosbaugh's third set of
12	interrogatories. My question I want to ask
13	MR. BLAKE: It was exhibit 230.
14	MR. MICHAEL KOHN: Thank you. After you
15	signed off on the response to 230, can you tell me who you
16	talked to between that point and September 13, 1995, when
17	the amended responses were issued about the content of
18	your response?
19	MR. BLAKE: Are you looking into content other
20	than communications with counsel?
21	MR. MICHAEL KOHN: I wanted to know the entire
22	factual information this witness is relying upon to issue
23	these responses.
24	MR. BLAKE: Are you asking about
25	communications with counsel?
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1	MR. MICHAEL KOHN: If that's what he relied
2	upon to issue these responses, yes.
3	MR. BLAKE: Then I object.
4	BOARD EXAMINATION
5	CHAIRMAN BLOCH: First let's ask without
6	counsel. Other than counsel. Whom did you discuss the
7	content of the third supplemental response with prior to
8	the time it was revised?
9	THE WITNESS: There's another plant employee
10	whose name is Bill Gabbard, G-A-B-B-A-R-D, who I believe
11	put this together originally with some help from an INC
12	person.
13	MR. MICHAEL KOHN: Who was the INC person?
14	THE WITNESS: I believe it was Mike Duncan.
15	BOARD EXAMINATION
16	ADMINISTRATIVE JUDGE MURPHY: Did you discuss
17	it with Mr. Burr?
18	THE WITNESS: No.
19	MR. MICHAEL KOHN: Now what new factual piece
20	of information, was there any new factual information that
21	was brought to your attention?
22	THE WITNESS: Between the first and the
23	original?
24	MR. MICHAEL KOHN: Yes.
25	THE WITNESS: There were several.
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1	MR. BLAKE: Again, other than with counsel,
2	correct?
3	MR. MICHAEL KOHN: All right we'll limit these
4	right now to other than with counsel.
5	THE WITNESS: Yes. I mean the fact that he
6	used NPMIS and that he instead of the actual work order
7	and the fact that he took a general statement from someone
8	who he believed or he remembered to be Mike Duncan in the
9	way they would handle high dew point measurements, which
10	would be to blow down the air receiver. Basically that's
11	it from Bill until we did the actual reviews.
12	MR. MICHAEL KOHN: Did anyone tell you that
13	the air receivers were not blown down as part of the
14	corrective action?
15	THE WITNESS: No.
16	MR. MICHAEL KOHN: So when the supplement
17	comes out, the fourth supplemental response which we can
18	mark as Intervenors II-243, Your Honor.
19	CHAIRMAN BLOCH: Please describe it
20	MR. MICHAEL KOHN: It is September 13, 1995,
21	fourth supplemental response to Mosbaugh's third set of
22	interrogatories. It is three pages in length, followed by
23	an attached affidavit of Mr. Stokes, followed by two
24	separate charts.
25	CHAIRMAN BLOCH: Motion to mark is granted.

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1	(Whereupon, the exhibit was marked
2	for identification as Intervenor's
3	Exhibit No. II-243.)
4	MR. MICHAEL KOHN: I have copies if anyone
5	needs one at this time.
6	CHAIRMAN PLOCH: I do need one. Thank you.
7	MR. MICHAEL KOHN: Did anyone tell you
8	first, you can see that this is the supplemental response
9	that you signed. Correct?
10	THE WITNESS: Yes.
11	MR. MICHAEL KOHN: And in preparing the
12	supplemental response, did anyone tell you that the air
13	dryers were not blown down with respect to if you look
14	through the charts, you will see that you are aware
15	that some statements concerning blow down of the air
16	dryers where it's deleted. Correct?
17	THE WITNESS: That's right.
18	MR. MICHAEL KOHN: With respect to any of
19	those deletions, did anyone tell you that they now had a
20	recollection that the blow down did not occur?
21	THE WITNESS: No. It just was not on the
22	documentation available.
23	MR. MICHAEL KOHN: Did you ask the technicians
24	involved with the readings whether they or any other
25	person at the plant, whether blow downs occurred in that
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1	time period?
2	THE WITNESS: No.
3	MR. MICHAEL KOHN: The following question, I'm
4	sure is going to be objected to. Did counsel provide you
5	with any information concerning whether or not blow downs
6	occurred during that time period?
7	MR. BLAKE: Good prediction. I object.
8	CHAIRMAN BLOCH: I don't see any basis for
9	asking him about counsel communications.
10	MR. MICHAEL KOHN: So then your only basis for
11	removing the statement is that it was not contained in the
12	NWO?
13	THE WITNESS: Or other documentation that we
14	could find.
15	CHAIRMAN BLOCH: Does that mean that when we
16	look at this and it doesn't say that a blow down was
17	performed, we can assume it wasn't performed?
18	THE WITNESS: I mean I don't know what you can
19	assume. It's just that it wasn't documented. It may have
20	been performed.
21	CHAIRMAN BLOCH: Where it has been crossed
22	off, there's no document to show that it existed?
23	THE WITNESS: I'm sorry?
24	CHAIRMAN BLOCH: But you said that before it
25	came either from the NWO or the rounds document.
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THE WITNESS: No. I said also, if you remember, that a guy -- the guy said that he took a general statement from the INC person that said well, yes, that's our normal practice. So that's why he put it in there, assuming that it was most likely done, if it's their normal practice. But it wasn't documented that we could find.

CHAIRMAN BLOCH: What is the meaning of the crossing out of the name of the person assigned to take readings?

earlier too. What the guy did in certain cases is just put the guys name that actually signed the work order off, when in fact, it may have been two or three other people that actually performed the work throughout the process. So that was just his mistake initially in putting that down. So we tried to clarify that a little bit and put the precise person who was recorded as taking the data.

MR. MICHAEL KOHN: We would look at the last chart contained in Intervenors II-243, the chart that has the annotated corrections, if I might refer to them that way. It's the chart which shows the differences from the original chart. If I start at the beginning, I look at air receivers being taken. Let's look at like the 18901008MWO. There is no mention about blow downs

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1	occurring at that time. Correct?
2	THE WITNESS: Which work order again, 90
3	CHAIRMAN BLOCH: It's the first line? Is that
4	what you are looking at?
5	MR. MICHAEL KOHN: It's actually the second
6	line, the March 1, 1989 date, MWO 18901008.
7	THE WITNESS: Okay.
8	MR. MICHAEL KOHN: There's no blow downs
9	identified there. Correct?
10	THE WITNESS: It looks like that was a
11	corrective work order, where they actually did some work
12	on the compressor or fan.
13	MR. MICHAEL KOHN: If you would let's look
14	at the third page in, a NWO 19004257, dated 11-8-90.
15	Again, there's no blow downs occurring there. Do you
16	think one would have occurred there?
17	THE WITNESS: Again, that looks like a
18	corrective type of work order. So they may defer back to
19	maybe an open PM work order or following this one there
20	could have been some sort of blow down. It is hard to
21	say. Obviously it didn't record it on the work order.
22	MR. MICHAEL KOHN: And the next one below it,
23	19004394, there is no blow down noted there. Is there?
24	THE WITNESS: No, sir.
25	MR. MICHAEL KOHN: And the dew points
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1	beforehand were 60, .2 and 70.8. Then on the corrective
2	actions list they eventually got
3	CHAIRMAN BLOCH: Mr. Kohn, why are we reading
4	a written document?
5	MR. MICHAEL KOHN: I'm just trying to
6	establish that in this particular case, there had to have
7	been a blow down and it's not recorded here.
8	MR. BLAKE: Which one are you looking at now?
9	MR. MICHAEL KOHN: 19004394, MWO.
10	MR. BLAKE: I don't understand why you are
11	representing it that way. It doesn't use the term blow
12	down, but why don't you ask him what the control comments
13	indicate.
14	MR. MICHAEL KOHN: I won't follow this line of
15	questioning, Your Honor. I think your observation was
16	well taken.
17	MR. BLAKE: Thank you. I take it the Board
18	understands as well.
19	CHAIRMAN BLOCH: Yes. I thought it was
20	humorous that he said, "Thank you, Your Honor" and you
21	said, "Thank you."
22	MR. BLAKE: Oh I didn't hear, "Your Honor." I
23	apologize.
24	CHAIRMAN BLOCH: Anything to keep the mind
25	alive.
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1	MR. BLAKE: And I think the record probably
2	should reflect that during the lunch hour in response to
3	our request this morning, we had telecopied to us what we
4	believed to be these technical evaluations Mr. Stokes
5	referred to. We have distributed that to the Board and
6	the parties. I take it that's what now prompts the
7	additional questions. Correct?
8	MR. MICHAEL KOHN: After reviewing those with
9	my client, additional questions arose.
10	Do you believe whether the pressure gauges
11	would have been calibrated in the shop or in the field?
12	THE WITNESS: No. It's generally done in the
13	field.
14	MR. BLAKE: Can I have a reference to the
15	documentation that we gave you that leads to this?
16	CHAIRMAN BLOCH: It's general. The
17	supposition is that water was introduced into the line in
18	the field. If it was not in the field, they couldn't
19	have. They have introduced it into the line, it would
20	have had to be done in the field I assume. They didn't
21	remove the pressure gauge. Well I'm testifying.
22	Mr. Blake, would you like to renew your
23	question?
24	MR. BLAKE: No. Hopefully we'll just get by
25	it more quickly.

1	MR. MICHAEL KOHN: And can you tell me in the
2	deficiency I'd like to mark as Intervenors II-244, I
3	believe. It is a one page document from the deficiency
4	card package. It is actually from the work order,
5	attached to the deficiency card package, work order number
6	19502428. It has on the top a number appearing 14846,
7	which is printed on the top.
8	CHAIRMAN BLOCH: Off the record.
9	(Whereupon, from 2:10 p.m. until 2:12 p.m. the
10	proceedings went off the record.)
11	CHAIRMAN BLOCH: Motion to mark is granted.
12	(Whereupon, the exhibit was marked
13	for identification as Intervenor's
14	Exhibit No. II-244.)
15	MR. BLAKE: This would have been the third
16	from the last page in the deficiency card package that we
17	handed out I think now a couple weeks ago. The top page
18	would have been the actual deficiency card at that point,
19	not yet completed. This would have been the third from
20	the last page in that package.
21	MR. MICHAEL KOHN: All right, Mr. Stokes, if
22	you would look at the document in front of you, you will
23	see after the MWO number, there's a systems/tags/component
24	ID number.

THE WITNESS: Yes.

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1	MR. MICHAEL KOHN: The number that appears
2	there, that's 1PI9053, correct?
3	THE WITNESS: Yes.
4	MR. MICHAEL KOHN: What does that refer to?
5	THE WITNESS: That's the plant instrument tag
6	number for one of these gauges.
7	MR. MICHAEL KOHN: One of the gauges where the
8	water was found?
9	THE WITNESS: Yes.
10	MR. MICHAEL KOHN: Can you tell me what the
11	comment under inspection means?
12	THE WITNESS: What it means? It simply stated
13	that the valve couldn't isolate completely.
14	MR. MICHAEL KOHN: All right. If the valve
15	could not isolate completely, then if you hooked up a
16	if you're doing the test in the field, do you think water
17	could be introduced in the system if this valve isn't
18	sealing correctly?
19	THE WITNESS: If it had been that way at that
20	time, it possibly could have.
21	MR. MICHAEL KOHN: If the valve this
22	statement goes on to state that when attempting to bleed
23	pressure and a small amount of liquid was released and
24	captured, unable to determine total amount in line due to
25	inability to isolate pressure. Does that mean that there

1	was more fluid left in the system that you could not
2	capture, due to the valve not sealing?
3	THE WITNESS: No. I think they actually got
4	surprised by it when they started to take the cap off.
5	They had the valve isolated and they had a capturing
6	device, whatever it was, a bag or something underneath
7	there.
8	When they started to take the cap off, the
9	pressure was still there. So it actually blew some of the
10	water out that they were unable to however much, who
11	knows, but just a little bit out that weren't able to
12	catch initially. So they caught it immediately and put
13	the cap back on and then isolated the system down upstream
14	with this valve, and then repeated the process and
15	captured the water. I believe that's what this means.
16	MR. MICHAEL KOHN: Do you know if this valve
17	was ever replaced?
18	THE WITNESS: I don't think it has been
19	replaced yet.
20	CHAIRMAN BLOCH: Mr. Stokes, isn't this valve
21	open when the system is operating?
22	THE WITNESS: Yes.
23	MR. MICHAEL KOHN: If they did an in-place
24	calibration, how could you do it if the valve was leaking?
25	THE WITNESS: I didn't do the calibration. I
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don't know. MR. MICHAEL KOHN: Well, you understand what 2 I'm saying. If it was done in the field rather than at 3 the shop, could they have done the calibration if the valve was leaking? 5 THE WITNESS: It depends on how much it was 6 7 leaking, I guess. CHAIRMAN BLOCH: Well, how could you know 8 that? 9 THE WITNESS: You should ask the INT people. 10 I don't know. I don't know how much it was leaking. I 11 haven't tried to do a calibration on it in its current 12 condition. It may not have been in that condition when 13 they calibrated it. I don't know. 14 MR. MICHAEL KOHN: I do not have any further 15 questions in these areas, but I would like to ask 16 everyone's indulgence for a second. In order to make a 17 complete and accurate record there's a fact concerning Mr. 18 Stoke's log and the numbering system and when those 19 numbers began, which I don't think is in the record. We 20 would like to put that in the record at this time with Mr. 21

MR. BLAKE: Are you talking about the diesel generator start log?

MR. MICHAEL KOHN: The start logs, when the

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Stokes.

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1	log
2	MR. BLAKE: And the fact that he happens to be
3	here, let's go back and
4	MR. MICHAEL KOHN: Basically, it deals with
5	the start numbering system, the starts are numbered
6	sequentially.
7	MR. BLAKE: Why don't we just talk about this
8	off the record during the next break. Ask me what it is.
9	We'll see if we can work our way and the staff can go on
.0	with our cross. If there's something why don't we just
1	talk about it. Just let me know during the next break.
.2	MR. MICHAEL KOHN: Okay.
.3	MR. BLAKE: We'll see if we can work it out.
.4	CHAIRMAN BLOCH: Staff.
.5	CROSS EXAMINATION
.6	MR. BARTH: Good afternoon, Mr. Stokes. I am
.7	Charles Barth. I am counsel with the NRC. I have some
.8	questions to ask you.
.9	I believe you have a copy of your testimony
0.0	available to you.
1	THE WITNESS: A copy of my testimony?
22	MR. BARTH: Your pre-filed testimony. It is
23	immediately before transcript page 7020, and was given on
4	June 3, 1995 in Loblolly (phonetic).

THE WITNESS: Hang on a second. 7022?

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1	MR. BARTH: 7020.
2	THE WITNESS: 7020. Okay.
3	MR. BARTH: Could I ask you to turn to page
4	three of your testimony, sir.
5	MR. BLAKE: Wait. What he has are the
6	manuscripts, so that the pre-filed testimony which is
7	incorporated into the transcript would not be in front of
8	him. We'll see if we can get him a copy.
9	MR. BARTH: We will.
10	MR. BLAKE: You are going to ask him about his
11	pre-filed testimony back in June. Correct?
12	MR. BARTH: Yes, sir.
13	MR. BLAKE: He doesn't have it.
14	ADMINISTRATIVE JUDGE CARPENTER: Do you have a
15	cross examination plan, Mr. Barth?
16	MR. BARTH: No. Mr. Chairman, I am going to
17	provide Mr. Stokes with a copy of his pre-filed testimony.
18	Mr. Stokes, I would refer you to page three,
19	line 17 through 20.
20	THE WITNESS: Okay.
21	MR. BARTH: The question is are you aware of
22	water ever being found in the diesel instrument air
23	sensing lines. You answered, "No, I am not." Given
24	reflection on all that's transpired, is that a true and
25	correct statement?

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1	THE WITNESS: In the sensing lines, it depends
2	on how you want to define it, I guess.
3	MR. BARTH: How would you define it? Are the
4	sensing lines the 60 psig lines?
5	THE WITNESS: Yes. They are 60 pounds.
6	MR. BARTH: And in those lines, to the best of
7	your knowledge, has water ever been found outside of the
8	bubble test?
9	THE WITNESS: No. Not to my knowledge.
10	MR. BARTH: So this statement on page three is
11	correct. Is that right?
12	THE WITNESS: Defined that way, it is correct.
13	MR. BARTH: I would refer you to transcript
14	page 7055. It is possible that Mr. Kohn may have covered
15	some of this. If so, I ask indulgence of counsel to let
16	me re-ask the question.
17	Do you have transcript page 7066?
18	THE WITNESS: Okay.
19	MR. BARTH: There is a question on line three,
20	and your answer commenced on line six. If you possibly
21	can, can you think back to Augusta, Georgia, and tell me
22	were you thinking of the 250 psig line or the 60 psig
23	lines? You talk about diesel ware system. What did you
24	have in your mind when you answered this question?
25	THE WITNESS: Ultimately it's the 60 pound.

1	Now obviously if we found moisture in the air receivers
2	though, then we would probably take I mean, the way
3	it's written now we would take steps to isolate the
4	receiver from the diesel and then take moisture checks
5	within the 60 pound air supply also to make sure that it
6	doesn't have moisture inside it.
7	MR. BARTH: Back when you were requested to
8	prepare testimony, were you concerned with addressing
9	pneumatic lines going to the sensors on the diesel or
10	diesel ware systems throughout the facility, which are
11	different? What was your concern about what were you
12	going to write about?
13	THE WITNESS: When you say these could you
14	repeat that again?
15	MR. BARTH: Was the purpose of your testimony
16	to address principally the instrumentation and the air
17	lines leading to it to the diesel. Nods will not do. The
18	reporter can't see. I wish you would answer yes or no.
19	THE WITNESS: Yes.
20	MR. BARTH: Was that the general framework you
21	had when you wrote your testimony and testified?
22	THE WITNESS: Yes, sir. I believe so.
23	MR. BARTH: I would refer you to transcript
24	page 7162, if you please.
25	MR. MICHAEL KOHN: What page, excuse me?

1	MR. BARTH: 7162, line 16. This is a response
2	to a question by Chairman Bloch. On line 17, you refer to
3	our air system in general. On line 18, you refer to
4	retesting of the logic systems. Are the logic systems
5	hooked onto the pneumatic air lines, Mr. Stokes?
6	THE WITNESS: Yes.
7	MR. BARTH: What is the pressure at those
8	lines?
9	THE WITNESS: Sixty pounds.
10	MR. BARTH: That is not the 250 pound psig
11	air?
12	THE WITNESS: No, sir.
13	MR. BARTH: So if we go down to page 21 and
14	you say if there had ever been moisture in the system
15	MR. MICHAEL KOHN: Page 21 of what?
16	THE WITNESS: Line 21.
17	MR. BARTH: Going to line 21, where you start,
18	if there had ever been moisture in the system, were you
19	referring there to the logic system lines to which you
20	refer to in the same paragraph which are 60 psig lines?
21	THE WITNESS: I would have to say so. It
22	looks like.
23	MR. BARTH: Do you recall at the present time
24	whether you were concerned with those 60 psig lines at
25	this time?

1	THE WITNESS: During the 1990 events?
2	MR. BARTH: During the testimony given in
3	Augusta, Georgia, in response to Judge Bloch's question.
4	THE WITNESS: Ultimately that is the concern,
5	is the 60 pound supply system.
6	MR. BARTH: Had moisture been found in those
7	60 pound lines as of the date you gave testimony in
8	Augusta, Georgia?
9	THE WITNESS: No, sir.
10	MR. BARTH: I would like to refer you to
11	transcript page 7385, if you please. There's a question
12	that starts on line one, and your answer on line four.
13	The question is, actual moisture of water in the diesel
14	pneumatic lines. You answered that you had not seen
15	evidence.
16	THE WITNESS: Right.
17	MR. BARTH: If that encompasses the 250 psig
18	lines as well as the 60 psig lines, the answer is not
19	correct, is it?
20	THE WITNESS: No.
21	MR. BARTH: Do you have any idea at this time
22	whether your concern with the instrumentation and
23	instrumentation lines would have inclined you to have
24	answered in those terms, in spite of the fact that the
25	words are quite general here?

1	THE WITNESS: I think that is probably what I
2	was doing, to not actually remember of have it entered my
3	mind as to finding moisture in those two lines or those
4	two gauges, I really don't know. Surely it was
5	concentrated and focused on the pneumatic system in our
6	normal checkpoints and that type stuff.
7	MR. BARTH: Let me refer you to the next page
8	7386 of the transcript, in which the question is, what
9	lines were you talking about. That's the question on page
0	three. Your answer on line five is what, of transcript
1	page 7386? The question is on line five.
2	THE WITNESS: Line six it says, is that what
3	you are referring to? Well, let's talk about the diesel
4	pneumatic lines and sensor lines.
5	MR. BARTH: To your recollection, is that the
6	framework with which you answered these questions, talking
7	about sensor lines which are 60 psig lines?
8	MR. MICHAEL KOHN: I have an objection to the
9	questions. I think the transcript indicates that the
0	lines they are talking about are the lines where corrosion
1	was found. If you look on page 7385 lines 24 and 25.
2	The framework of the question seems that Mr.
3	Barth is trying to encompass more than is indicated in the
4	transcript.

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MR. BARTH: I've not asked about corrosion,

1	Your Honer.
2	CHAIRMAN BLOCH: What kind of an objection is
3	that?
4	MR. MICHAEL KOHN: The foundation to the
5	question. He's been asking as to what is meant by lines
6	in prior portions of the transcript. It's my
7	understanding of what's occurring, he's trying to derive
8	what is meant. But in between, there's changes of
9	discussion. I don't know if
10	CHAIRMAN BLOCH: To the extent that we are
11	interpreting the transcript, I'm not sure we're going to
12	get that much out of the witness, but if you really want
13	to interpret the transcript, I'd suggest less leading
14	questions.
15	MR. BARTH: I have done neither, Your Honor.
16	I have asked him if he can recall whether he was
17	discussing 60 psig lines or 250 psig lines in this line of
18	questioning.
19	CHAIRMAN BLOCH: Okay. I think the last
20	question to which this objection was raised was somewhat
21	leading. Why don't you try it again?
22	MR. BARTH: Having looked at transcript page
23	7385 and 7386, to the best of your recollection, were you
24	discussing 60 psig instrumentation lines?
25	THE WITNESS: Yes. I would have to say so.

1	MR. BARTH: And the further question, as of
2	the time you answered that question, had water been found
3	in those lines?
4	THE WITNESS: No, sir.
5	MR. BARTH: Here I ask you to recall your
6	questions by Mr. Kohn. Will you turn to transcript page
7	7520, if you please.
8	THE WITNESS: Okay.
9	MR. BARTH: Is the discussion at the top of
10	the page a discussion relating to the
11	MR. MICHAEL KOHN: Excuse me. Is that not in
12	the Georgia Power handout? I have to find it.
13	CHAIRMAN BLOCH: The date, sir?
14	MR. BARTH: June 6, 1995.
15	MR. MICHAEL KOHN: 75
16	MR. BARTH: 20.
17	ADMINISTRATIVE JUDGE CARPENTER: What line?
18	MR. BARTH: Top of the page, Your Honor.
19	Is the discussion at the bottom of page 7519
20	and the top of page 7520 relating to the eight ounces of
21	water allegedly found in a jar coming out of diesel lines?
22	It's a question. Does that discussion relate to the eight
23	ounces of water allegedly found in a jar coming out of the
24	lines?

THE WITNESS: Yes.

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	[2018] IN 1918 (1918] IN 1918 (1918)
1	MR. BARTH: Do you recall Mr. Kohn asking you
2	questions about this earlier today?
3	THE WITNESS: Yes.
4	MR. BARTH: And you were questioned in
5	Augusta, Georgia, about this obviously from the
6	transcript.
7	Do you now have any present recollection that
8	there is any error in your response in Augusta, as set
9	forth in this transcript here?
10	THE WITNESS: About that eight ounces of
11	water? No.
12	MR. BARTH: Having refreshed your recollection
13	about the water found in 1995 by Mr. Johnston, I ask you
14	to jog your memory and see if you can remember any more
15	about the alleged eight ounces of water allegedly found on
16	diesel lines, other than you have testified to previously.
17	THE WITNESS: No, sir.
18	MR. BARTI: Earlier, you mentioned an NRC
19	employee which I believe you referred to as Randy. Was
20	that Randy Moore?
21	THE WITNESS: Yes.
22	MR. BARTH: I would refer you, if I may, to
23	transcript page 7669. Let me know when you have the page.
24	THE WITNESS: Okay, I have it.
25	MR. MICHAEL KOHN: What's the date?
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1	MR. BARTH: The date is June 5, Mr. Kohn.
2	MR. MICHAEL KOHN: 7669?
3	ADMINISTRATIVE JUDGE CARPENTER: June 7.
4	THE WITNESS: Yes, sir.
5	MR. BARTH: You're right, June 7. It's hard
6	to see my blue pages.
7	There's a question starting on line four as to
8	whether there's any evidence of moisture that was ever
9	actually found in the logic system. On line eight you
10	replied, "No, sir, not to my recollection."
11	Do you have any change to make in that
12	testimony now in view of the water discovered by Mr.
13	Johnston in February or March of 1995?
14	THE WITNESS: No, sir.
15	MR. BARTH: That statement is correct? Is
16	that correct?
17	THE WITNESS: Yes, it's correct.
18	MR. BARTH: I would refer you to transcript
19	page 7706.
20	CHAIRMAN BLOCH: The date of this one?
21	MR. MICHAEL KOHN: Same date.
22	MR. BARTH: I'm advised it's the same date,
23	Your Honor.
24	There's a truncated question that starts at
25	the beginning, but it indicates in the question, was water
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1	or moisture found in control air systems. What was your
2	answer on line seven?
3	THE WITNESS: No.
4	MR. BARTH: Is that answer still true and
5	correct to the best of your knowledge and belief?
6	THE WITNESS: Like I said before, if you are
7	talking control air, it's still true.
8	MR. BARTH: The if is bothersome. The
9	question is, any signs of water or moisture were found in
10	the control air systems.
11	THE WITNESS: It's still true.
12	MR. BARTH: That is true. Thank you.
13	Your Honor, this is going to take a bit of
14	assistance from you. I have a picture provided by the
15	licensee to the licensing board. I have picture frame 26.
16	This has not been marked, it has not been introduced. I
17	would like to show the picture to the witness and ask
18	permission of the licensing board to substitute a
19	photocopy for the picture. The photocopy of course could
20	be born into the record in the long run. Therefore, I
21	would
22	CHAIRMAN BLOCH: Do we have any idea how good
23	the quality of a photocopy will be?
24	MR. BARTH: The photocopy's quality is
25	sufficient for the purposes of the questions. NEAL R. GROSS

1	CHAIRMAN BLOCH: Then we can do what you said.
2	MR. BARTH: I believe the number of the staff
3	exhibit will be II-69, Your Honor. I ask that the
4	reporter mark it for identification with your permission.
5	CHAIRMAN BLOCH: Granted.
6	(Whereupon, the exhibit was marked
7	for identification as Staff Exhibit
8	No. II-69.)
9	MR. BARTH: I also move the bench to allow me
10	to substitute a photocopy for the original, if I may have
11	your permission.
12	CHAIRMAN BLOCH: Granted. So you are going to
13	mark the photocopy, isn't that right?
14	MR. BARTH: Yes, Your Honor. That would be
15	the most successful way to handle this.
16	CHAIRMAN BLOCH: Let the record show that the
17	Board will keep one set of photographs with the record,
18	colored photographs.
19	MS. YOUNG: Judge Bloch
19 20	MS. YOUNG: Judge Bloch CHAIRMAN BLOCH: I'd note for the record that
20	CHAIRMAN BLOCH: I'd note for the record that
20	CHAIRMAN BLOCH: I'd note for the record that the only part of this that is hard to see is the knob on
20 21 22	CHAIRMAN BLOCH: I'd note for the record that the only part of this that is hard to see is the knob on the valve.

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photographs in some file so that the Commission will have 1 access to them? Because I don't believe those photographs 2 were given to the Board using any documentation. It was 3 just something handed to the Board. Copies were not 4 provided to the parties. I am just concerned about 5 extraneous materials being in the Board's hand. 6 CHAIRMAN BLOCH: You don't have those copies? 7 MS. YOUNG: No. We do not. 8 MR. BLAKE: That is the onliest set. 9 were first shown to the parties before I divulged them to 10 the Board. I showed them to the Board to the extent it 11 might be helpful for the Board's use in avoiding the need 12 for it to work. We've never gotten them back, but I take 13 it that you were still looking through them. 14 CHAIRMAN BLOCH: My thought was that with this 15 exhibit, it would be handy to have a copy of that picture 16 available if the Commission wanted to see it or if your 17 group wanted to see it. 18 MS. YOUNG: But traditionally, it is available 19 for the public record, what information has been submitted 20 to the Board. You talked about cross examination plans 21 being placed in a file afterwards. Will these photographs 22 also be placed somewhere so there is a record of what was 23 given to the Board in the midst of this proceeding? 24

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CHAIRMAN BLOCH: In fact, that generally is

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1	
1	the case. But if we were to have taken a tour of the
2	plant, it would not necessarily be in the public record.
3	MS. YOUNG: This is something that there is a
4	physical manifestation of, and it would be available for
5	public review. It's not the same thing as taking a trip.
6	CHAIRMAN BLOCH: Well, we also are permitted
7	to read freely in the literature about the plant. That is
8	never in the record. We'll take this under advisement.
9	MR. BARTH: Mr. Stokes.
10	THE WITNESS: Yes.
11	MR. BARTH: We're back together again. Would
12	you look at both the color photograph and the photocopy,
13	which is monochromatic and which is marked as Staff
14	Exhibit II-69.
15	THE WITNESS: Okay. Mine is not marked.
16	MR. BARTH: To the best of your vision, is the
1.7	photocopy an accurate depiction of the color picture
18	itself?
19	THE WITNESS: Yes, sir.
20	MR. BARTH: I have provided you with a ruler.
21	I would ask you to measure on the color photograph the
22	diameter of the line leading to the valve.
23	CHAIRMAN BLOCH: We have no idea what the
24	scale is of the photograph.
25	MR. BARTH: We will. We will, Your Honor.

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1	That is the purpose of asking him this question.
2	MR. MICHAEL KOHN: Your Honor, maybe the
3	parties can just stipulate to something. I mean
4	CHAIRMAN BLOCH: Off the record.
5	(Whereupon, from 2:44 p.m. until 2:46 p.m. the
6	proceedings went off the record.)
7	MR. BARTH: Mr. Stokes, would you please take
8	a ruler which I provided to you and measure the outside
9	diameter of the line leading to the valve, color
10	photograph.
11	THE WITNESS: It actually looks just over
12	somewhere between three-sixteeths and a quarter.
13	MR. BARTH: Is it approximately a quarter of
14	an inch?
15	THE WITNESS: Approximately.
15	THE WITNESS: Approximately. MR. BARTH: And I believe you previously
	현실이 그렇게 하면 하는데 하는데 하다 하는데 되는데 하는데 얼마 없었다. 그래요 !
16	MR. BARTH: And I believe you previously
16	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I
16 17 18	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I will ask you to reiterate for the License Board, is that a
16 17 18	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I will ask you to reiterate for the License Board, is that a quarter inch line leading in to the best of your knowledge
16 17 18 19 20	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I will ask you to reiterate for the License Board, is that a quarter inch line leading in to the best of your knowledge ability?
16 17 18 19 20 21	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I will ask you to reiterate for the License Board, is that a quarter inch line leading in to the best of your knowledge ability? THE WITNESS: It is a quarter inch line.
16 17 18 19 20 21 22	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I will ask you to reiterate for the License Board, is that a quarter inch line leading in to the best of your knowledge ability? THE WITNESS: It is a quarter inch line. MR. BARTH: Then do you conclude that the
16 17 18 19 20 21 22 23	MR. BARTH: And I believe you previously testified that it's a quarter inch line leading in, but I will ask you to reiterate for the License Board, is that a quarter inch line leading in to the best of your knowledge ability? THE WITNESS: It is a quarter inch line. MR. BARTH: Then do you conclude that the scale is a full scale reproduction of the

1	quarter inch line mean that the outside diameter is a
2	quarter of an inch?
3	MR. BARTH: He can't measure it inside, Your
4	Honor.
5	BOARD EXAMINATION
6	CHAIRMAN BLOCH: Is that what it is?
7	THE WITNESS: Yes. Actually.
8	CHAIRMAN BLOCH: If you know.
9	THE WITNESS: I'm not sure. Witness doesn't
10	know. He could say actually inside, but I'm not sure.
11	MR. BARTH: Does the photograph show the
12	inside of the pipe leading to it?
13	CHAIRMAN BLOCH: No. We'll note that it
14	doesn't show the inside of the pipe.
15	MR. BARTH: Then I again ask you to make an
16	effort to approximate the outside diameter of the pipe
17	leading into the valve.
18	THE WITNESS: It's approximately a quarter of
19	an inch, but it's not quite there with the measurement.
20	MR. BARTH: Fine. Could you measure the
21	distance between the valve which shuts off the flow and
22	the dead end of the pipe.
23	CHAIRMAN BLOCH: So which part of the valve do
24	you want him to start with?
25	MR. BARTH: I would like him to start with the
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1	middle of where the valve comes down. There's a square
2	where the valve seats.
3	CHAIRMAN BLOCH: So you want him to start on
4	the right side of the seat?
5	MR. BARTH: I would like him to start in the
6	middle.
7	CHAIRMAN BLOCH: In the middle of the seat.
8	MR. BARTH: In the middle of the seating,
9	which is a square.
10	MR. MICHAEL KOHN: Is that are we assuming
11	the middle of this W?
12	MR. BARTH: That's approximately it, Mr. Kohn.
13	MR. MICHAEL KOHN: Okay.
14	MR. BARTH: I'd like you to measure to the end
15	of where the piece of pipe sticks out from beyond the
16	valve.
17	MR. MICHAEL KOHN: I'm not sure where that is.
18	MR. BARTH: It's nice that you don't have to
19	testify then.
20	MR. MICHAEL KOHN: But I have to follow it.
21	CHAIRMAN BLOCH: He's going to go to the
22	middle of what? From there to where?
23	MR. BARTH: To where the pipe ends, dead ends.
24	This has been wagged as a dead end pipe, Your Honor.
25	CHAIRMAN BLOCH: Is that before or after it
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1	makes the bend?
2	MR. BARTH: It does not a bend. It has a T,
3	but it goes to the end. We're trying to get approximate
4	figures.
5	THE WITNESS: In other words, you don't want
6	to go to the center of that pipe over there. You want to
7	go to just where the pipe goes into the
8	MR. BARTH: Yes, sir. We would like to
9	calculate the volume that is between the that is left
10	in that valve. When the valve is closed, we want to
11	calculate the volume that is left.
12	THE WITNESS: Looks like about pretty close to
13	one and a half inches, maybe a little less than that.
14	MR. BARTH: That comes to my calculations.
15	Approximately one and a half inches. Is that correct?
16	THE WITNESS: Yes.
17	MR. BARTH: Now then if you assume, I know
13	this is fanciful, if you assume that the pipe leading in
19	has no walls, is a quarter inch thick, could you calculate
20	the volume that is left in that pipe when that valve is
21	closed? This is easily done by raising four to the minus
22	one times pi times the distance between the pipe, which
23	you say is one and a half inches.
24	The square and the pi are in the lower
25	lefthand corner.

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1	THE WITNESS: Okay. I've got the pi and I've
2	got the square.
3	MR. BARTH: You divided the diameter by two, I
4	hope. Then squared that for the radius times five.
5	MR. MICHAEL KOHN: Your Honor, I'd like to
6	make an objection. I think NRC staff can call their own
7	witness to do the calculation. We don't need to do it
8	here on approximations.
9	Second, I don't believe it's within the scope
10	of what the witness has actually testified to. I might be
11	wrong, but I think there's a more expeditious way of doing
12	it than at this hearing.
13	MR. BARTH: There is. The Judge suggested by
14	stipulation. That was declined.
15	Could you calculate the volume?
16	THE WITNESS: If you've got it there, can you
17	just have you already done it?
18	MR. BARTH: Certainly, but I can't testify,
19	and I can't get a stipulation. Will you please take a
20	quarter inch.
21	THE WITNESS: Okay.
22	MR. BARTH: Convert it to a decimal.
23	CHAIRMAN BLOCH: Could you state what you
24	believe the volume is?
25	MR. BARTH: .049087385 cubic inches.

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1	CHAIRMAN BLOCH: Do you think it's less than
2	.05 cubic inches. Is that right?
3	MR. BARTH: Yes, sir, .049.
4	CHAIRMAN BLOCH: Are the parties willing to
5	stipulate to that?
6	MR. BARTH: That is per inch of line. That
7	has to be multiplied by one and a half, which is the
8	distance.
9	CHAIR'AN BLOCH: So it's less than .075.
10	MR. MICHAEL KOHN: He can't ignore the wall
11	thickness in the calculation.
12	MR. BARTH: If we ignore the wall thickness,
13	we help you, Mr. Kohn. If we take the wall thickness we
14	go against you. This is in your favor.
15	MR. MICHAEL KOHN: I don't read it that way,
16	Charles.
17	CHAIRMAN BLOCH: The more the volume, the more
18	moisture is possible in that line.
19	Why don't we take our 10 minute break, and at
20	the end, we'll have a solution to this I'm sure.
21	MR. BARTH: The answer is quite simple, as you
22	pointed out, Your Honor. It's .073 cubic inches are in
23	that thing. But I am going to have to get Mr. Stokes to
24	calculate. This is simple arithmetic. Pi R squared times
25	

1	CHAIRMAN BLOCH: You can also get a
2	stipulation that the upper bound is .01 or even .02, and
3	you are just as well off.
4	MR. BARTH: No, .07 comes a lot closer.
5	There's a lot of difference.
6	CHAIRMAN BLOCH: .1 or .2 and you are still
7	just as well off.
8	ADMINISTRATIVE JUDGE CARPENTER: And both are
9	smaller than a bread box.
10	CHAIRMAN BLOCH: We'll go off the record.
11	(Whereupon, from 2:52 p.m. until 3:06 p.m. the
12	proceedings went off the record.)
13	CHAIRMAN BLOCH: We've received a copy of
14	Intervenor's Exhibit II-240 in color. The reporter has
15	been given three copies to bind in, in the official
16	transcript. I would suggest that they be bound at the
17	beginning of today's volume, since they relate to
18	yesterday's volume.
19	Let us continue. First of all, I understand
20	there was a stipulation as to the upper bound of the
21	volume in the dead end of .07
22	MR. BARTH: May I make the statement.
23	CHAIRMAN BLOCH: Yes, sir.
24	MR. BARTH: And see if we can all agree. That
25	if this dead end piece of pipe were valve shut, the volume
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1	that the stub beyond the valve would be less than .07
2	cubic inches. Does that sound reasonable to the
3	Intervenor, to the Power Company?
4	CHAIRMAN BLOCH: I see nods, indicating yes.
5	MR. BARTH: I will continue, Mr. Stokes. Mr.
6	Stokes,
7	ADMINISTRATIVE JUDGE MURPHY: Before we go on,
8	is the photograph that we're working from or the copy of
9	the photograph that we're working from, has that been
10	marked?
11	MR. BARTH: Yes, Your Honor. That has been
12	marked as Staff Exhibit No. II-69. I appreciate your
13	comment. I move the bench to accept this as evidence in
14	this case.
15	CHAIRMAN BLOCH: Granted.
16	(Whereupon, the exhibit previously
17	marked for identification as Staff
18	Exhibit No. II-69 was received into
19	evidence.)
20	CROSS EXAMINATION
21	MR. BARTH: Mr. Stokes, are you familiar with
22	the piping beyond the valve that we have been discussing
23	in the diesel room?
24	THE WITNESS: Yes.
25	MR. BARTH: Is there any conceivable way, in

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1	your professional judgement, that this .07 cubic inches of
2	water if the valve were opened could back track through
3	that system and get into the instrument lines?
4	ADMINISTRATIVE JUDGE MURPHY: Mr. Barth, did
5	you mis-speak?
6	CHAIRMAN BLOCH: He said .07 cubic inches of
7	water. Is that what you meant to say?
8	MR. BARTH: Yes. What did I say?
9	CHAIRMAN BLOCH: That's what you said.
10	ADMINISTRATIVE JUDGE MURPHY: Are you saying
11	this piece of pipe is full of water?
12	MR. BARTH: We're making a hypothetical
13	assumption, the worst case assumption. My place always
14	makes worst case assumptions. This is a class 9 accident.
15	We'll get back to that.
16	THE WITNESS: No.
17	MR. BARTH: By now the question is lost.
18	CHAIRMAN BLOCH: To clarify the record, this
19	was
20	Just a second, Mr. Barth. I just want to
21	clarify this was not a class 9 accident. Now you may
22	continue.
23	MR. BARTH: Is there any possible way that
24	this .07 cubic inches of water if the valve were opened,
25	could backtrack through that system and get into the
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1	instrument lines?
2	THE WITNESS: No.
3	ADMINISTRATIVE JUDGE MURPHY: Why do you say
4	that?
5	MR. BARTH: That's a question for the Judge,
6	Mr. Stokes, which you should answer. That was my next
7	question.
8	THE WITNESS: I mean you get the solid water
9	down at the end of the tube and you get constant pressure
10	there with the 60 pounds of air supply. It's not turning
11	over. It's not depressurizing. It's constant pressure
12	there. I just don't see how it can, it's going to
13	levitate or go anywhere from that.
14	CHAIRMAN BLOCH: I thought we established this
15	morning in discussion with me that you are not sure what
16	will happen to that water sitting there, because of the
17	molecular action at the surface.
18	THE WITNESS: I just do not believe it will go
19	anywhere. That is just my opinion. That is what you
20	asked for.
21	MR. BARTH: We'll continue with the Judge's
22	question.
23	Between the valve and the instrument lines,
24	does this quarter inch line have any rise at all? Does it
25	go up?

1	THE WITNESS: Yes. Like I was saying
2	initially or earlier this morning, it comes out
3	horizontally, and then it goes up to I don't know how
4	far, maybe six inches or so, above the gauge block-out
5	that I was talking about earlier, and then goes across and
6	then back down.
7	MR. BARTH: Again with the hypothetical. If
8	we assume that this seven one-hundredths of a cubic inch
9	of water could somehow travel to where the tube goes up,
10	is there any way that that seven hundredths of a cubic
11	inch of water could travel up the six inches of pipe?
12	THE WITNESS: Not in my opinion.
13	MR. BARTH: Are the facts I have give you, for
14	a hypothetical, somewhat unrealistic in that they do not
15	take into account the wall thickness, the coefficient of
16	adhesion, the water to the pipe, the coefficient of
17	cohesion of the water to itself to form droplets. Have I
18	given you an extreme example that is almost foolish?
19	THE WITNESS: Right.
20	MR. BARTH: As my counsel has well advised me,
21	she often does, is my assumption not overly conservative,
22	is the question.
23	THE WITNESS: Right.
24	MR. BARTH: It's a better word than foolish.

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May I have a moment, Your Honor, to check my

25

1	notesf
2	CHAIRMAN BLOCH: Granted
3	(Whereupon, the proceedings went briefly off
4	the record.)
5	CHAIRMAN BLOCH: Back on the record.
6	MR. BARTH: Thank you, Your Honor.
7	Mr. Stokes, if I mischaracterize your
8	testimony, please tell me. I believe you testified that
9	you really didn't think a great deal about the water found
10	by Mr. Johnston in March or April because you thought it
11	was insignificant, it was not meaningful. Is that
12	correct?
13	THE WITNESS: Yes.
14	MR. BARTH: Can you be very certain, and I ask
15	you to think back, that there have not been other
16	incidents of water being found that you thought were
17	insignificant or significant that might have escaped your
18	judgement and memory at this moment? How certain are you?
19	THE WITNESS: I'd say uncertain at this point,
20	that there are no other occurrences like this.
21	MR. BARTH: When Mr. Johnston or whoever
22	BOARD EXAMINATION
23	CHAIRMAN BLOCH: I'm sorry, but you qualified
24	the answer at the end. Are you certain that there are no
25	incidents involving water?
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1	THE WITNESS: To my recollection today, there
2	are no other instances. Like I think I testified on this
3	other one, the only reason I didn't bring it up is it just
4	did seem insignificant. I guess placed in that manner
5	now, I'd have to say no, this is the only one.
6	MR. MICHAEL KOHN: Does that include starting
7	error?
8	MR. BARTH: Another question.
9	CHAIRMAN BLOCH: The question that was just
10	asked can be reserved.
11	MR. BARTH: Did you observe the removal of the
12	cap on this deadend pipe by Mr. Johnston or whoever did it
13	Johnston was there, in February or March, 1995.
14	THE WITNESS: I don't recall specifically
15	seeing his removal of the cap. Mr. Burr may have, I don't
16	know. I do not recall that specifically.
17	BOARD EXAMINATION
18	CHAIRMAN BLOCH: Ultimately he wound up
19	removing more than one cap. Did you see the removal of
20	any of the subsequent caps?
21	THE WITNESS: No.
22	MR. BARTH: You may have to correct me. My
23	recollection is that you testified that the water came out
24	in the form of mist. Is that
25	THE WITNESS: A fog. Yes. I think that's

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1	what Mr. Johnston had said. I just don't recal?.
2	MR. BARTH: Mr. Stokes, is water compressible
3	in ordinary terms?
4	THE WITNESS: Is water compressible in
5	ordinary terms?
6	MR. BARTH: That's 60 psig.
7	THE WITNESS: I'm not sure what you are
8	leading to. At 60 psig, no.
9	MR. BARTH: Is water compressible at 250 psig,
10	significantly compress; ??
11	THE WITNESS: No.
12	MR. BARTH: If the blocked off piece of pipe
13	with the valve closed were completely full of water and
14	the cap were removed, would that water come out in fog?
15	THE WITNESS: Yes. If it were completely
16	full?
17	MR. BARTH: Completely filled.
18	THE WITNESS: No.
19	MR. BARTH: Is it your conclusion that this is
20	a reasonable conclusion then from your professional
21	judgement, that if it came out in a fog, that it was less
22	than completely filled?
23	THE WITNESS: Oh yes.
24	MR. BARTH: Does that make my prior
25	assumptions even more conservative?
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1	THE WITNESS: Yes.
2	MR. BARTH: As to the volume of water
3	contained there.
4	THE WITNESS: Yes.
5	MR. BARTH: I have no more questions, Mr.
6	Stokes. J appreciate your having come here. The
7	arithmecic has been fun.
8	CHAIRMAN BLOCH: Mr. Kohn, how much more do
9	yru estimate?
10	MR. MICHAEL KOHN: 10 or 20 minutes.
1.	CHAIRMAN BLOCH: Okay. Let's begin. It's
12	always a mystery to find out what that means.
13	RECROSS
14	MR. MICHAEL KOHN: Mr. Stokes, do you know if
15	the valves were leaking?
16	CHAIRMAN BLOCH: For the purpose of the
17	record, it might be helpful to specify a particular valve.
18	MR. MICHAEL KOHN: Yes. I think it might.
19	Mr. Barth was asking you about a fog coming out and
20	whether that would indicate that it was less than
21	completely filled. Could it also indicate that the valve
22	was leaking?
23	THE WITNESS: Where are you talking about,
24	which instance? Any instance?
25	MR. MICHAEL KOHN: Well, the one that Mr.
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1	Barth asked you about was the one that Mr. Johnston was
2	involved with, where you call it a fog coming out.
3	THE WITNESS: That he was probably
4	manipulating the valve I would say. For safety purposes I
5	would have to say that. I don't know what he did, but I
6	imagine you would loosen the little cap and possibly
7	BOARD EXAMINATION
8	CHAIRMAN BLOCH: I'm sorry. What was he doing
9	that would require that he open the valve?
1.0	THE WITNESS: I don't know. I don't remember.
11	CHAIRMAN BLOCH: So if you don't know, don't
12	speculate.
13	THE WITNESS: I'm not. I don't know what he
14	was
15	CHAIRMAN BLOCH: So is there any reason to
16	believe that the valve was being opened at the time that
17	the cap came off the end of the pipe?
18	THE WITNESS: There's no reason to speculate
19	either way. I would say if I were doing it, I would
20	isolate the valve just for safety purposes.
21	CHAIRMAN BLOCH: Well, you wouldn't want it to
22	blow in your face, would you?
23	THE WITNESS: No. I wouldn't it to blow the
24	cap off in my face.
25	MR. MICHAEL KOHN: Mr. Johnson was taking the
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make the connection, he would had to have taken the cap off from that T. MR. MICHAEL KOHN: So then would he have closed the valve? MR. BLAKE: Can I help, Mr. Kohn. Whether the isolation valve was closed or not, there would have been pressure in that little segment when he removed the cap, there would have been pressure released, just a small amount if the isolation valve were closed. A much larger amount, of course, if it weren't. Presumably shut the isolation valve, bled the pressure down in, made his test connection after he removed the top. When he bled it down, that is presumably when he got the fog. If that helps, I'd be happy to try to reach an agreement.	1	valve off excuse me. Taking the cap off to bleed down,
THE WITNESS: I don't know what he was doing. You are telling me that then, okay? MR. BLAKE: I will stipulate that in order to make the connection, he would had to have taken the cap off from that T. MR. MICHAEL KOHN: So then would he have closed the valve? MR. BLAKE: Can I help, Mr. Kohn. Whether the isolation valve was closed or not, there would have been pressure in that little segment when he removed the cap, there would have been pressure released, just a small amount if the isolation valve were closed. A much larger amount, of course, if it weren't. Presumably shut the isolation valve, bled the pressure down in, made his test connection after he removed the top. When he bled it down, that is presumably when he got the fog. If that helps, I'd be happy to try to reach an agreement. CHAIRMAN BLOCH: Mr. Kohn, do you need a brief recess? I am waiting for a question and I'm getting his conversation. How much time do you need for your	2	to vent the system. That's what he was doing at that
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22 CHAIRMAN BLOCH: Mr. Kohn, do you need a brief 23 recess? I am waiting for a question and I'm getting his 24 conversation. How much time do you need for your	20	he got the fog. If that helps, I'd be happy to try to
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24 conversation. How much time do you need for your	22	CHAIRMAN BLOCH: Mr. Kohn, do you need a brief
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25 conversation?	24	conversation. How much time do you need for your
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1	MR. MICHAEL KOHN: I just need five minutes,
2	Your Honor.
3	CHAIRMAN BLOCH: We'll be here. We'll take a
4	recess of up to five minutes.
5	(Whereupon, from 3:22 p.m. until 3:29 p.m. the
6	proceedings went off the record.)
7	CHAIRMAN BLOCH: There has been a discussion
8	off the record about the difficulty Intervenor is having
9	in deciding how to present further technical issues about
10	the matters before us.
11	Mr. Barth for the staff stated that we're at
12	Recross. The only question is, how to follow up on the
13	rather elementary matters that Mr. Barth has raised in
14	cross examination.
15	Mr. Blake has stated that in his opinion, the
16	95 matter, the matter involving the discovery of water at
17	these deadend valves, is not necessarily a part of this
18	case at this point, because there has never been a motion
19	to make it a part of the case.
20	We do not know specifically what technical
21	issues Intervenor wishes to raise about this matter. When
22	it knows what those technical issues are, they should
23	inform us in a motion, which could be either a motion to
24	add a new contention or a motion to ensure the adequacy of
25	the record. The other parties may respond and we'll

1	decide at that point whether there's something here that
2	needs to be subject to discovery or whether this matter
3	will be at an end.
4	At this point, it is up to Intervenor to
5	pursue recross based on the staff's cross examination.
6	Would Intervenor like to continue?
7	MR. MICHAEL KOHN: Yes.
8	Mr. Stokes, there was a discussion starting
9	about water that Mr. Barth asked you. I asked a question
10	at that time whether you were referring to starti. Do
11	you recall that exchange?
12	THE WITNESS: Yes.
13	MR. MICHAEL KOHN: Are you aware of water
14	being found in the starting air system at any time since
15	you testified or at any time?
16	THE WITNESS: You mean outside of what we were
17	discussing here in the unit two time frame?
18	MR. MICHAEL KOHN: Since you have been working
19	at Plant Vogtle, are you ever aware of water being found
20	in the starting air system?
21	THE WITNESS: The last outage, unit two
22	outage, Mr. Johnston discovered some moisture in the
23	starting air system, 150 pound.
24	MR. MICHAEL KOHN: In what portion?
25	THE WITNESS: The 250 pound supply.

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1	MR. MICHAEL KOHN: Supplying where in the
2	supply?
3	THE WITNESS: At the gauges, at the starting
4	air pressure gauges on the front of the panel.
5	MR. MICHAEL KOHN: Is that what we are talking
6	about now?
7	THE WITNESS: Yes.
8	MR. MICHAEL KOHN: Other than the instance
9	with Mr. Johnston, are you aware of water being found in
10	the starting air, the diesel system anywhere else or at
11	any other time?
12	THE WITNESS: Not outside of my previous
13	testimony, which was the bubble test events.
14	CHAIRMAN BLOCH: Mr. Stokes, are you aware
15	that Mr. Kohn's question is broader than the question that
16	Mr. Barth asked? He is asking the whole diesel system,
17	not just control air.
18	THE WITNESS: Right.
19	CHAIRMAN BLOCH: So that would include
20	starting air.
21	THE WITNESS: Yes.
22	CHAIRMAN BLOCH: Okay. I'm sorry. Continue.
23	MR. MICHAEL KOHN: Could the water that
24	formed, that was found in 1995 be a remnant of an earlier
25	event, as a result of earlier water condensation forming
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in the trench?

2 CHAIRMAN BLO

CHAIRMAN BLOCH: Forming in the what?

MR. MICHAEL KOHN: In the line in the trench.

THE WITNESS: I think our analysis of where we think the water came from is documented in this DC that you have distributed. So I'd have to stick with --

CHAIRMAN BLOCH: Okay. We've got a problem.

It has been distributed, but it has not been marked. Wait a second. We need it marked, because he has referred to it. It is not in evidence, but it still has to be marked.

MR. BLAKE: I can give it a Georgia Power number. Georgia Power II-189. It's a document, the first page of which is a PRB meeting minutes continuation sheet, PRB 95-94 page two of two. The next page is a deficiency card. This is card number 1-95077. The third page is the next page of that deficiency card.

Attached to it are root cause and corrective action report procedure form 00058-C Rev. 10. This specifically, this event investigated is related to the DC 1-95077.

Attached to that finally is a three page attachment to the root cause and corrective action report, which is the evaluation earlier described or discussed on the record today, the three-page engineering discussion of what may have led to this water, ending with the

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1	conclusion on the last page of this document.
2	CHAIRMAN BLOCH: The motion to mark is
3	granted, GPC II-189.
4	(Whereupon, the exhibit was marked
5	for identification as Licensee's
6	Exhibit No. II-189.)
7	ADMINISTRATIVE JUDGE CARPENTER: Mr. Blake.
8	MR. BLAKE: Yes, Judge.
9	ADMINISTRATIVE JUDGE CARPENTER: On this first
10	page which is page two of two, I can't find any date for
11	when the PRB meeting occurred. Maybe I'm just not looking
12	carefully enough.
13	MR. BLAKE: I didn't refer to one. You are
14	absolutely right. I do not know what the date of this PRB
15	meeting was, which was the reason that I cited.
16	ADMINISTRATIVE JUDGE CARPENTER: You don't
17	have page one?
18	MR. BLAKE: No. At 9564, so it will be
19	identified for sure as to what PRB meeting it was.
20	CHAIRMAN BLOCH: Let's continue.
21	MR. MICHAEL KOHN: Is the document attached to
22	Licensee's II-189 and the analysis attachment of RCC for
23	DC 1-95077, page three of five, four of five, and five of
24	five. Is that the technical analysis that you testified
25	about during your direct examination?
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1	THE WITNESS: Yes.
2	MR. MICHAEL KOHN: Do you agree with this
3	technical analysis?
4	THE WITNESS: I believe so, yes.
5	MR. MICHAEL KOHN: Is there any part of it you
6	don't agree with?
7	THE WITNESS: No.
8	MR. MICHAEL KOHN: This technical analysis,
9	that sets forth no evidence as to how the water was
10	actually introduced. Does it?
11	THE WITNESS: No evidence, that is correct.
12	MR. MICHAEL KOHN: So it only provides some
13	speculation of how it was introduced. Correct?
14	THE WITNESS: Yes.
15	MR. MICHAEL KOHN: Do you think people could
16	speculate as to additional reasons of how it was
17	introduced other than the speculation contained in this
18	document?
19	THE WITNESS: I think we consider it to be
20	complete the way it is.
21	CHAIRMAN BLOCH: You don't think it's
22	necessary to examine the possibility of a leak in the
23	gauge?
24	THE WITNESS: No, sir.
25	MR. MICHAEL KOHN: Could someone speculate

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1	that it was a remnant from 1990, from portions of water
2	that were in the system in 1990?
3	THE WITNESS: In the system or in that
4	particular little piece of the line?
5	MR. MICHAEL KOHN: In the system, and ended
6	up.
7	THE WITNESS: No.
8	MR. MICHAEL KOHN: Why couldn't someone
9	speculate as to that?
10	THE WITNESS: Why would they speculate to
1.1	that?
12	MR. MICHAEL KOHN: To find the root cause.
13	THE WITNESS: The root cause of the water
14	being in there?
15	MR. MICHAEL KOHN: Yes.
16	THE WITNESS: I don't see how it can be there
17	if it's coming from the system. I think if you read this,
18	it gives you an idea or pretty much says that it can't
19	come from the system over the period of time.
20	MR. MICHAEL KOHN: If the water was in the 250
21	supply pipe and there was a leak by the gauge, wouldn't
22	the water flow up through there?
23	THE WITNESS: A leak by the gauge?
24	MR. MICHAEL KOHN: Yes.
25	THE WITNESS: Why would it precipitate there
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1	and not through the filter or any of the other
2	MR. MICHAEL KOHN: Well maybe a remnant. It's
3	before the filter, correct?
4	THE WITNESS: What's before it?
5	MR. MICHAEL KOHN: The tap.
6	THE WITNESS: No, it's not before the filter.
7	They diverge there. In other words, like I was saying
8	before, the lines come up and they split off at that
9	point. One line goes to the filter. The other line goes
10	up to the gauges. They are all 250 pound.
11	MR. MICHAEL KOHN: The drawing shows the tap
12	before the filter. Correct?
13	MR. BLAKE: There's agreement. The line
14	feeding the gauges taps off before the line goes to the
15	filter. It's just a misunderstanding. He's talking about
16	the little tap for the T. You are talking about the
17	entire line.
18	CHAIRMAN BLOCH: Sorry. Is counsel saying
19	that the T comes before or after the filter?
20	MR. BLAKE: He said that in fact it isn't in
21	the same line because it branches off. One goes to the
22	filter, and one goes to this T. That is what the man's
23	testimony was. I am trying to just shorten it.
24	BOARD EXAMINATION

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CHAIRMAN BLOCH: Is that true, Mr. Stokes?

25

1	THE WITNESS: Yes. That's right.
2	CHAIRMAN BLOCH: So therefore, the absence of
3	water in the filter would have nothing to do with whether
4	or not there might be water in the T. Is that right?
5	THE WITNESS: No. They all come you've got
6	two lines that come into the panel, and then they split.
7	One line goes up to the filter. The other line goes up to
8	the gauges. Why would this line choose to have water and
9	this line choose not to have water?
10	MR. BLAKE: It depends on the supply, Judge.
11	That was the question.
12	MR. MICHAEL KOHN: Well, isn't it lower in
13	elevation?
14	THE WITNESS: What lower?
15	MR. MICHAEL KOHN: The T as compared with the
16	filter, the tap which comes off the gauges, isn't it lower
17	in elevation than the filter?
18	THE WITNESS: The filter is lower than the
19	gauges.
20	MR. MICHAEL KOHN: I thought you testified
21	that where it branches off it is lower in elevation than
22	the filter.
23	THE WITNESS: The branch itself would probably
24	be lower than the filter, which is also lower than the
25	gauges
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BOARD EXAMINATION

	CHAIRMAN B	LOCH:	Let's	see.	Mr.	Stokes,	to
know whethe	r one line	might p	refer	to col	lect	water	over
the other,	wouldn't we	also h	ave to	know	the	tempera	ture
distributio	n?						

THE WITNESS: Not for small amounts of water.

CHAIRMAN BLOCH: The witness said I wouldn't think so.

MR. MICHAEL KOHN: Isn't there a possibility that the water could have gone up to the T to the tap off rather than to the filter?

THE WITNESS: I wouldn't think so.

MR. MICHAEL KOHN: Your Honor, I'm going to raise an objection to what has actually unfolded here today, which is basically Mr. Stokes was called to state whether his prior testimony was false or not. We spent most of the time discussing technicality and the technical nature of the water.

On direct examination, Mr. Blake said that -elicited from the witness that there was a technical
report. Throughout the course of the day --

CHAIRMAN BLOCH: Counsel, I agree. Your objection is not timely, because you participated in it along with everybody else. We are not going to go back and uncreate the record.

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1	MR. MICHAEL KOHN: I didn't mean to uncreate
2	the record, Your Honor.
3	CHAIRMAN BLOCH: What's your objection? What
4	are we going to do if we don't uncreate the record?
5	MR. MICHAEL KOHN: The remedy that we're
6	looking for is the discovery needed to respond to the
7	technical matter that comes onto the record. I think what
8	we've done is put the cart before the horse for
9	intervenor. We don't have the data and documentation we
10	need to conduct the examinations of the witnesses that we
11	need. The witness was allowed to testify on direct about
12	documentation that has never been provided. We think it's
13	just fundamentally unfair.
14	MR. BLAKE: Judge Bloch, in all fairness, this
15	is I think the fourth time we've talked about this. What
16	he has, he has the deficiency card. He has the
17	documentation related. He now has a staff report on it.
18	He is far ahead of the game in terms of trying to make a
19	motion that this ought to be a part of the affair.
20	CHAIRMAN BLOCH: I already did rule. There
21	are two kinds of motions you have been invited to file.
22	MR. MICHAEL KOHN: Thank you, Your Honor.
23	CHAIRMAN BLOCH: Does this mean you're
24	resting?
25	ADMINISTRATIVE JUDGE CARPENTER: I have a

question.

MR. MICHAEL KOHN: Yes.

BOARD EXAMINATION

ADMINISTRATIVE JUDGE CARPENTER: Mr. Stokes, in looking at this document that begins with the second page of the PRB meeting minutes that's labeled GPC II-189, I want to ask if it was concluded that the most probable source of the water was the so-called calibration procedures. Did you go over to I&C and talk to people and find out whether they did use water or did not use water?

THE WITNESS: Yeah. The guy that actually did this -- and I know you see my name there, it just means that I reviewed it -- but it's --

ADMINISTRATIVE JUDGE CARPENTER: Oh.

THE WITNESS: -- somebody else came in to do this particular thing, and he -- he did consult with the I&C people directly, some I&C techs., and also I&C supervision. But their comment was, actually, that no, we use a -- at least now, you know, we had to speak for the present, and that's -- that's all they could do in saying that they used nitrogen bottles now to calibrate them.

Nobody would admit to using water, at least recently, and none of the other guys are here anymore that did the ones back in the start-up time.

ADMINISTRATIVE JUDGE CARPENTER: I'm having a

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1	hard time. I can imagine having a small tank of high
2	pressure nitrogen and some fittings and lines, and so on,
3	going up with either a referee gauge or something and
4	calibrating it. An installed gauge, I'm having what
5	would the man do if he or the lady do if she had water?
6	And so have a hose some place or
7	THE WITNESS: It's just a little short line
8	with essentially a little pump on it
9	ADMINISTRATIVE JUDGE CARPENTER: Oh.
10	THE WITNESS: that they would use.
11	ADMINISTRATIVE JUDGE CARPENTER: Do you have
12	
13	THE WITNESS: I haven't seen it personally,
14	but that's that's what they tell me.
15	ADMINISTRATIVE JUDGE CARPENTER: You know
16	there are such devices that they do use?
17	THE WITNESS: Oh, yes.
18	ADMINISTRATIVE JUDGE CARPENTER: Well, you
19	couldn't get anybody to say, "Yeah, I remember."
20	THE WITNESS: No.
21	ADMINISTRATIVE JUDGE CARPENTER: Thank you.
22	ADMINISTRATIVE JUDGE MURPHY: Mr. Stokes, can
23	you help me read this document?
24	THE WITNESS: I can try.
25	ADMINISTRATIVE JUDGE MURPHY: How about going
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1	to page 2 of 5, which is the root cause and corrective
2	action report.
3	THE WITNESS: Okay.
4	ADMINISTRATIVE JUDGE MURPHY: Do you know who
5	did this analysis?
6	THE WITNESS: Yes. My signature is down
7	there, and but actually David Lisenby, he's he was
8	supposed to have his signature over on this other page.
9	But, anyway, I I reviewed the document after it was
10	done, I after David performed the analysis and
11	essentially concurred with it, and I signed as the
12	investigator.
13	ADMINISTRATIVE JUDGE MURPHY: So you signed as
14	the investigator, but you didn't do the investigation?
15	THE WITNESS: No. No, sir, not all of it.
16	Like I said, I reviewed what he did and essentially agreed
17	with it.
18	ADMINISTRATIVE JUDGE MURPHY: And can we tell
19	from looking at this document that David Lisenby did it?
20	THE WITNESS: Like I was saying, I no.
21	ADMINISTRATIVE JUDGE MURPHY: Okay. Thank
22	you.
23	CHAIRMAN BLOCH: Staff, do you have any
24	further recross?
25	MR. BARTH: Yes, Your Honor. Give me about
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1	one minute. I would like to commence.
2	CHAIRMAN BLOCH: You have permission to
3	commence.
4	MR. BARTH: Do I have permission for one
5	minute?
6	Thank you, Your Honor. I'm ready.
7	CHAIRMAN BLOCH: Charge.
8	RECROSS EXAMINATION
9	BY MR. BARTH:
10	Q Mr. Stokes, does the air pass through the
11	filter before it gets to this blocked valve that we've
12	been discussing all day? I can rephrase the question if
13	you think the question is poorly done.
14	A Do the
15	Q We've discussed the valve where the the
16	pipe where water was found in February/March. Is that
17	downstream from the filter?
18	A It's like I said, the line splits off and
19	they go in two different directions.
20	BOARD EXAMINATION
21	CHAIRMAN BLOCH: Within a parallel path, is
22	that right?
23	THE WITNESS: Yeah, essentially a parallel.
24	RECROSS EXAMINATION (Continued)
25	BY MR. BARTH:
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1	Q I would like to show you a picture of a filter
2	which we have taken.
3	Again, Your Honor, I would move the Court for
4	permission to mark a photocopy of the picture as Staff
5	Exhibit Number 70 for identification. Mr. Mosbaugh has
6	seen the original color photograph. I do not believe
7	other people have seen the copies of the photocopy of it.
8	CHAIRMAN BLOCH: Permission to mark is
9	granted.
10	(Whereupon, the above-referred to
11	document was marked as Staff Exhibit
12	No. II-70 for identification.)
13	BY MR. BARTH:
14	Q I'm showing a copy of the photograph to the
15	witness and a copy of the xerox, Your Honor, of Staff
16	Exhibit 70, marked for identification purposes only.
17	Mr. Stokes, when you've familiarized yourself
18	with 'he picture, will you please let me know, and get the
19	idea of where it is in the plant and how it looks?
20	A I'm ready.
21	Q What is the object in the middle of the
22	picture that does not have a gauge on it?
23	A That's the filter we've been discussing.
24	Q And could you tell me where this blacked piece
25	of pipe that we've been discussing all day is located in
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relation to the filter and the pipes? And please make 1 your description so that it's understandable from the 2 written record. 3 The lines going up to the gauges, you're 4 talking about? Yeah. Okay. That's the -- you can see 5 the little bit of -- a glimpse, I guess, of the black 6 isolation valve down there, just below and to the right of 7 the filter. That's one of the lines coming in from the 8 starting air header, and the other one is just to the left 9 of it. 10 Well, you can see those lines go up, and then 11 they T off, essentially, the lines going to the left would 12 go up to the filter, and then the two one-quarter inch 13 lines on either side of the filter continue on up past the 14 filter, and then make a right horizontal turn and then 15 turn again to go up the side of the panel, and then on to 16 the gauges eventually. 17 To get up to the gauges, would our famous .07 18 cubic inches of water have to take one of these two lines 19 that goes up past the filter? 20 21 Yes. A Can you estimate for the bench what kind of 22 distance that is? I don't have a scale here. 23 Yeah. I think I said previously something 24

like maybe five feet. As a matter of fact, I believe five

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25

1	feet, maybe an inch, and then the our disposition of
2	the DC. It's an estimated five feet anyway.
3	Q And you're telling me that for our water to
4	back up this .07 cubic inches, it would have to rise at
5	least five feet past this filter?
6	A Yes.
7	Q Is there a further rise in the piping past the
8	filter, the filter the two lines above the filter going
9	to a hole in the wall? There's no or it goes as a
10	blank in my picture. Are you cognizant of where the lines
11	go after they disappear from this picture?
12	A Yes, they go straight up the side of the panel
13	into a couple of the as I said earlier, a couple of
14	pressure switches and and then on up near the top of
15	the panel, and then across, and then up and over the
16	little box. It's
17	Q Is the five feet
18	A quite a few turns.
19	Q Is the five feet you discussed from the bottom
20	of the photograph to these cabinets, or is it to the top
21	of the filter? So I have a perspective of how much rise
22	our .07 cubic inches of water has to go.
23	A No, we're probably just just trying to get
24	the actual volume inside the complete stretch of tubing,
25	if it was just stretched out. It's not a rise of five
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1	feet, essentially. It's just a we're thinking it's the
2	whole length of tubing is five feet, estimated.
3	Q How high is the tubing from the top to the
4	bottom?
5	A Maybe, I don't know, three three feet,
6	something like that.
7	Q I'm sorry. I did not hear your answer.
8	A Maybe three feet. Yeah, something like that,
9	three feet.
10	Q So, at a minimum, our water would have to
11	travel up at least three feet. I have no further
12	questions, and thank you.
13	Your Honor, I
14	CHAIRMAN BLOCH: On that one, I think you
15	asked the question, but I didn't hear an answer.
16	THE WITNESS: Three feet, yes.
17	CHAIRMAN BLOCH: Okay.
18	MR. BARTH: Thank you, Your Honor. I would
19	move that the Board accept Staff Exhibit 70, marked for
20	identification purposes, the photo the xerox of the
21	photograph, into evidence at this time.
22	CHAIRMAN BLOCH: Granted.
23	(Whereupon, the above-referred to
24	document, previously marked as Staff
25	Exhibit No. II-70 for
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1	identification, was received into
2	evidence.)
3	BOARD EXAMINATION
4	ADMINISTRATIVE JUDGE MURPHY: Mr. Stokes, just
5	to make the record clear, and so that Judge Carpenter and
6	I can follow this, would you get out GPC 188, which is
7	this schematic? The filter and I'm going to be looking
8	both at Staff II-70, which is the photograph that you were
9	just looking at and the schematic, and I want to try and
10	correlate the two.
11	THE WITNESS: I believe your pictures kind of
12	lay this out in a sequence if you add those.
13	ADMINISTRATIVE JUDGE MURPHY: Yeah.
14	THE WITNESS: I'll try
15	ADMINISTRATIVE JUDGE MURPHY: Well, let's just
16	do it with this photograph.
17	THE WITNESS: Let's do it.
18	ADMINISTRATIVE JUDGE MURPHY: The regulator is
19	item number 20 on the schematic, and the regulator is in
20	the left center of the picture, right?
21	THE WITNESS: Yes.
22	ADMINISTRATIVE JUDGE MURPHY: The filter is
23	item number 19?
24	THE WITNESS: That's correct.
25	ADMINISTRATIVE JUDGE MURPHY: The two valves
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1	that are on either side of the filter, underneath the
2	filter, are they isolation valves 81?
3	THE WITNESS: Yeah, they both are numbered 81
4	coming out of E31L and E31R.
5	ADMINISTRATIVE JUDGE MURPHY: And the pressure
6	switches are off to the side of the filter? Can we see
7	them on this?
8	THE WITNESS: No, the pressure switches are
9	actually above, where the lines go up. The lines by the
10	filter will turn across and then go up. Along that
11	vertical line is where you'll find the pressure switches,
12	just for your future reference.
13	ADMINISTRATIVE JUDGE MURPHY: Along which
14	vertical lines?
15	THE WITNESS: The two lines going up to the
16	gauges.
17	ADMINISTRATIVE JUDGE MURPHY: I see. Okay.
18	Thank you. All right. That's all.
19	CHAIRMAN BLOCH: Mr. Kohn, further?
20	RECROSS EXAMINATION (Continued)
21	BY MR. MICHAEL KOHN:
22	Q At the T's in NRC II-70 at the bottom of the
23	page, right below the bottom of the filter where the lines
24	branch off to the gauges are you with me?
25	A Yes, I am.

	할 것이다. 그들에 가게 되었다면 하면 하면 하면 하는데
1	Q If there's a mixture of water or air and water
2	at that point, and there was a leak by the gauge, would
3	the 250-pound pressure be sufficient to push the water up
4	to where it was found?
5	A Of course, if there's a leak in the and
6	this is just my I mean, my answer to that. If there's
7	a leak in the gauge, I mean, I think I think we would
8	have noted it and had to write a corrective work
9	Q Or a fitting by the gauge?
10	CHAIRMAN BLOCH: That wasn't the question.
11	The question was, if there was a leak, would it be
12	sufficient to cause movement of water and moisture along
13	that line, up towards the place where water was found?
14	THE WITNESS: I mean, I guess if it was large
15	enough.
16	BY MR. MICHAEL KOHN:
17	Q Is that a yes?
18	MR. BLAKE: That's a hypothetical without any
19	basis in the record.
20	BOARD EXAMINATION
21	ADMINISTRATIVE JUDGE CARPENTER: If it were
22	large enough, it would simply blow out, wouldn't it?
23	CHAIRMAN BLOCH: Well
24	ADMINISTRATIVE JUDGE CARPENTER: Mr. Stokes,
25	are you qualified to talk about a mixed flow of gas and
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1	water?
2	THE WITNESS: Well, in this hypothetical
3	situation well, no, I don't have a mechanical
4	engineering degree or instrumentation degree either. So
5	I'm not
6	ADMINISTRATIVE JUDGE CARPENTER: This is not
7	the kind of question that you're normally used to doing a
8	technical analysis of.
9	THE WITNESS: That's absolutely right.
10	ADMINISTRATIVE JUDGE CARPENTER: I think you
11	should make the record show that.
12	CHAIRMAN BLOCH: Are Mr. Domby's notes in the
13	record or not
14	MR. MICHAEL KOHN: They are no one has
15	moved for their admission at this time yet.
16	CHAIRMAN BLOCH: So, then, Mr. Blake's comment
17	is correct, right?
18	MR. MICHAEL KOHN: What was I didn't follow
19	Mr. Blake.
20	CHAIRMAN BLOCH: He said that the hypothetical
21	has no basis in the record, and he is correct.
22	MR. MICHAEL KOHN: I'm not following.
23	ADMINISTRATIVE JUDGE CARPENTER: Mr. Johnston
24	didn't tell us there was a leak when he found the water.
25	Period.

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1	MR. MICHAEL KOHN: Well, there could have
2	Mr. Johnston has testified that there were leaks in
3	Your Honor, the record is clear that Mr. Johnston
4	testified that many of the tubings and fittings were
5	leaking in the 1990 timeframe. That is in the record.
6	CHAIRMAN BLOCH: Let's continue. I won't
7	strike the question.
8	RECROSS EXAMINATION (Continued)
9	BY MR. MICHAEL KOHN:
10	Q If there was water found below the filter in
11	the lines where we were looking at previously, could the
12	250-pound pressure push the water up to where it was later
13	detected in 1995 by Mr. Johnston?
14	MR. BLAKE: Well, where is the evidentiary
15	basis for if there is water found at that spot?
16	CHAIRMAN BLOCH: Repeat the question again,
17	please.
18	MR. MICHAEL KOHN: Okay.
19	MR. BLAKE: Judge, I'll withdraw it, but let's
20	just let's just simply get on and see if we can get
21	this behind us.
22	THE WITNESS: I'm not going to speculate on
23	that. I don't know.
24	ADMINISTRATIVE JUDGE CARPENTER. Mr. Blake,
25	I'm not very comfortable with this question, because it NEAL R. GROSS

1	oversimplifies the very complicated physics of what would
2	occur, and agreeing to that I don't know if anybody has
3	testified that water was found, but you'd have to say how
4	much water, and you have to look at the velocity, the
5	magnitude of the leak, as to whether the water would move
6	as a slug or a bubble, bubble, bubble, or what would
7	happen.
8	MR. BLAKE: Judge, I appreciate that. The
9	reason for my withdrawing it was
10	ADMINISTRATIVE JUDGE CARPENTER: I'm flinching
11	from this oversimplification of the question.
12	MR. BLAKE: My
13	ADMINISTRATIVE JUDGE CARPENTER: If you want
14	to specify a particular size leak and a particular volume
15	of water, then it might be tractable.
16	CHAIRMAN BLOCH: One second, please.
17	MR. BLAKE: Sure.
18	CHAIRMAN BLOCH: Mr. Kohn, continue.
19	BY MR. MICHAEL KOHN:
20	Q Can you tell me whether it is possible that
21	water
22	CHAIRMAN BLOCH: I think you might want to
23	rephrase the question.
24	MR. BLAKE: Don't help him, Judge.
25	CHAIRMAN BLOCH: Of course, anything is

possible. Come on.

MR. BLAKE: Thank you, Your Honor.

BY MR. MICHAEL KOHN:

Q If water was located in the lines below the filter that we've previously identified, could 250-pound pressure force that water up to the location where it was -- where water was found by Mr. Johnston if there was a leak in -- at the -- at the gauge?

MR. BARTH: I object to the question, Your
Honor, not because it's a hypothetical with insufficient
facts, but without describing the kind of water the
question makes no sense. If the water were a form of
vapor, it's one thing. If it were in the form of small
particles, it would be another. Or the form of a drop or
a cohesion, it would be an adhesion, it would be another
kind of -- we just have no facts here which make any
answer sensible. If the question makes no sense, it
should be stricken.

BOARD EXAMINATION

whole area, not necessarily with the questioning. And that is that, in fact, it's -- there's speculation going on of a variety of kinds as to where this water came from. So I don't see that we can rule that one kind of speculation is allowed and other kinds are not.

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1	Ultimately, somehow you've got to demonstrate that there's
2	plausibility to it.
3	Mr. Blake, you had a comment about that? No,
4	you just sat forward.
5	So we'll do you know, Mr. Stokes, whether
6	or not there are conditions under which water could move
7	up that line because there was flow caused by a leak in
8	the gauge?
9	MR. MICHAEL KOHN: Or a fitting by the gauge.
10	CHAIRMAN BLOCH: Or a fitting by the gauge.
11	THE WITNESS: Do you want to know if there
12	were instances?
13	CHAIRMAN BLOCH: No. No, we're not asking you
14	whether it happened in fact. But do you know, as an
15	engineering matter, whether there could be movement of
16	water up the line as a result of a leakage either in the
17	gauge or in the fitting by the gauge?
18	THE WITNESS: Yes.
19	CHAIRMAN BLOCH: It could happen, okay.
20	Mr. Kohn?
21	MR. MICHAEL KOHN: No further questions.
22	ADMINISTRATIVE JUDGE CARPENTER: Mr. Stokes,
23	given your answer to that question, when this hypothetical
24	water got to the point of the leak, why would the water
25	say, "I don't want to go out that hole; I'm going to stay
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1	right here"?
2	THE WITNESS: It wouldn't.
3	ADMINISTRATIVE JUDGE CARPENTER: This is
4	silly.
5	THE WITNESS: I just answered the question.
6	(Laughter.)
7	ADMINISTRATIVE JUDGE CARPENTER: If mean, if
8	the air leaks, why doesn't the water leak?
9	THE WITNESS: That's right.
10	ADMINISTRATIVE JUDGE CARPENTER: I just
11	MR. BLAKE: Are we done?
12	CHAIRMAN BLOCH: That's what I'm trying to
13	find out.
14	RECROSS EXAMINATION (Continued)
15	BY MR. MICHAEL KOHN:
16	Q Mr. Stokes, air flows more freely out of the
17	system than would water from a leak, isn't that true, due
18	to its density and viscosity?
19	A That's true.
20	MR. MICHAEL KOHN: No further questions.
21	MR. BARTH: I have one question, Your Honor.
22	RECROSS EXAMINATION (Continued)
23	BY MR. BARTH:
24	Q Mr. Stokes, I'd like to follow Dr. Carpenter.
25	If the water were in the form of gas, would it flow
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1	equally out with the air, out of the leak in our gauge?
2	A Yes.
3	Q Have you made any kind of calculations in your
4	own mind as to what size of molecule, if we were talking
5	about free available water, would have been inhibited by
6	the flow of the air as versus air without without the
7	water being solid?
8	CHAIRMAN BLOCH: We'll take notice that he
9	hasn't calculated the size of molecule. Go on. He hasn't
10	done that.
11	THE WITNESS: And I don't have the calculators
12	to
13	(Laughter.)
14	MR. BARTH: Touche. I quit.
15	ADMINISTRATIVE JUDGE CARPENTER: I protest.
16	This is so technically trivial, we just
17	CHAIRMAN BLOCH: Mr. Kohn, anything further?
18	MR. MICHAEL KOHN: No, Your Honor.
19	CHAIRMAN BLOCH: Mr. Blake?
20	MR. BLAKE: I have just one area to follow up
21	on on Judge Murphy's question.
22	REDIRECT EXAMINATION
23	BY MR. BLAKE:
24	Q Would you take a look at GPC II-189?
25	A Okay.
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1	Q The third page in in the top section under
2	"Disposition." It has hello?
3	A I see it.
4	Q Okay. It has apparent two signatures there.
5	Can you read those?
6	A Yes. Dave Lisenby and Ken Stokes. I'm sorry.
7	I missed that myself.
8	Q And would that help in identifying that
9	Mr. Lisenby played a role in dispositioning this?
10	A Yes.
11	MR. MICHAEL KOHN: Sorry. I can't find what
12	page you're on.
13	MR. BLAKE: I'm in GPC II-189, and I'm on the
14	third page into the document at the top, in Section 4,
15	where it says, "Hardware not affected. Use as is,"
16	etcetera.
17	MR. MICHAEL KOHN: Okay. Thank you.
18	MR. BLAKE: That's all I had, Judge.
19	THE WITNESS: I had actually been looking on
20	page 5, because we had signed that previously. I missed
21	that. I'm sorry.
22	CHAIRMAN BLOCH: Are there any questions based
23	solely on the signature? There being none, Mr. Stokes,
24	it's a great pleasure to dismiss you once again. Thank
25	you for joining us.
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1	THE WITNESS: It's my pleasure to accept.
2	(Whereupon, the witness was excused.)
3	MR. BLAKE: I think maybe we can take a short
4	break and then we'll be able to put on Mr. Chenault for
5	the remainder of the day.
6	CHAIRMAN BLOCH: We'll take a 10-minute break
7	right now.
8	(Whereupon, the proceedings were off the
9	record from 4:10 p.m. until 4:27 p.m.)
10	CHAIRMAN BLOCH: Mr. Chenault, I'd like to
11	welcome you to our hearing.
12	Could you please identify yourself by full
13	name and present position?
14	MR. CHENAULT: My name is William Hall
15	Chenault, III. I'm a Senior Engineer with Intercom
16	Services in Atlanta.
17	CHAIRMAN BLOCH: And this is a Licensing Board
18	for the Nuclear Regulatory Commission, and it's a formal
19	hearing. I'd like to advise you that the testimony you're
20	about to give should be the truth, the whole truth, and
21	nothing but the truth, and the testimony is subject to
22	possible penalty for perjury. Do you understand?
23	MR. CHENAULT: Yes.
24	WHEREUPON,
25	WILLIAM KALL CHENAULT, III

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1	was called as a witness by Counsel for the Licensee and,
2	having first been duly sworn, assumed the witness stand,
3	was examined and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. BLAKE:
6	Q Mr. Chenault, this is Mr. Blake. Do you have
7	before you a document entitled "Rebuttal Testimony of
8	William H. Chenault, III, " on diesel generator air quality
9	statements, dated August 14, 1995, and comprised of some
10	four and a half pages of text?
11	A Yes.
12	Q And were you involved in the preparation of
13	this document?
14	A Yes, I was.
15	Q And can you describe your involvement? What
16	role did you play?
17	A I answered questions for John Lamberski, and
18	over the phone we discussed the questions and he wrote
19	down my answers, and then I reviewed it.
20	Q And as written down now and reviewed by you,
21	is it accurate, to the best of your knowledge and belief?
22	A Yes, it is.
23	Q And are you prepared to adopt it as your
24	testimony in this proceeding?
25	A Ves

1	Q And do you so adopt it?
2	A Yes, I do.
3	MR. BLAKE: Judge Bloch, I would ask that the
4	testimony of Mr. Chenault, the rebuttal testimony, be
5	accepted into evidence and physically incorporated into
6	the record just as though read.
7	BOARD EXAMINATION
8	CHAIRMAN BLOCH: Mr. Chenault, you understand
9	that when we bind testimony into the record, it's the same
10	as if you had said it in the hearing yourself?
11	THE WITNESS: Right.
12	CHAIRMAN BLOCH: The motion is granted.
13	DIRECT EXAMINATION (Continued)
14	BY MR. BLAKE:
15	Q Mr. Chenault, is there attached to your copy
16	of this rebuttal testimony a three-page document, which
17	would be your curriculum vitae?
18	A Yes, there is.
19	Q And in the upper right-hand corner, does it
20	indicate Chenault Exhibit A?
21	A Yes, it does.
22	Q Are you familiar with this three-page
23	description of your qualifications?
24	A Yes, I am.
25	Q And are you prepared to answer questions about
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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

GEORGIA POWER COMPANY, et al.

(Vogtle Electric Generating Plant, :

Units 1 and 2)

Docket Nos. 50-424-OLA-3

50-425-OLA-3

Re: License Amendment (Transfer to

Southern Nuclear)

ASLBP NO. 93-671-0LA-3

REBUTTAL TESTIMONY

OF

WILLIAM HALL CHENAULT, III

ON

DIESEL GENERATOR AIR QUALITY STATEMENTS

TESTIMONY OF WILLIAM HALL CHENAULT, III

- 2 Q: PLEASE STATE YOUR NAME AND POSITION.
- 3 A: My name is William Hall Chenault, III and I am employed by
- 4 Enercon Services in Atlanta, Georgia.
- 5 Q. WHAT ARE YOUR PROFESSIONAL QUALIFICATIONS?
- A. A summary of my professional qualifications is attached hereto
- 7 as Exhibit A.
- 8 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
- 9 A. The purpose of my testimony is to address Intervenor's
 10 testimony that I observed water pouring out of the Vogtle
 11 diesel generator control air trip lines in the days following
 12 the March 20, 1990 site area emergency. I also address
 13 Intervenor's assertion that high dew point readings recorded
 14 during this time frame support his claim that water
 15 accumulated in the control air system.
- 16 Q. WHAT ROLE DID YOU HAVE IN THE INVESTIGATION OF THE MARCH 20,
 17 1950 FAILURE OF THE PLANT VOGTLE 1A DIESEL GENERATOR?
- A. In March and April of 1990, I was employed by Enercon Services
 and had performed consulting services for Georgia Power on an
 as-needed basis in connection with the Plant Vogtle diesel
 generators. Following the March 20, 1990 site area emergency,
 I was contacted by Mr. Ken Burr and asked to come to Plant
 Vogtle to assist in the investigation of the 1A diesel

failure. Based on my time records, I arrived at Plant Vogtle on March 26, 1990 and left the site on April 1, 1990.

Q. WHAT DID YOU CONCLUDE DURING YOUR VISIT TO THE PLANT?

- A. Initially, I believed that pneumatic leaks in the 1A diesel's instrument air system could have been the cause of the diesel failure. However, I dismissed this theory after reviewing the design of the system and concluding that observed air leakage was insufficient to cause a diesel trip. I concluded that the cause of the 1A diesel failure was the Calcon jacket water temperature sensors. Before I left the Vogtle site, I believed that concern had been raised about the Calcon sensor calibration procedure and that steps had been taken with respect thereto to ensure proper Calcon sensor set points. I do not remember whether, by the time I left the site, foreign material had been discovered in some of the Calcon sensors.
- 16 Q. WHILE YOU WERE AT VOGTLE, DID YOU OBSERVE THE DISASSEMBLY OF
 ANY DIESEL CONTROL AIR SENSING LINES?
- A. Although I do not have a specific recollection of this, I
 believe that I did observe functional testing and bubble
 testing of the diesel control systems during which the sensing
 lines would have been disassembled.

- 1 Q. WHILE YOU WERE AT VOGTLE, DID YOU EVER HEAR OR OBSERVE THAT
 2 THERE WAS WATER OR MOISTURE FOUND IN THE VOGTLE DIESEL
 3 PNEUMATIC CONTROL SYSTEM?
 - 4 A. No.
 - DO YOU THINK YOU WOULD REMEMBER IF THERE HAD BEEN WATER OR
 MOISTURE FOUND IN THE PNEUMATIC CONTROL SYSTEM?
 - 7 A. Yes. I believe that would have received considerable attention and discussion.
- 9 Q. HAVE YOU LISTENED TO THAT PORTION OF MR. MOSBAUGH'S TAPE NO.
 10 24 WHICH IS TRANSCRIBED ON INTERVENOR'S EXHIBIT II-85?
- 11 A. Yes. I listened to a copy of the tape provided to me by

 counsel for Georgia Power. I also listened to that same tape

 recording in the Summer of 1994 when I was interviewed by OI

 investigator Mr. Larry Robinson. I believe the tape that Mr.

 Robinson played for me was a micro-cassette size.
- 16 Q. DO YOU BELIEVE THAT IT IS YOU SPEAKING ON THIS TAPE?
- 17 A. When I listened to the tape in the Summer of 1994, I told Mr.

 18 Robinson that I wasn't sure that it was me on the tape, and I

 19 believed that the speed of that tape was off-normal. After

 20 listening to the tape copy provided to me by Georgia Power

 21 counsel, I believe that it is me speaking on the tape.
- 22 Q. WHAT DO YOU BELIEVE IS BEING DISCUSSED ON THE TAPE?

- A. It is hard to decipher this conversation because it sounds
 like Ken Burr and I are having a conversation with Mr.

 Mosbaugh while Ken Stokes is talking on the telephone in the
 same room. In any event, I believe we were talking about air
 leakage from the diesel trip lines.
- 6 Q. HAVE YOU REVIEWED MR. MOSBAUGH'S PREFILED TESTIMONY AT PAGE 7 94?
- 8 A. Yes.
- 9 Q. DO YOU AGREE WITH MR. MOSBAUGH'S CHARACTERIZATION THAT THIS
 10 CONVERSATION INVOLVED THE PRESENCE OF LIQUID IN THE DIESEL
 11 TRIP LINES?
- 12 A. No.

15

16

17

18

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22

- Q. HAVE YOU EVER HEARD THAT HIGH DEW POINT READINGS WERE OBTAINED
 ON THE VOGTLE DIESEL AIR RECEIVERS?
 - A. I recall that over the course of all my visits to Plant Vogtle there were some dew point readings taken which were out of specification high. However, I don't believe that either Ken Stokes or myself ever concluded there was an actual moisture problem in the diesel control system. I recall believing that there were problems with the way the technicians took the dew point readings such that neither Ken nor I had confidence in the accuracy of those particular readings.

- 1 Q. WHEN YOU RECEIVED REPORTS OF HIGH DEW POINT READINGS DID YOU
 2 TAKE ANY ACTION TO ENSURE THERE WAS NOT AN ACTUAL HIGH
 3 HUMIDITY CONDITION IN THE DIESEL PNEUMATIC CONTROL SYSTEM?
- A. Yes. I recall checking for water in the blowdown of the air receivers and checking the bowl of the five-micron filter in the diesel engine control panel.
- 7 Q. IF WATER DID ACCUMULATE IN THE VOGTLE DIESEL CONTROL SYSTEM
 8 WHERE WOULD YOU EXPECT TO FIND IT?
- 9 A. I would expect it to appear in the diesel control panel
 10 filter, which has a bowl for the purpose of trapping any water
 11 or debris that might find its way into the system. In my
 12 opinion, if water were in the system it could not get out
 13 unless it were removed manually.

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William H. Chenault, III

Experience Summary

- Over twenty years commercial nuclear power experience including extensive experience at Boiling Water and Pressurized Water Reactor Plants
- Extensive Standby Electrical Power Systems experience
- Experienced in Licensing and Regulatory Requirements
- Experienced Technical Support Staff Engineer

Experience Description

Bill Chenault is a Senior Engineer with Enercon Services, Inc., located in Atlanta, Georgia. He provides support for utility and engineering companies for a variety of engineering, licensing, training, operations and maintenance projects. This experience includes procedure development, licensing, technical specification procedure reviews, lesson plan development and diesel generator maintenance and operation. Since joining Enercon, he has worked on projects for Entergy (Grand Gulf, Arkansas Nuclear One, River Bend), Westinghouse Savannah River (Savannah River Site), Southern Nuclear Operating Company (Georgia Power Company's Vogtle), Baltimore Gas and Electric (Calvert Cliffs), Carolina Power and Light Lighting (South Texas Project). In addition to his engineering responsibilities, Mr. Chenault is the Quality Assurance Auditor for Enercon's Atlanta Office.

Mr. Chenault has been directly and continually involved with Enterprise Diesel Generators for fifteen years. He was a Startup Engineer for the Enterprise Diesel Generators at Grand Gulf Nuclear Station for four years and a Startup Engineer for the Enterprise Diesel Generators at Vogtle Electric Generating Plant for five years. Since its inception in 1984, he has been involved in varying degrees with the TDI (Enterprise) Diesel Generator Owners Group. He participated in the initial review and approval process of the Maintenance/program). He has assisted Georgia Power in maintaining Vogtle's Diesel Generator subsequent revisions and revising the Diesel Generator maintenance procedures as required and developing a database of commitments, regulatory requirements and industry recommendations for the Enterprise DGs.

He has also performed other diesel generator related consulting activities such as: technical support to Southern Nuclear Operating Company in analysis of a station blackout event at Vogtle Unit 1 (NUREG-1410); a detailed technical review of the ANO Units 1 and 2 diesel generator systems' design basis documents at the AP&L offices in Little Rock; and assistance to Westinghouse-Savannah River Co. with the analysis of connecting rod bearing failures of one of the emergency diesel generators at the Savannah River Site.

NUCLEAR REGULATORY COMMISSION
Docket No. 50-424/425-OLA-3 EXHIBIT NO. II - 190
in the matter of Georgia Power Co. et al., Voqtle Units 1 & 2
Staff Applicant Intervenor Other
☐ Identified ☐ Rejected Reporter 5D
Date 9/14/95 Winness William Chennelt

William H. Chenault, III Page 2 of 3

Mr. Chenault was as an Issue Evaluator in the Reactor Safety Improvement Program at the Savannah River Site. He was responsible for review of issues involved with the diesel generators and electrical systems related to reactor safety which were submitted by outside contractors, plant operating contractors (Dupont & Westinghouse), plant employees and the DOE to determine their impact on restart of the reactors at the site. The issues were reviewed against criteria developed from DOE Safety Performance Criteria, Technical Specifications and Safety Analysis Report.

As an Engineer in the both the Maintenance and Startup Departments at Vogtle during initial startup of Units 1 and 2, Mr. Chenault prepared work packages for the detailed inspection of Diesel Generator components to ensure compliance with specified design requirements of the TDI Diesel Generators Owners Group. He interfaced with outside agencies involved with testing and inspecting system components, directed craft personnel in the initial checkout of individual system components, and scheduled and coordinated the construction effort for the installation of the Unit 2 DGs and auxiliary equipment. Mr. Chenault prepared and performed procedures for verification of the performance of the DGs and their auxiliaries. He also initiated and implemented design changes to correct and enhance system operation and developed and review. plant surveillance and maintenance procedures for the DGs. He also participated in the development of draft through final versions of the electrical section of the Vogtle Technical Specifications, including direct meetings with the NRC to resolve items of contention.

Mr. Chenault was the Enterprise Diesel Generator Startup Engineer at Grand Gulf. He participated in the review of the diesel generator system for design adequacy and directed craft personnel for the initial checkout of individual system components. He also prepared and performed test procedures to verify system performance per design specification for the Enterprise diesel generators. While at Grand Gulf, Mr. Chenault assisted in the performance of the plant's first Diesel Generator/Engineered Safety Features integrated transient response and design verification test.

Mr. Chenault participated in the development of the first lesson plan for the Standby Diesel Generators at Grand Gulf and assisted in the classroom presentation. The class was tailored for mechanics, electricians and instrument technicians for the purpose of augmenting their understanding of the system's operation, inter-system relationships and trouble shooting the electrical and pneumatic controls of the engine and generator.

Mr. Chenault has recently been involved with the following diesel generator projects:

- Revised the Grand Gulf Diesel Generator Maintenance Standard, which is used for governing maintenance activities on the Diesel Generators, to incorporate the latest Cooper-Enterprise Clearinghouse Preventative Maintenance Plan.
- Reviewed newly developed diesel generator (Cooper) surveillance procedures at the South Texas Project.
- Developed safety related design functions for the pumps and valves for the Enterprise and EMD Diesel Generators at Grand Gulf to support the ten year update effort of the plant's Inservice Test Program.

- 4. Responsible for resolving Diesel Generator related open items associated with Grand Gulf's submittal of the Improved Technical Specifications to the Nuclear Regulatory Commission (NRC) and updating the plant's Lubrication Manual to latest diesel generator vendor requirements.
- 5. Performed an audit of the design and testing of the Station Blackout Project at Prairie Island Units 1 & 2 on behalf of Northern States Power Corporate Quality Assurance Department. The audit included a detailed review of the design and installation of two new SACM Diesel Generators (French manufacturer) installed for Unit 2 and the dedication of the two existing Diesel Generators to Unit 1. The design was evaluated against applicable industry standards and regulatory requirements. Following completion of the installation of equipment, reviewed the diesel generator testing program to verify that design specifications, industry standards and regulatory requirements had been complied with.
- 6. Verified the technical adequacy of the surveillance test procedures for Calvert Cliffs. This work involved reviewing applicable Technical Specifications to ensure specific design basis requirements were reflected in the surveillance program, and development of a surveillance requirement licensing and design basis document for the onsite AC and DC electrical power sources and distribution systems, including the Diesel Generators and battery systems.
- 7. Assisted in the preparation and resolution of issues for an NRC Electrical Distribution System Functional Inspection (EDSFI) at Grand Gulf. Performed tasks that included the review and revision of the System Design Criteria for the Diesel Generators and preparation of UFSAR changes, including verification documentation and safety evaluations, for the Electrical and Auxiliary System sections of the UFSAR.

While attending college, Mr. Chenault was employed full time at Georgia Power Company's corporate office where he was a draftsman/designer responsible for mechanical layouts, P&ID's and electrical schematics. He also designed fluid transfer systems, procured equipment for design projects, and performed field inspections of design projects.

Education

B.S., Mechanical Engineering, Georgia Institute of Technology, 1976

1	compensation for your testimony today?
2	A Yes.
3	Q Are you personally receiving compensation?
4	A Yes.
5	Q And can you tell me what that compensation is?
6	A I'm not exactly sure, but it would be
7	comparable to what I would normally charge to Georgia
8	Power for doing work for them.
9	CHAIRMAN BLOCH: I'm sorry. I could not hear.
10	It might be the mike, but
11	THE WITNESS: Okay. I said I was I'm being
12	compensated for the same amount that I would normally
13	charge Georgia Power for doing work for them.
14	CHAIRMAN BLOCH: Thank you.
15	MR. MICHAEL KOHN: Is this witness a
16	technical question of Georgia Power being presented as
17	an expert witness, Mr. Blake?
18	MR. BLAKE: You know, he is like many, many
19	witnesses in NRC proceedings, where they have expertise
20	and they talk. If you look at his testimony, he is
21	talking about what he saw and what he observed during his
22	role post-site area emergency in 1990.
23	And I think although his qualifications would
24	qualify him to be an expert, I think it's a fairer
25	characterization to say he is really a fact witness in
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1	this juncture, but certainly qualified to talk about the
2	topics that he observed.
3	MR. MICHAEL KOHN: I guess I'm not aware of
4	any custom to pay fact witnesses, and I do have an
5	objection to that practice that has been employed in this
6	proceeding.
7	MR. BLAKE: Well, fine.
8	CHAIRMAN BLOCH: Is there a motion pending
9	before me?
10	MR. MICHAEL KOHN: Not presently, Your Honor.
11	BY MR. MICHAEL KOHN:
12	Q Can you tell me what documents you were
13	provided before you testified today?
14	A A copy of my testimony.
15	Q In your conversations with Mr. Lamberski, did
16	he provide you any factual information?
17	MR. BLAKE: Are you asking about
18	communications now or documents?
19	MR. MICHAEL KOHN: I'm sorry. Now I'm asking
20	about communications.
21	BY MR. MICHAEL KOHN:
22	Q When you were working on your testimony, did
23	he provide you some factual background and some factual
24	information that you had forgotten over the time?
25	A No, I reviewed the tape that was the subject
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1	of this testimony.
2	Q Yes, sir.
3	A I listened to that, and I listened to his
4	transcripts. I mean, I read the transcripts, saw the
5	tape.
6	Q And did you agree with the transcript of the
7	tape that you had read?
8	A I couldn't totally agree with it, because I
9	I couldn't make out all of the conversations myself.
10	Q And other than the tape, was there other
11	documentation that you looked at?
12	A No, not that I recall.
13	Q On page 2, line 7, you state that you observed
14	air leakage. Can you tell me what you were told about
15	this air leakage that you what did you observe?
16	A Which sentence are you referring to?
17	Q Line 7, you say, "However, I dismissed this
18	theory after reviewing the design of the system and
19	concluding that observed air leakage was insufficient to
20	cause the diesel trip."
21	A Okay. This was at the time when I arrived at
22	Vogtle, and I arrived there I think six or seven days
23	after the event. And I was going over what had been
24	stated had occurred, and the subject of air leaks came up.
25	And at the time, like I said here, that I believe that air
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leaks could have been contributing to the particular diesel failure that they had.

BOARD EXAMINATION

CHAIRMAN BLOCH: Mr. Chenault, the question was, what was your basis for believing that the observed air leakage was insufficient to cause the diesel trip?

What was the information you had on which you reached that conclusion?

THE WITNESS: That it was not involved with the diesel trip, was that your question?

CHAIRMAN BLOCH: That observed air leakage was insufficient to cause a diesel trip. What did you know about observed air leakage, so that you could reach that conclusion?

THE WITNESS: Well, after I got there and we had been there several days, some of the Cooper employees -- I believe it was Sheldon Owyoung and Bob Johnston -- conducted a systematic troubleshooting method of determining what the trip was. And as I said in the testimony here, that originally I believed that air leakage may have contributed to the particular trip they had. But after seeing the Cooper personnel go through it step by step, and essentially recreating the type of trip they had seen, that convinced me that the problems they had found were the cause for the trip.

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CROSS EXAMINATION (Continued)

BY MR. MICHAEL KOHN:

Q Were you aware that the leaks had been tightened by the time Mr. Owyoung and Mr. Johnston had done that?

A I don't think that was really relevant to what I believed. What -- what I had --

Q Well, I'm saying you -- you say you observed -- air leakage was insufficient to cause a trip. I'm asking you whether you knew that the -- that leaks had been tightened.

Decause what -- in my opinion, what I said was not sufficient that -- because of the design of the system.

We had added -- Ken Stokes and I had, when we were there as start-up engineers, added some more pneumatic lines into the system to compensate for leakage. And just leakage from the system would not cause the trips.

And as I said here, I initially believed that air leaks may have been involved. But since I've been away from the site for a couple of years, I had forgotten about that design change, for instance, and my scenario I had worked out in my own mind did not correspond to what the -- was described to me.

BOARD EXAMINATION

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1	CHAIRMAN BLOCH: Mr. Chenault, I'm having a
2	problem. This is Judge Bloch. The testimony says
3	something about insufficient. Do you want to focus on
4	that line? Does it matter did you why did you reach
5	the conclusion that the leaks were insufficient to cause
6	the trip?
7	THE WITNESS: Because on those particular trip
8	lines, it has built in pneumatic lines that make up for
9	leakage.
10	CHAIRMAN BLOCH: So regardless how large the
11	leaks would be, they couldn't have contributed to the
12	event, is that correct?
13	THE WITNESS: That's my understanding, right.
14	CHAIRMAN BLOCH: So you really didn't reach
15	any conclusion about the leaks being insufficient. No
16	leaks, in your opinion, could possibly have contributed to
17	the event.
18	THE WITNESS: Well, I couldn't say that. But
19	as well as I remember, as I reviewed it here recently in
20	my mind, is that the design of the system was such that
21	leakage that that was described to me, or that I
22	remember talking about when I first came on the site,
23	would not have caused the leaks.
24	CHAIRMAN BLOCH: No, that's the problem.
25	Obviously, there is some upper bound to how much leakage

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1	is permitted without causing problems, isn't that correct?
2	THE WITNESS: For those particular lines, I'm
3	not sure what that would be.
4	CHAIRMAN BLOCH: But there is some upper
5	bound, isn't there?
6	THE WITNESS: Well, the pneumatic system works
7	on the method of venting off a particular sensor to create
8	a trip. So there would be some upper bound, which would
9	be equivalent to whatever it would take to trip the
10	sensor.
11	CHAIRMAN BLOCH: And if you're not sure how
12	much that would be, how did you reach the conclusion that
13	the leakage was insufficient?
14	THE WITNESS: Just based on, really, the
15	the bases for my belief that it was insufficient was, like
16	I say, the troubleshooting method we went through and
17	reviewed the drawings at that time, when I was on site,
18	and then leakage would not have produced the results that
19	they had obtained.
20	CHAIRMAN BLOCH: Did you rely on the testing
21	by Mr. Johnston and Mr. Owyoung?
22	THE WITNESS: Yes.
23	CHAIRMAN BLOCH: Did you know that testing had
24	been conducted before their testing?
25	THE WITNESS: I think I do recall that.
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1	CHAIRMAN BLOCH: Snoop testing.
2	THE WITNESS: Right.
3	CHAIRMAN BLOCH: And did you know the results
4	of the snoop testing?
5	THE WITNESS: I believe they found some leaks.
6	CHAIRMAN BLOCH: Well, what size leaks?
7	THE WITNESS: I can't remember.
8	CHAIRMAN BLOCH: Did you know at the time what
9	size leaks were found in the
10	THE WITNESS: I think they described them to
11	me as as they poured the snoop on them, they described
12	some they didn't quantify it.
13	CHAIRMAN BLOCH: They didn't quantify it?
14	THE WITNESS: No. I mean, I don't know how
15	you'd quantify
16	CHAIRMAN BLOCH: So how would you reach your
17	conclusion based on a report of unquantified snoop testing
18	that the leaks weren't large enough?
19	THE WITNESS: As well as I remember, the
20	leakage was not conducive to the type of trip that I saw.
21	In other words, leakage would be lines that are intact but
22	leaking from the fittings. I'm not talking when I
23	if you had a line that was totally disconnected, that
24	wouldn't be leakage. That would be a failure of the
25	system.
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1	CHAIRMAN BLOCH: So anything short of the
2	disconnecting of a line would not be sufficient to cause a
3	trip?
4	THE WITNESS: I would define it as nominal
5	leakage, which would not have caused the trip. I can't
6	quantify a leakage, but I would say nominal leakage.
7	CHAIRMAN BLOCH: So how did you conclude that
8	the leakage was nominal?
9	THE WITNESS: Well, I don't know where the
20	leakage was. As I said, it
11	CHAIRMAN BLOCH: So do you want to change your
12	testimony about having concluded that it was insufficient
13	to cause a trip? If you don't know what the leakage is,
14	and you don't know what nominal is, and you don't know how
15	much it would take to cause a trip, how could you conclude
16	that it was insufficient leakage?
17	THE WITNESS: After reviewing the scenario,
18	what had happened, and talking with the people involved at
19	that time, that was my conclusion, that the leakage was
20	not the problem.
21	CHAIRMAN BLOCH: Okay.
22	THE WITNESS: Maybe the quantity was
23	CHAIRMAN BLOCH: Is that based on things other
24	than knowing how much leakage there is? Did it not depend
25	at all on how much leakage there was? Did you have other
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THE WITNESS: As I said before, the basis for my determination that it may have been the trip sensors was the troubleshooting method we went through and was able to reproduce that. And I was basing -- when I initially said that I thought leaks may have had something to do with the problem, is my experience at other installations. And the other installation I was thinking back on did not have this particular design change that was implemented to make up for leakage.

So for leakage to have caused the problem would have been -- I mean, that was the whole reason we put the design change in, which is to compensate for leakage.

CHAIRMAN BLOCH: Mr. Kohn?

CROSS EXAMINATION (Continued)

BY MR. MICHAEL KOHN:

- Q Was anyone assigned responsibility to assess the magnitude of the leaks?
 - A Not that I know of.
- Q Do you know -- there was bubble testing performed on the diesel, correct?
 - A Right.
- Q And prior to the bubble testing, do you know whether there was any additional testing done to detect

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1	leaks?
2	A I'm not sure.
3	Q Do you know if snoop was used before the
4	bubble testing?
5	A I'm not sure.
6	Q Were you aware that I&C that a leak at
7	one leak at least was detected that was sufficient to blow
8	snoop in the face of an I&C technician?
9	A No, I'm not aware of that.
10	Q I'm going to
11	BOARD EXAMINATION
12	CHAIRMAN BLOCH: Would that have changed your
13	conclusion?
14	THE WITNESS: No.
15	CHAIRMAN BLOCH: How can you tell so quickly
16	that it wouldn't have changed your conclusion?
17	THE WITNESS: Because, as I said before, the
18	due to the testing process that we went through, that
19	to me the leakage was not the issue.
20	CHAIRMAN BLOCH: Oh. But the testing process
21	was on a system when it may have been tightened up. Does
22	that change your position?
23	THE WITNESS: No.
24	CHAIRMAN BLOCH: No matter how much it was
25	tightened up?
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1	THE WITNESS: No.
2	CROSS EXAMINATION (Continued)
3	BY MR. MICHAEL KOHN:
4	Q Were you aware of any discussions at the site
5	as to whether it was anybody's guess whether a leak was
6	sufficient enough to cause a trip of the diesel generator?
7	A Say that again?
8	Q Were you aware of discussions at the site of
9	whether the diesel generator failure could have that
10	resulted in the site area emergency could have been the
11	cause of leakage? Are you aware of specific discussions
12	around that fact?
13	CHAIRMAN BLOCH: I couldn't understand the
14	question.
15	MR. MICHAEL KOHN: All right.
16	BY MR. MICHAEL KOHN:
17	Q You were mentioning earlier about some design
18	change to make up for leakage. Is that through the 006
19	orifices?
20	A I don't recall the size, but there were some
21	orifices, right, involved.
22	Q And were any added to the jacket water
23	temperature switch lines?
24	A I can't recall specifically.
25	Q Were any added to lube oil?
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1	A I can't recall specifically. I think they
2	were I would have to look at the drawing to say.
3	BOARD EXAMINATION
4	CHAIRMAN BLOCH: Well, Mr. Chenault, do you
5	know whether the makeup system that you were depending on
6	is enough to make up regardless of where the leaks might
7	be in the system?
8	THE WITNESS: No. As well as I remember,
9	without having the drawing here, I can't say for sure that
10	they were installed for specific trips. I could say that
11	I believe they were, for instance, the low temperature
12	jacket I mean, jacket water pressure, low jacket water
13	pressure, trips of that nature. But without seeing the
14	drawing, I couldn't say.
15	CHAIRMAN BLOCH: You changed the question a
16	little bit.
L7	THE WITNESS: Did I?
18	CHAIRMAN BLOCH: I wanted to know whether you
19	are generally assured that the makeup system was adequate,
0.5	regardless of where the leak might be.
21	THE WITNESS: The design change was made for
22	specific trips.
23	CHAIRMAN BLOCH: Please answer the question
24	I've asked.
25	THE WITNESS: But I don't believe it it was

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1	not intended to make up for all leaks in the pneumatic
2	system.
3	CHAIRMAN BLOCH: So do you know whether or not
4	the makeup system for air was enough to compensate for any
5	leak, no matter where it might be?
6	THE WITNESS: No, it was not installed to make
7	up for any leak, no matter where it was.
8	CHAIRMAN BLOCH: Thank you.
9	CROSS EXAMINATION (Continued)
10	BY MR. MICHAEL KOHN:
11	Q On page 2 of your testimony, lines 14 through
12	15, you say you don't remember whether, by the time you
13	left the site, foreign material had been discovered in
14	some of the Calcon sensors. Did you know about the
15	foreign material before the Wiley report came out?
16	A I don't recall exactly when I learned about
17	it, but I do recall the foreign material and the trip
18	switches. But I'm not sure at what point in time that I
19	knew about it.
20	Q You are aware that Wiley looked at those
21	switches?
22	A Yes.
23	BOARD EXAMINATION
24	CHAIRMAN BLOCH: Mr. Chenault, do you remember
25	from whom you learned about the contamination in those
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1	switches?
2	THE WITNESS: No, I don't remember in
3	particular.
4	CHAIRMAN BLOCH: Was it some person on the
5	site?
6	THE WITNESS: I really have no recollection of
7	how I learned that.
8	CHAIRMAN BLOCH: But you do know it wasn't
9	from Wiley?
10	THE WITNESS: Wiley directly to me, no. I
11	never was involved with Wiley.
12	CROSS EXAMINATION (Continued)
13	BY MR. MICHAEL KOHN:
14	Q Did you ever read the Wiley report?
15	BOARD EXAMINATION
16	CHAIRMAN BLOCH: Excuse me. When did you
17	leave the site?
18	THE WITNESS: I was there about six days. I
19	think I left on April 1st.
20	CHAIRMAN BLOCH: Okay. And before you left,
21	you had you believe you had some knowledge about
22	foreign material?
23	THE WITNESS: As I said, I couldn't really
24	remember at what point in time I knew about it.
25	CROSS EXAMINATION (Continued)
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1	Q Can you tell me what timeframes you had been
2	at the Vogtle site since let's start since 1990?
3	MR. BLAKE: Judge Bloch, is there some
4	relevance to other than the period in question? I'm
5	unaware of any, and I'd object to it unless there is some
6	showing.
7	MR. MICHAEL KOHN: Yes, Your Honor. On page
8	3, at the top of the line, the witness states, "While"
9	the question reads, "While you were at Vogtle," and I am
10	trying to determine what the witness meant by that. So
11	maybe if I actually rephrase the question we may even get
12	to it quicker.
13	BY MR. MICHAEL KOHN:
14	Q Can you tell me what you mean by how you
15	interpret the question, "While you were at Vogtle," what
16	time period are you referring to?
17	A I interpret that to mean during the incident
18	of the station blackout and prior to that time.
19	Q The six days you were at the site?
20	A Or that's right. Right.
21	Q Were you at the site before that?
22	A Yeah, I was. I worked there for five years.
23	Q In 1990, you had worked there for five years?
24	A I left there in '89 and came back, just for
25	this one incident for that week.

1	THE WITNESS: I couldn't tell you who in
2	particular, but just, I guess, the history of working with
3	pneumatics I've been told by somebody that moisture was
4	bad for pneumatic controls. I have never observed
5	moisture in the controls, so I can't say off hand what the
6	effect would be on those particular pneumatics. But it
7	was impressed upon us that you needed dry air.
8	CHAIRMAN BLOCH: So is this a matter of rumor
9	or professional opinion?
10	THE WITNESS: That it was told to me?
11	CHAIRMAN BLOCH: Do you accept the statement
12	you just made as one that "I heard it from somebody," or
13	is it a professional opinion and it's true?
14	THE WITNESS: I believe I heard it from a
15	professional-type person that relayed it to me as guidance
16	on pneumatic systems. But I couldn't tell you
17	specifically who told me. It may have been 15 years ago.
18	I've been working with pneumatics for 15 years, and it was
19	someone along somewhere along that line, somebody had
20	impressed upon me the importance of it.
21	CROSS EXAMINATION (Continued)
22	BY MR. MICHAEL KOHN:
23	Q And in your professional judgment, that is
24	true, that water moisture could cause a malfunction?
25	A I believe it to be true, but I've never

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1	Q And, since then, have you returned to the
2	site?
3	A Yes, I have.
4	Q And when did you last return? Well, let me
5	rephrase it. Since the site area emergency, when did you
6	return the next time?
7	CHAIRMAN BLOCH: That's what the objection was
8	about before. What is the relevance of that? It's late,
9	but let's try to stay awake.
10	MR. MICHAEL KOHN: Thank you, Your Honor.
11	BY MR. MICHAEL KOHN:
12	Q What's your basis to conclude that Georgia
13	Power would get considerable attention and discussion
14	should water be detected in the pneumatic control system?
15	A Because in a pneumatic system moisture is a
16	major concern, and
17	Q What could it do?
18	A It could get inside the pneumatic system and
19	cause some problems if it was in sufficient I would
20	suppose sufficient quantities.
21	Q It could cause malfunction and trips?
22	A That's what I've been told.
23	BOARD EXAMINATION
24	CHAIRMAN BLOCH: Who told you that,
25	Mr. Chenault?
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1	observed it myself.
2	Q And have you ever observed water in a diesel
3	generator system at a nuclear facility?
4	A In a diesel generator?
5	Q Excuse me. In the pneumatic system.
6	A I vaguely recall, during the construction-type
7	activities, finding water in a particular component of a
8	pneumatic system. As far as I can remember, it might have
9	been at Grand Gulf rather than at Vogtle, and a particular
10	section of that, due to storage conditions.
11	BOARD EXAMINATION
12	CHAIRMAN BLOCH: So are you confident that it
13	wasn't Vogtle?
14	THE WITNESS: No, I'm not confident. But I am
15	confident that it was during the construction-type
16	activity.
17	CROSS EXAMINATION (Continued)
18	BY MR. MICHAEL KOHN:
19	Q Now, you listened to tape 24, which is
20	Intervenor's Exhibit 85. Let's Your Honor, that I
21	think that section will probably take a little longer than
22	so maybe I'll move to another section and come back to
23	that.
24	CHAIRMAN BLOCH: No objection.
25	BY MR. MICHAEL KOHN:

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1	Q On page 4, line 13, of your testimony, through
2	page 5, line 6, you have a discussion about high dew
3	points. And I'm at a loss to understand what timeframe
4	you're talking about in this section. Can you tell me the
5	dates that you're referring to?
6	A This was prior to the 1990 incident.
7	Q All right. So this your answer is limited
8	to your observations prior to March of 1990?
9	A Right.
10	BOARD EXAMINATION
11	CHAIRMAN BLOCH: Well, do you know how much
12	prior? Is it months? Is it years?
13	THE WITNESS: Well, I left there in '89, and
14	the incident was in the early part of '90, and I was there
15	for five years before that. So during that five years of
16	startup is what I'm talking about there.
17	CHAIRMAN BLOCH: Do you know how to operate a
18	dew point instrument?
19	THE WITNESS: Yes.
20	CHAIRMAN BLOCH: Would you be able to instruct
21	a technician on how to do it properly?
22	THE WITNESS: Probably not today, without
23	CHAIRMAN BLOCH: Well, in that time period.
24	THE WITNESS: Yes.
25	CHAIRMAN BLOCH: How long would it have taken?
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1	THE WITNESS: I would guess 15 to 20 minutes
2	to to instruct somebody on how to do it?
3	CHAIRMAN BLOCH: Yes.
4	THE WITNESS: Probably 15 or 20 minutes.
5	CHAIRMAN BLOCH: So if that's he case, why
6	would you and Mr. Stokes be concerned about improper use
7	of dew point instruments?
8	THE WITNESS: We had seen some cases where
9	maybe an inexperienced technician had been using the
10	instrumentation, and typically Ken Stokes and myself was
11	not present when they were taking the dew point.
12	CHAIRMAN BLOCH: And so what did you do about
13	the fact that inexperienced people were making readings at
14	a nuclear power plant?
15	THE WITNESS: Well, the intent was that, as a
16	technician would take a reading, they would if they had
17	an or a reading that was not good, they would contact
18	the engineer for resolution.
19	CHAIRMAN BLOCH: Oh. So when they read it as
20	good, there was no check, but only when it was not good.
21	Do you like that system?
22	THE WITNESS: Well, all readings were
23	reviewed, as far as I know. But as with most things, only
24	the negative things were reported as far as I know.
25	CHAIRMAN BLOCH: Did anyone talk to I&C to
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1	make sure that people were properly trained to do it
2	properly every time?
3	THE WITNESS: Yeah, we worked with I&C to make
4	sure that they would use the instrument correctly. They
5	did use several types of instruments, which may have been
6	contributing to it. They had different types of dew point
7	instruments, as far as I remember.
8	CHAIRMAN BLOCH: Do you mean they were able to
9	train people in some of them but not all of them?
10	THE WITNESS: I don't know what the training
11	
12	CHAIRMAN BLOCH: Why wasn't this straightened
13	out? It's so simple, isn't it?
14	THE WITNESS: I don't recall the specifics.
15	CHAIRMAN BLOCH: Was it straightened out?
16	THE WITNESS: As far as I know.
17	CHAIRMAN BLOCH: Well, your testimony suggests
18	that it wasn't straightened out. You said, "I recall
19	believing that there were problems." It doesn't say you
20	solved them. It says you believed there were problems.
21	So they must not have been solved, isn't that correct?
22	THE WITNESS: Periodically, we would have a
23	negative reading, which we would investigate.
24	CHAIRMAN BLOCH: Well, that shouldn't happen,
25	should it, at a nuclear power plant?
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1	THE WITNESS: Yeah, I think mistakes could be
2	made.
3	CHAIRMAN BLOCH: Was there something wrong
4	with the training?
5	THE WITNESS: I couldn't really answer on
6	that.
	CHAIRMAN BLOCH: Was there something wrong
8	with the certification for use of an instrument?
9	THE WITNESS: Couldn't say.
10	CHAIRMAN BLOCH: Was this thoroughly checked
11	into, so it wouldn't happen?
12	THE WITNESS: I couldn't couldn't say.
13	CHAIRMAN BLOCH: Do you feel personally
14	responsible when you're working at a plant to follow up to
15	make sure it is done?
16	THE WITNESS: Yes, I do.
17	CHAIRMAN BLOCH: Why didn't you follow up?
18	THE WITNESS: I didn't say I didn't follow up.
19	CHAIRMAN BLOCH: You didn't follow up, did
20	you?
21	THE WITNESS: Yes, I would say I did follow
22	up.
23	CHAIRMAN BLOCH: Did you file a deficiency
24	card, so it would be followed up and resolved?
25	THE WITNESS: I don't recall if I filed any
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1	deficiency cards or not.
2	CHAIRMAN BLOCH: Could you have?
3	THE WITNESS: I don't recall.
4	CHAIRMAN BLOCH: You don't recall if you could
5	have?
6	THE WITNESS: No, I don't.
7	CHAIRMAN BLOCH: Were you permitted to?
8	THE WITNESS: As far as I know, if a
9	deficiency card was the right tool to use.
10	CHAIRMAN BLOCH: Do you know whether it was
11	the right tool to use?
12	THE WITNESS: I don't recall.
13	CHAIRMAN BLOCH: So you were working on the
14	site and you didn't know what paper to file to correct the
15	deficiency?
16	MR. BLAKE: Judge Bloch, the man's response
17	was he doesn't remember. He doesn't know now today. He
18	didn't say that he
19	CHAIRMAN BLOCH: Did you know at the time what
20	card you were supposed to file if there was a deficiency?
21	THE WITNESS: Yes, I was probably aware of all
22	of the procedures that were required of me.
23	CHAIRMAN BLOCH: And did you have the
24	responsibility of filing deficiency cards?
25	THE WITNESS: If that was one of the tools
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1	that was to be used at that particular phase of the
2	construction, startup, or operation.
3	CHAIRMAN BLOCH: And do you recall what tool
4	you were supposed to use if you saw a problem with the use
5	of instruments, and you wanted to make sure it was solved?
6	THE WITNESS: I was involved with all phases
7	of construction, startup, testing, operation. I couldn't
8	really say exactly when the dew point readings in question
9	occurred, so I don't know what paper would necessarily go
10	along with the deficiency.
11	CHAIRMAN BLOCH: But in any event, you could
12	have found out and made sure that there was something
13	filed and it would have been corrected, is that right?
14	THE WITNESS: I can only say that I'm sure
15	that I took whatever action was necessary.
16	CHAIRMAN BLOCH: Well, it looks like from your
17	testimony it didn't solve the problem. How did that
18	happen if you filed took the action necessary, that it
19	didn't solve the problem?
20	THE WITNESS: I really couldn't say how
21	somebody else would solve a problem.
22	CROSS EXAMINATION (Continued)
23	BY MR. MICHAEL KOHN:
24	Q Do you believe the problem was solved by the
25	time you left the site? That is, the problem of taking
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+	accurace dew point measurements:
2	A By the time I left in 1989?
3	Q Yes.
4	A I really don't know.
5	Q Had you made sure that your feelings about the
6	accuracy of taking these readings had been conveyed to I&C
7	personnel?
8	A Say that one more time.
9	Q Did you convey your understanding that
10	additional training was needed to I&C, the I&C Department?
11	A As well as I recall, any time we had a reading
12	that we thought may have been in error, that we would
13	immediately get with the technicians responsible and
14	resolve the problem, whether it be an error in taking the
15	method, whether it be an instrument out of calibration,
16	whether it be somebody not familiar with the
17	instrumentation. All I can say is that, in general, we
18	would try to resolve the problem.
19	Q So by the time you left, your knowledge about
20	proper use of the instruments had been conveyed to the I&C
21	personnel involved?
22	A As far as I knew, we had we did have
23	confidence in routinely them going out and taking dew
24	point measurements. And
25	Q Excuse me. Did you say "we did"? Did you say
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1	"we did have confidence" by the time you left?
2	A In some cases, they would get inaccurate
3	readings which we questioned on particular occasions. But
4	we didn't necessarily have no confidence in the people
5	overall doing the job.
6	Q Would you question the readings on the spot as
7	soon as you heard about them?
8	A If they like I said before, normally, if
9	they had a negative type reading, they would come to us
10	for resolution. Not necessarily coming to us to help them
11	fix the problem, but to report that a negative reading was
12	found.
13	Q If an I&C would I&C technicians, to your
14	knowledge, train that when they detected a problem that
15	they would go to management and report it immediately?
16	A Yes.
17	Q Do you believe an I&C technician, or more than
18	one I&C tech: cian would use a piece of dew point test
19	equipment in the field if they believed it was defective?
20	A No, I don't believe they would normally do
21	that.
22	BOARD EXAMINATION
23	CHAIRMAN BLOCH: Sir, you mentioned that, as
24	just an example, that if you found someone using an out of
25	calibration piece of equipment, you'd handle it right NEAL R. GROSS

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1	away. Is that correct?
2	THE WITNESS: If I found somebody using out of
3	calibrated, would I handle it?
4	CHAIRMAN BLOCH: Yes. That's what I think you
5	said. Is that correct?
6	THE WITNESS: I don't remember saying those
7	exact words, no.
8	CHAIRMAN BLOCH: That if someone was either
9	as I recall, what you said was if they were using it
10	improperly or the instrument was out of calibration, you'd
11	handle it. If you don't recall it that way, you can state
12	what you meant to say about that.
13	THE WITNESS: Okay. As I thought I said, was
14	that if dew point errors were found I mean, if a
15	negative dew point was found, the investigation was made
16	to see if the dew point was actually bad dew point, or
17	whether it was the method of taking the dew point, or if
18	it might be the instrument that caused the erroneous
19	reading. And we would work with the technician to resolve
20	the problem, whatever the whether it was a bad dew
21	point or a bad reading, or whatever the case may have
22	been. We would have worked with the technician to resolve
23	it.
24	CHAIRMAN BLOCH: Now, when you say "worked
25	with them," what would that look like?
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THE WITNESS: Either going through another 1 reading of the dew point and -- or maybe getting another 2 instrument to measure the same value. Things of that 3 4 nature. CHAIRMAN BLOCH: Well, if you made another 5 reading, how would you know whether the first one was 6 7 wrong? THE WITNESS: Well, we used other 8 observations, not -- if we -- if we had a bad dew point 9 reading, we may use some other observation, such as 10 blowing down the air receiver to see if there is any water 11 in the air receiver, or we may have verified the proper 12 operation of the air dryer to see if it was actually 13 dispelling water. So we wouldn't necessarily rely 14 strictly on a good reading. We would investigate the 15 system to see if we found any signs of moisture or water. 16 CHAIRMAN BLOCH: And would a high dew point 17 reading necessarily be reflected in signs of water? 18 THE WITNESS: If -- I think there would be 19 20 signs of water, or either malfunction of the air dryer. CHAIRMAN BLOCH: So if you had a 60-degree dew 21 point, and the temperature was 70, would there be signs of 22 23 water? THE WITNESS: There could be, if the air is 24 25 compressed to 250.

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1	CHAIRMAN BLOCH: So if there's a 60-degree dew
2	point, and compressed air at 250 pounds, you would expect
3	to see signs of water?
4	THE WITNESS: I would think you would probably
5	see it if there was a long-term problem with the dew
6	point. You know, if you just found one particular
7	incident where the air dryer wasn't working for a short
8	period of time, then it might not show up in the other
9	tell-tale signs.
10	CHAIRMAN BLOCH: You would not, however, be
11	verifying whether or not the dew point was 60 degrees if
12	you checked for water, would you be?
13	THE WITNESS: No, you could not tell what the
14	dew point was by checking for water. But typically, we
15	would also look at the air dryer to see if if it was
16	functioning correctly, it had the correct indications on
17	it, whether it was discharging water from its drain
18	system.
19	CHAIRMAN BLOCH: Do you know if you suspected
20	that an instrument was out of calibration, what would be
21	done with respect to the instrument?
22	THE WITNESS: If it was out of calibration,
23	that would be handled by the Instrument Department.
24	CHAIRMAN BLOCH: And do you know what they
25	would be expected to do under their procedures?

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1	THE WITNESS: I don't recall what they were.
2	CHAIRMAN BLOCH: And I said if it was
3	suspected to be out of calibration, because you wouldn't
4	necessarily know that right away, would you?
5	THE WITNESS: No, you wouldn't.
6	CHAIRMAN BLOCH: Would you expect that it
7	would be sent out for a calibration check, so you would
8	know what the calibration was?
9	THE WITNESS: I don't know if they sent it
10	out, but I would expect it to be checked.
11	CHAIRMAN BLOCH: And if it wasn't checked,
12	could you be sure that it was out of calibration?
13	THE WITNESS: For a suspect instrument, I
14	wouldn't think you would know unless you had it checked.
15	CHAIRMAN BLOCH: Thank you. It is 5:04.
16	Mr. Kohn
17	MR. MICHAEL KOHN: I can stop at this point.
18	There's no nothing pending.
19	CHAIRMAN BLOCH: Okay. And how much time do
20	you expect to take tomorrow morning?
21	MR. MICHAEL KOHN: Based on the speed that
22	we've been going through the questioning, I'd say about an
23	hour.
24	CHAIRMAN BLOCH: Okay. So we may have sped up
25	things a little bit today?
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1	MR. MICHAEL KOHN: Right. Your Honor?
2	CHAIRMAN BLOCH: Mr. Kohn? Mr. Blake? You
3	said who was speaking? Oh.
4	MR. MICHAEL KOHN: There is the exhibits
5	that Intervenor presented to the witnesses today we'd like
6	to move into evidence. We can do it tomorrow morning, but
7	I'd just like to
8	CHAIRMAN BLOCH: Well, do you want to mention
9	the numbers? It helps to mention the numbers.
10	MR. BLAKE: And tell me remember what they
11	were.
12	CHAIRMAN BLOCH: Why don't you do it in the
13	morning? If you can present the list to the other parties
14	so they'll know what to expect, that would be helpful.
15	We'll be ending tomorrow, because it's a Friday, at about
16	4:00. We'd like to start at 8:30 well, we're either
17	end at 4:00 or taking a lunch break, or we'll end at 1:00,
18	depending on how the thing how the schedule goes, with
19	no lunch break.
20	So we'll begin at 8:30 in the morning. We'll
21	begin at 8:30 in the morning, and we're adjourned.
22	(Whereupon, the proceedings were off the
23	record briefly.)
24	CHAIRMAN BLOCH: We're back on the record.
25	MR. BLAKE: I have available, and Mr.
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There are a large number of very large drawings and all that are not very easily reproduced. I'm going to make them available for inspection. To the extent people want copies of particular items, then we'll undertake to coordinate that with, for example, the Intervenor and/or the Staff. That's what I have as of today, and I didn't want to hesitate in making them available simply because we hadn't made copies of all of these difficult documents to make copies of.

preparation of his testimony that he has submitted. And I

have before me the only set of those.

CHAIRMAN BLOCH: Do the other parties understand the mechanics of how this can be done?

MR. BLAKE: No. I just got the documents. We just got them this afternoon by Federal Express from California and went through them, so --

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CHAIRMAN BLOCH: Okay. I hope the Staff and Intervenor can work out the mechanics, so that they can both gain access to the documents they need. We are adjourned until 8:30 tomorrow. (Whereupon, at 5:10 p.m., the proceedings in the above-entitled matter were adjourned, to reconvene at 8:30 a.m., the following day.)

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CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: GA POWER CO. ET AL. VOGTLE UNITS 1 & 2

Docket Number: 50-424/425-OLA-3

Place of Proceeding: ROCKVILLE, MARYLAND

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 DILDINE

Official Reporter

Neal R. Gross and Co., Inc.