

# OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: U.S. NUCLEAR REGULATORY COMMISSION

Title: INTERVIEW OF: ROBERT DORMAN

Docket No.

LOCATION: WAYNESBORO, GEORGIA

DATE: MARCH 28, 1990

PAGES: 1-25

ANN RILEY & ASSOCIATES, LTD.

1612 K St. N.W., Suite 300  
Washington, D.C. 20006  
(202) 293-3950

9202200398 920116  
PDR ADOCK 05000424  
S PDR



U. S. NUCLEAR REGULATORY COMMISSION

INTERVIEW OF:

ROBERT DORMAN

)  
)  
)  
)  
)

Conference Room  
Administration Building  
Vogtle Electric Generating Plant  
Waynesboro, Georgia

Wednesday, March 28, 1990

The interview commenced at 1:39 a.m.

APPEARANCES:

On behalf of the Nuclear Regulatory Commission:

GARMON WEST, JR.  
GENE TRAGER  
BILL JONES

PROCEEDINGS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

MR. TRAGER: This is the Vogtle IIT. It's March 28, 1990, at 1:39 p.m., and we are here to interview Mr. Rob Dorman.  
Whereupon,

ROBERT DORMAN

appeared as a witness herein and was examined and testified as follows:

EXAMINATION

BY MR. TRAGER:

Q Could you state your name, Mr. Dorman, and your position here at the plant?

A My name is Rob Dorman, and my position is supervisor of operations training.

Q The topic we will be discussing is operations training. I wonder if you could tell us about training that the plant has conducted during mid-loop operations, the preparations you've made, particularly changes you've made to comply with generic letter 8817? The hardware changes, for example. I'm sure you've made some training changes.

A Yeah. Basically the event was reviewed, I think when this generic letter came out in '88, and I think Georgia Power responded to that and we reviewed their response and incorporated their responses into the training program. The last time we officially trained on RHR mid-

1 loop operations was the last segment of 1988. Let me look  
2 at my records here for when that was. Last segment ran from  
3 September 18th through October 20th. In addition to that  
4 training, a videotape was made to assist in the shift  
5 briefing prior to going into mid-loop. That tape was made  
6 sometime in February and had all the latest information and  
7 procedure changes at the time. I believe that tape was  
8 shown to all the shift people prior to going to mid-loop.

9 Q That was February 1990?

10 A February 1990, yeah, right before they went down  
11 the mid-loop this last time.

12 Q Is that a tape you made or contracted out or--

13 A That was a tape that I -- Yeah, we made it  
14 inhouse, and it pretty much reiterated the same training we  
15 had on mid-loop operations and the Diablo Canyon event.

16 BY MR. JONES:

17 Q Were you in operations before --

18 A Yes, I was.

19 Q How long were you in operations?

20 A I came with Georgia Power Company in 1981, and I  
21 was in operations until April of '88 and that was a various  
22 -- Actually I was an engineer at first and I transferred in  
23 the operations department in 1982, and I have had some  
24 various assignments at other plant sites at different time  
25 frames. So we've trained fairly extensively, I feel, on the

1 mid-loop operations and covered all the specific items  
2 mentioned in the GPC response to the generic letter.

3 BY MR. TRAGER:

4 Q Some of the hardware changes that were made as a  
5 result of the generic letter, were those some of the things  
6 the training emphasized or was it more operating experience  
7 at other plants?

8 A On the most recent training, we focused on just --  
9 as far as the industry experience, we focused in on the  
10 Diablo Canyon event in specific, specifically on that event,  
11 and that was the only industry event we really emphasized  
12 at that time. In addition to that training we went ahead  
13 and emphasized a lot of the changes we'd made to the  
14 procedures and the hardware, like, for instance the  
15 thermocouples -- it required two thermocouples to be  
16 installed whenever the head is in place. The changes to the  
17 -- as far as making sure -- Can I refer to my notes?

18 Q Oh, sure.

19 A I've got the lesson plan right here we used.

20 MR. JONES: You can use anything to help us  
21 understand while we are here to learn what you all have  
22 done.

23 WITNESS DORMAN: Some of the things that we  
24 stressed were, and one of the big problems at Diablo Canyon  
25 was the fact that they immediately restarted the second RHR



1 before investigating why the first one tripped out and the  
2 operators needed to make sure that they had the pump checked  
3 out and to make sure that the water level was adequate, and  
4 that they didn't go ahead and start that second pump until  
5 they knew what the problem was with the first one. We  
6 talked about -- I think the big concern, or the worst case  
7 concern is the cold leg opening with the loops isolated. We  
8 went into some detail about that and explained the  
9 pressurization and blowing the water out of the cold leg  
10 opening and, you know, that could possibly cause chlorine  
11 covery in as little as 20 to 30 minutes. We went into some  
12 detail about that.

13 All this training was trained on and in segment 8  
14 it was also re-emphasized. It's pretty much the same  
15 training.

16 BY MR. JONES:

17 Q Segment 8, that was the one that ran from  
18 September 18th until October 28, '88?

19 A Yes.

20 Q When you say it was re-emphasized, what do you  
21 mean?

22 A The videotape was pretty much just a repeat of the  
23 training that occurred in that timeframe except that in the  
24 training we focused on the RHR system as a whole, and in the  
25 videotape we just focused on mid-loop operations.

1           We emphasized the modifications we made, or needed  
2 to be made as far as the level indication, the fact that we  
3 had the wide range and narrow range on the cumulators in the  
4 control available and the tygon tube emphasized the wind.  
5 The tygon tube had to be modified -- I mean, had to be  
6 monitored. Pretty much the requirements for going below the  
7 17 percent pressurized level, what all had to be met to do  
8 that.

9 BY MR. TRAGER:

10           Q     While we are on the subject of the tygon, that is  
11 -- There seems to be a lot of emphasis on using the tygon  
12 level, I guess maybe to say to check on your other --

13           A     Yes.

14           Q     -- instrumentation systems. Is that a holdover  
15 from -- You've got two independent level systems.

16           A     Basically, I'm not sure, you know, where the  
17 philosophy came from. There are procedure requirements in  
18 place that require that two out of the three of your  
19 instruments have to agree within a certain tolerance level.  
20 I think the tolerance level is 7 percent now. At the time  
21 it was 2 percent when we did the training. They've changed  
22 procedures since then and they want you to monitor the tygon  
23 tube continuously whenever you are changing a level.

24 BY MR. WEST:

25           Q     You had other indications in --



1           A     We had other indications in the control room, but  
2 those requirements were still in place. I think he might  
3 have been, which I'm -- you know, I really don't know, but  
4 I'm just guessing would be that if you were changing the  
5 level and you were to lose that indication, possibly, you  
6 know, it may take a while to get somebody dispatched to  
7 containment. So that may have been the thinking for why to  
8 have somebody continuously monitoring the tygon tube while  
9 changing levels.

10           Q     Do you know if the tygon tube level is more  
11 accurate than, let's say, what you have in the control room?

12           A     I wouldn't think it would be, no. Equally the  
13 same, I guess you'd be taking out some the instrument air  
14 possibly, but it's really monitoring the same parameters.  
15 I can't see where it'd be more accurate.

16 BY MR. TRAGER:

17           Q     People might feel it was more accurate.

18           A     I think they may have more confidence in the tygon  
19 tube because of the fact that it's there. They've seen it.  
20 They've used it for a long period of time.

21           Q     It's in containment.

22           A     It's in containment. It's right there, you know,  
23 and they feel good about that. So that could be the  
24 philosophy for using it. I really don't know. I never  
25 really thought about it.

1 Q I was just wondering maybe what you stressed in  
2 training? What the --

3 A What we stressed in training was to have diverse  
4 indications and to use all your indications you have  
5 available and not focus on any one indication because if you  
6 focus on one indication, you get to a problem. Let's see  
7 what else we mentioned. We also stressed about the  
8 equipment hatch and the requirement to be able to whenever  
9 you go below greater than three feet below the phalange to  
10 be able to put the equipment hatch on within a two hour time  
11 frame. I think Vogtle is committed to some other time less  
12 than the two hours, but the procedural requirements are two  
13 hours. You need to make sure you have that capability  
14 before going below, three feet below the phalange.

15 BY MR. TRAGER:

16 Q Did you have -- Your team was qualified during  
17 that certain period of time? For example, if you feel you  
18 can do it in 59 minutes, for example --

19 A Right.

20 Q -- then you would practice and have different  
21 crews check and see that that was reachable?

22 A I don't know. That was more of a maintenance  
23 function and --

24 Q So you wouldn't train in doing that?

25 A We didn't train in doing that in the operations

1 area as a maintenance function to put that hatch on. I'm  
2 sure if they committed to do it in a certain timeframe that  
3 we actually went out and proved that we could do it in that  
4 timeframe. I can't remember that. I was not personally  
5 involved.

6 BY MR. WEST:

7 Q You are speaking of the equipment hatch?

8 A Yes.

9 Q What kind of timeframe does it take to put that  
10 on?

11 A I know we did it in approximately an hour or so in  
12 this last outage.

13 Q Is that a pretty good time? I just don't have a  
14 sense of --

15 A I don't know. I really don't know.,

16 Q -- if it's fast or slow.

17 A I don't think we've ever, other than maybe the  
18 practice drills we ran to try to put it on in a timely  
19 manner. I can't ever remember us racing to try and put it  
20 in and try to do it against the clock. Getting anything  
21 done in an hour is a pretty good feat in a nuclear plant  
22 when it involved coordination of several people. I feel  
23 it's pretty good timing.

24 BY MR. TRAGER:

25 Q There were other changes here?

1           A     Yeah. We talked about the requirement to track  
2 the containment penetrations that were going to be open. In  
3 fact, we needed to write an information LCO and the  
4 supervisor needed to be aware of those. We talked about  
5 his, as far as the -- what's it on the -- whenever you are  
6 going to install the dams, I believe we were required to  
7 maintain a vent path. We talked about that some, and the  
8 fact that he is going to have a very difficult time or  
9 either he will be well challenged to try and maintain the  
10 hot leg injection path as required. Not only it's going to  
11 have to be operable. It's one of the hot leg injection  
12 paths, and you can't take both of your safety injection  
13 pumps out. You can't drain the systems during an outage  
14 when there is so much activity going on. It's just  
15 difficult to manage that. So we stressed that to them to  
16 make sure they were clear of that.

17                     That's most of the highlights as far as what I  
18 have.

19           Q     I guess the big thing, as a result of this  
20 incident, how do you feel about the amount of time you may  
21 have spent on incidents such as -- as you lost your AC power  
22 to the vital busses. Had you considered that in training?

23           A     Not really. We didn't focus in on the loss of  
24 power aspect. I think we looked more from the -- most of  
25 the industry events that have occurred have been RHR pumps

1 losing their level indication and that's where I training  
2 focused. We did train on the abnormal operating procedure  
3 for loss of RHR and touched on some of those changes. That  
4 briefly touches on what you do in case you lose power, but  
5 that definitely was not the focus of the training. It was  
6 definitely from a loose pump, you'd still have power, but--

7 BY MR. JONES:

8 Q So if you talk about recovery from loss of RHR,  
9 did you accomplish that by going through the loss of RHR  
10 procedure, or how did you accomplish that? Is that what you  
11 were just saying?

12 A Yeah, we went through the eighteen thousand and  
13 nineteen, the procedure for loss of RHR and we touched on,  
14 you know, the highlights, and focused more on the changes  
15 due to the generic letter more than anything else. You  
16 know, the things you need to do, what you need to check, do  
17 you need to evacuate containment right away, do you need to  
18 get the equipment hatch on. You know, the fact that you  
19 need to, before starting your second pump, you need to check  
20 it out thoroughly. Things like that. We talked about, you  
21 know, the possibility of hot leg injection possibly -- all  
22 the possible options you'd have as far as, you know, other  
23 means of injection if you couldn't get RHR back.

24 BY MR. TRAGER:

25 Q And this is with power to the vital busses?

1           A     Yeah, I think the only thing we mentioned,  
2 possibly as far as loss of power, would be the gravity  
3 method. You use the RWST -- and they had on the RWST the  
4 gravity field, which that's addressed in the AOP.

5           Q     And as it was, I guess, you still had your non-  
6 vital AC?

7           A     We had the non-vital AC.

8           Q     You could use your crane --

9           A     Right.

10          Q     -- and you had lights?

11          A     Yes, that made it a whole lot better.

12 BY MR. JONES:

13          Q     And I think it's in 1804 -- 1801 for the loss of  
14 RHR procedure. There's some curves in there on heat up  
15 rights or something like that. Do you know if someone in  
16 operations prepared those or did y'all prepare them?

17          A     I'm not sure who prepared them.

18          Q     Did you have any -- Did you talk about those in  
19 your lesson plans?

20          A     A little bit. Not a whole lot. Anytime there's a  
21 major change to procedure, we cover that. That was a fairly  
22 significant change of that procedure. So --

23          Q     Beyond those curves, did you do anything  
24 technical? And by that I mean, did you do anything where  
25 you did some calculations to show people --



1 A No.

2 Q So there was no additional heat up work or time  
3 after shutdown? I'm just saying like you'd have a curve of  
4 heat up rate versus time after shutdown --

5 A Right.

6 Q So you didn't discuss that?

7 A (Negative nod) We didn't do any calculations.

8 Q I'm sorry.

9 A We had some questions in our examine bank, which  
10 evaluated the operators ability to perform that. Put them  
11 in the scenario of loss RHR for this time, and they are  
12 going to charge up to the RCS, what's the required charging  
13 rate to insure that you have adequate heat for the charging  
14 system. We evaluate them on that ability to perform that  
15 task. As far as sitting down and going through the  
16 calculations and showing them how to -- you know, how these  
17 charges were derived, I haven't done that.

18 Q No, I didn't mean that. I meant whatever -- I was  
19 really going down the path of -- not to show them how to  
20 make the charts, but to say -- give operators the  
21 illustrative examples of the differences in time after  
22 shutdown versus heat up grade and things like that. I  
23 wasn't -- Just to be -- to present to them more information.  
24 That's what I was going to, not to let them do, but to show  
25 them and give them additional guidance, that's all I saying.

1           A     We didn't really stress that very much. I think  
2 we talked about the difference in areas and worst case  
3 scenarios and the worst case scenarios as far as time for  
4 recovery and things like that as far as applying the graphs  
5 we had and -- I don't think we really stressed that very  
6 much.

7           Q     Did you talk about the difference between  
8 operating in your first mid-loop operation after the core  
9 has been shut down for a short period of time versus in the  
10 second mid-loop where they were when this event occurred,  
11 did you? Did you talk about those differences with the  
12 operators?

13          A     I would say that we did mention the fact, you  
14 know, that the K heat is going to be a function of the  
15 amount of timing of the shutdown, but I don't think we  
16 specifically talked about the first time versus the second  
17 time in the mid-loop operation. I don't think we went into  
18 that much detail.

19 BY MR. WEST:

20          Q     Does your area of training get into the training  
21 for plant equipment operators?

22          A     Yes.

23          Q     What specifically is done in the area of  
24 enunciator training? I'm thinking primarily of the diesel  
25 generator panel for setup and the enunciator panel above the

1 break glass for emergency start. What specifically is  
2 provided in that area?

3 A I'd have to look.

4 Q Do you know if there is anything done with respect  
5 to first out indication on that panel?

6 A I don't know if there is a first out indication on  
7 that panel.

8 Q That's a little unclear to me. I was going to  
9 follow up a little bit. What about the sequencer and the  
10 functions that take place when they are resetting the  
11 sequencer. Are you familiar with the training that's covered  
12 in that area?

13 A I don't think we train the non-license operators  
14 to do that. I think that'd be more of a function of a  
15 licensed operator.

16 Q Is that something that is done independent of a  
17 procedure, or does the operator have to have a procedure  
18 when they perform that particular activity?

19 A To my knowledge, I don't know of any procedures  
20 specifically addressed having to reset the sequencer as it  
21 was reset. Again, there is a procedural step which talks  
22 about resetting a different function. Not this particular  
23 one. The operators are trained in detail on the sequencer  
24 operation, and I don't think there's a specific procedure  
25 that addresses the situation the sequencer was in at that

1 time as far as an normal operating procedure, or whatever,  
2 but I'm not 100 percent sure of that. About 95 percent.

3 Q One last question. It's sort of two-pronged. With  
4 respect to -- just to give a frame of reference -- the  
5 diesel generator role and also the sequencer role, is there  
6 anything that's covered in training that speaks to what the  
7 operator's expectation should be regarding headsets and the  
8 extension cords for those headsets? And also the  
9 procedures themselves where they are applicable. I'm really  
10 holding in on there. If the operator is, as they were in  
11 this instance during the event, going to those areas, does  
12 training speak to what their expectation should be regarding  
13 whether they should expect to find the headset and extension  
14 cords in those areas, whether they should expect to find the  
15 procedures in those areas that they are going to at the  
16 panels precisely?

17 A Most of the type of training you're talking about  
18 is done via the task training we do through our  
19 instructional units and what they do is, they identify tasks  
20 in training programs and actually walk through the task or  
21 the simulator to perform the task, if possible, and we they  
22 perform this training, they should be familiar with the  
23 procedures and any type of headset or equipment in the area.  
24 I think a good example is in our training on the shutdown  
25 panel operations, you know, the operators go down there and

1 normally when they go down there, they will evaluate or  
2 point out the equipment locker right there, the type of  
3 equipment that's in the locker.

4 Q I understand your response in terms of a process  
5 for providing the training, but my question is geared more  
6 to what would be the operator's expectation of, "I've got to  
7 perform this function. Where would I get the procedure? Is  
8 it the expectation that I find the procedure at the panel?  
9 I've got to perform this function. I may have to  
10 communicate." Is the expectation, "I'll find the headset.  
11 I'll find the extension cords at the panel where I can  
12 perform the function?" That's what I am really trying to  
13 get at.

14 A I think that'd be more of a function of on-the-job  
15 training. Operator knowledge.

16 Q That's not an area that ---

17 A I don't think it's specifically addressed in the  
18 training program, you know, "In these locations you'll find  
19 headsets, and in these locations you'll find procedures."  
20 But once again, when they perform the task within the  
21 program, they go down and walkdown the task and they see the  
22 procedures and headsets and whatever equipment that is  
23 available is there.

24 Q And who covers that? The walkdown?

25 A That's part of our training. I don't think I have

1 lesson plan that specifically says that. The diesel  
2 generator, there's a manual with these procedures in there,  
3 and there's the headset and you plug it in behind the switch  
4 gear and things like that. It's more of just going through  
5 the task within the program.

6 BY MR. TRAGER:

7 Q Maybe part of the question is, how does the --  
8 This may be difficult to answer, but how is the training for  
9 PEOs -- PEOs and operation of diesel generator, how is there  
10 -- which is safety equipment, how does that relate to  
11 training for operators? Are they the same standards?

12 A We expect our license operators to know everything  
13 that our non-licensed operators know. They are responsible  
14 for that knowledge. They may be responsible for additional  
15 knowledge. As far as the diesel generator, they are. You'd  
16 expect a licensed operator who is operating in the control  
17 room to understand local operation as well as operation from  
18 the control room, and we probably stress the control  
19 functions, the interlocks, the trips, and things like that a  
20 lot more for the licensed operator than we will for the non-  
21 licensed operator. Whereas, for the non-licensed operator,  
22 you know, a lot of the things we stress more would be things  
23 like monitoring the diesel during the start up, doing the  
24 air roll, being able to perform the operations that he had  
25 performed in the field. Probably not much troubleshooting



1 or understanding of the overall operation of the diesel,  
2 some but not quite as much. Probably not tested nearly as  
3 heavily. I wouldn't expect an NLO to understand what  
4 happened with our diesel generator as far as, you know, it  
5 had the UV and it sealed in, and the thing's going to give  
6 another UV signal after it does a normal trip and roll for  
7 five seconds. They are not going to be trained to that  
8 limit. The licensed operator would be able to explain that.

9 Q They would be capable because of their training to  
10 go and perform those same functions, or those same  
11 operations, at these generators?

12 A Yes.

13 Q So they would be both qualified to do the same  
14 thing, but your expectation would be higher of the SRO, for  
15 example?

16 A I would -- the diagnostic performed on the diesel  
17 as far as what needs to be done, that would cause me to  
18 identify an RO or a SRO, whereas a non-licensed operator was  
19 told what to do to go out there and perform the same task.

20 Q Well, maybe I was thinking that in the  
21 instructions for doing that, operating the diesel generator,  
22 for example, because a PEO doesn't have as much training,  
23 you might -- you might have more detail in a procedure. You  
24 might spend more time in trying to make the procedure  
25 usable and understandable by the plant equipment operator.

1           A     Uh-huh (affirmative).

2           Q     Because they don't have as much training.

3           A     They still get very extensive training on the  
4 diesel generator. You know, we pretty much use the same  
5 lesson plan and, you know, most of the learning objectives  
6 are similar since some of the more detailed learning  
7 objectives would be there for the licensed operators, that  
8 they will be for the non-licensed.

9           Q     If there were areas that they felt were more  
10 difficult, would they be as likely to come forward and tell  
11 you that they didn't feel that the training was suitable  
12 that it was hard to understand?

13          A     They will definitely let you know.

14          Q     They would do that?

15          A     They will give you some good feedback. That's one  
16 thing we do well here. When we do have an event, we will  
17 investigate the event and make changes in procedures when  
18 necessary, you know. I know of one case when we had some  
19 problems with the diesel generator and I think it was just a  
20 knowledge problem and a procedure deficiency, and the guys  
21 went out there, and I was on the shift at the time, and they  
22 let me know what the problem was. They will give us  
23 feedback when necessary. You know, they definitely don't  
24 want to make any mistakes, and if they think the procedure  
25 is inadequate, they will definitely speak up.

1           Q     One of the things I think that we were told is  
2 that some of the equipment operators during this event felt  
3 that there was too many people around the equipment.

4           A     That's possible.

5           Q     It seemed to me that they didn't know how to cope  
6 with that situation at the time. Would that be part of your  
7 training for operators to tell them that they are  
8 responsible for the equipment and they are trying to  
9 manipulate the equipment and clear the area, or would they  
10 be --

11          A     I wouldn't think so.

12          Q     So is it a difficult situation? Maybe one that  
13 ought to be considered or --

14          A     That's a difficult situation and maybe something  
15 we should look at. I'll agree with that. It's difficult  
16 from their standpoint because you are looking at different  
17 people from another organization with a different chain of  
18 command than theirs, and they may not feel comfortable with  
19 telling them they need to leave the area. Then again, you  
20 don't want to clear the area of the people that are helping  
21 you out. You need to get the system engineer down there to  
22 help figure out what's going on in the event and then you've  
23 got reps that are around and they could help you out. The  
24 tendency is that people that may not be helping you out to  
25 come around because they are interested in what's going on.

1           Q     Maybe it's good training for everybody. Maybe  
2 people should be aware that they are around diesel  
3 generators and there are certain people that are responsible  
4 for that equipment and they are responsible to make sure it  
5 operates correctly. So maybe it's the upper level people--

6           A     Could be. Good point. Didn't think of that.

7           Q     And after this. I guess -- It's only been a week  
8 now. Have you had any opportunity to think about changes  
9 you might make in your training as far as loss of vital  
10 busses, and also the possibility of a total loss of AC  
11 power, which is -- Well, could be even a bigger problem, I  
12 guess.

13          A     Yeah.

14          Q     And this particular operations been a little --

15          A     Yeah. I've given it some thought, not a whole lot,  
16 yet. I'm real interested in seeing how the procedure is  
17 going to be impacted, maybe changes the text specs possibly,  
18 and most of our changes in the training material are results  
19 of changes to the procedures of the plant. I think there is  
20 one area that we have identified a definite weakness, or  
21 just simply hadn't thought of it, and that's the diesel  
22 generator operation, and we are definitely going to be  
23 upgrading that lesson plan and talk about loss of power and  
24 if you have a normal trip during loss of power, what the  
25 sequence of events are going to be, and that was something

1 we hadn't considered before.

2 Q It was certainly important in this event.

3 A Yeah. So that will definitely be changed. As far  
4 as the procedures, you know, and loss of all AC, I think I'm  
5 going to have to wait until -- to see what procedures are  
6 changed and how they are changed. Then we will address the  
7 training issue after the procedures are updated. I don't  
8 have any idea what direction they are headed in there. I'm  
9 in the dark.

10 Q When the changes come, you'll take care of it?

11 A It won't take long once they decide what to do.

12 Q That's good.

13 A We already have a simulator guide for the next  
14 segment. Put them in a similar situation. We'll get some  
15 good training on that simulator.

16 BY MR. JONES:

17 Q Let me ask one quick question. I understand that  
18 the simulator now is able to model mid-loop?

19 A Yes.

20 Q But that's only recent?

21 A We have upgraded our simulator models. We have  
22 upgraded the electrical system, the stick generator, core  
23 containment models -- We've just completed that in late  
24 January, February of this year. And we still had some  
25 problems with the RHR system. It wasn't upgraded, but we

1 made some changes to that on our own to give us the  
2 capability of modeling some of our concerns at mid-loop.  
3 HRH certexing, you know, putting in a -- or a low range RCS  
4 inventory at mid-loop and things like that.

5 Q Did operations staff involved in this outage, did  
6 they go through that or --

7 A This has just been in the last week and half or so  
8 that we got some of the final bugs worked out -- Actually  
9 we're still working on some of them.

10 MR. TRAGER: Okay. Are there any other questions?

11 (No response)

12 MR. TRAGER: Okay. Thank you very much.

13

14

15

16

17

18

19

20

21

22

23

24

25



C E R T I F I C A T E

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

This is to certify that the attached proceedings before the  
U. S. Nuclear Regulatory Commission in the matter of:

Name: Investigative interview of  
ROBERT DORMAN

Docket Number:

Place: Vogtle Nuclear Generating Plant, Waynesboro, GA

Date: March 28, 1990

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

---

SUSAN M. BREEDLOVE  
Official Reporter

Ann Riley & Associates