

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: U.S. NUCLEAR REGULATORY COMMISSION

Title: INTERVIEW OF: MIKE CAGLE

Docket No.

LOCATION: WAYNESBORO, GEORGIA

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ANN RILEY & ASSOCIATES, LTD.

1612 K St. N.W., Suite 300

Washington, D.C. 20006

(202) 293-3950

9202200405 920116
PDR ADICK 05000424
S PDR

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ADDENDUM TO INTERVIEW OF MICHAEL R. CAGLE (120-3A)
(Print Identity of Interviewee)

<u>Page</u>	<u>Line</u>	<u>Correction and Reason for Correction</u>
7	15	PC, PLASTIC
5	5	I (AND ONE MAN) WORKED
5	24	ADD (DAVID SESSINGER)
6	10	(CHAIN FALL) NOT CHAIN SAW
6	17	KNOCKER (WRENCHING) NOT RIDGING
9	16	(CHAIN FALL) NOT CHAIN SAW
20	19	(SITES) NOT SLOTS
23	21	(IRON WORKERS) NOT MINE WORKERS
26	10	(STEEL) NOT SEAL

PROCEEDINGS

1
2 MR. LYON: This is Warren Lyon, a member of the IIT
3 tea- investigating the March 20 event at Vogtle.

4 Whereupon,

5 MIKE CAGLE

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

8 EXAMINATION

9 BY MR. LYON:

10 Q Would you state, please, your name?

11 Oh, I am sorry, and it is presently 2:08 p.m. on
12 March 29.

13 Would you state your name, please, and your
14 position?

15 A Mike Cagle, Superintendent/Engineer. I work in the
16 Maintenance Department. My employer is Fluor Daniels.

17 Q And would you spell that, please?

18 A Fluor Daniel?

19 Q Yes.

20 A (Spelling) F-l-u-o-r D-a-n-i-e-l, Daniel. I always
21 put an "s" on it.

22 Q Would you describe for us your involvement during
23 the event of March 20, starting with where you were at the
24 time of the event and then just take us through until you
25 were no longer involved in dealing with the event?

1 A Okay, sir. My crew and I was down there putting the
2 steam generator manway on. Okay. We had completed on night
3 shift 1 and 4. We had one manway to cold leg on generator
4 number 3 was tensioned up to approximately 7,000 which, in
5 our tolerances, is like 8 to 10.

6 We had discovered that some of the bolts was in the
7 wrong location, so we started changing out bolts, and about
8 the time we changed the bolts out, or the studs out, we--I
9 went over to get the second tensioner where we could just
10 proceed at a better rate.

11 Well, me and a man named Tommy, and I don't have
12 Tommy's last name, but he was with me getting the tensioner
13 down and all of a sudden, the people started coming out of
14 the loops and they said that we needed to clear containment.

15 Okay, so me and Tommy gathered up what we had went
16 after and handed it down and came on out.

17 Well, we undressed because we had respirators and
18 doubles. We took our doubles off and stepped off to the pad
19 with our singles and got rid of our respirators.

20 Okay, at that point, I was stopped by Keith Hognett.

21 Q Would you spell that last name?

22 A I cannot spell that last name. Well, hold it,
23 (Spelling) H-o-g-n-e-t-t.

24 Q Close enough. Okay.

25 A And he told me that we needed to get the manways on

1 and if I needed anymore manpower or anything, that he would
2 get them down there, and from that point, I said, "Well, I
3 believe we are fine with the manpower we have here," and I
4 had five men down there and they were approximately four or
5 five HPs.

6 We were going to tension the manways with a
7 tensioner to 12,000 psi, which is like 2,000 short of our
8 normal tensioning pressure and we were going to hit them one
9 lick, spin the nuts up, take them down and go to the next
10 tensioner--I mean the next manway.

11 Well, we started to do this, we had everybody cut
12 out of their bubble suits, except for one man, he was still
13 in the area of 2 and 3.

14 Well, we started resuiting back up and it was double
15 PC plastic and a respirator is how we were going to have to
16 suit up, so the HPs were suiting us up and I had called QC
17 and I had called Charles Coursey, and with those two calls,
18 I told them what I was going to do with the tensioner.

19 The QC guy asked me if I needed him down there and I
20 told him no, I didn't think that we did in the condition we
21 was in and so we would just go short and then we could just
22 come back and tension where he could verify length.

23 Well, when I came back and we were suiting up, we
24 heard the announcement to site, and so, at that moment, we
25 decided, well, we had better just put the studs in and

1 knocker wrench, or slug wrench, either one you want to use,
2 the manways up to where they would hold water.

3 Okay, at that time, we went back in and installed
4 approximately 24 studs and we took the knocker wrench and we
5 tightened them and I worked on generator number 3, hot leg;
6 two of my men were working on generator 2, cold leg, and as
7 soon as we finished on the hot leg on 2, we went over to do
8 number 3--I mean number 2 hot leg. We came off number 3.
9 After we completed it, we went to number 2 to do its hot
10 leg, so me and two of my men went over there and we knocker
11 wrenched those up.

12 And as soon as we completed that, we came down,
13 unsuited from the plastics and the doubles, and the
14 respirator, at the step-off pad, and we left.

15 At that point, I called the control room and--on the
16 regular number, 3001. I didn't get an answer, so not
17 knowing exactly how quick they needed to know what condition
18 we were in, I went to the page and I paged, I gave them my
19 name and that the steam generators would hold water, they
20 were water tight and then we left. We went upstairs.

21 Well, when I had got upstairs, the rest of my men
22 and the other Superintendent, Steve Young, was shutting the
23 hatch, and so they told me that we were going to have shut
24 the pressurizer at that time. That was given to me by--

25 Q Which hatch are you referring to?

1 A The equipment hatch.

2 Q Okay, go ahead.

3 A Okay, they were closing the equipment hatch and they
4 said that we need -- David Sessinger.

5 Q Uh-huh.

6 A He told me that he needed to, that we needed to
7 close the pressurizer manway, and so I gave him a list of
8 things I needed, that I needed a gasket, I needed a Felpro
9 lubricant for the threads, and we had all the rest. We had
10 a hoist. We had a chainsaw up there. We had some chokers
11 and so, we went up there and two of the maintenance guys and
12 three of my guys went up there. Me and Steve Young went up
13 there, and we installed the gasket diaphragm, manway, and
14 then installed all the studs but one. We had one stud we
15 didn't put in.

16 Q Okay. We--at that point, I left and came down and
17 they were knocker ridging it up, and I left containment at
18 that time, and then came on back to the office, and they had
19 de-scaled -- brought it down to a lower level at that time,
20 I think, about when I cleared containment.

21 Q Did you inform anyone that the pressurized manway
22 was in place?

23 A Yes, I called them and told them that the
24 pressurized--well, I did not, no, sir. That is an incorrect
25 statement. Steve Young was up there, still up there, I left

1 before they sealed it all the way up.

2 Q Uh-huh.

3 A As soon as I got back, I told them that we were
4 through, they should have been through with the manway and
5 so it would have been Steve or one of the Maintenance
6 Foremen calling them to tell them that it was exactly
7 sealed.

8 Q Okay, you had indicated that--going back to your
9 steam generator manways--I am sorry, did you have any other
10 responsibilities or activities from that point?

11 A No, sir.

12 Q You had indicated in installing steam generator
13 manways, you were throwing on 24 bolts?

14 A Yes, sir.

15 Q What is the total number it takes to close those
16 normally?

17 A On those would have been 48.

18 Q So you were every other one?

19 A Yes, sir. We were changing them out, every other
20 one at a time, you know, we had taken eight out of one and
21 was taking eight out of the other and were making the swap
22 to get them in the correct location.

23 Q Would you describe the process of closing one of
24 those critters for us?

25 A Okay.

1 Q I visualize that it starts with the manway laying
2 down on the platform and there is a diaphragm involved.

3 A Yes.

4 Q Could you walk us through that process of how you
5 get that manway in place, hold it, and so on?

6 A Okay, sir. Well, now, at this time, we had all the
7 manways up. Okay. Because we had put all the manways up
8 the night before, or the day before.

9 Q Would you describe what you mean by manways up?

10 A Yes, sir. We had the new gasket on. QC would, when
11 the diaphragms, when the nozzle dams was removed, QC has an
12 inspection to verify the generators are clean. They did
13 their inspection, we put a gasket on and the diaphragm,
14 which weighs 51 pounds and is held by 3 1/4-inch screws. We
15 stalled those. Now the system is closed from anything being
16 able to get into it.

17 Q Okay.

18 A Okay, at that point, we did all of them right behind
19 Westinghouse, and so as they would pull the nozzle down and
20 clear off the platform, we would go up, inspect the
21 generators and put the diaphragms up.

22 Okay, that night, my men, right after they finished
23 those, they started putting manways up and so what you do on
24 a manway, you have got an I-bolt. It is a one-inch I-bolt.
25 You screw it into the top of the manway cover.

1 You have got a chain fall, or a come-a-long, either
2 one you want to use, and it is rigged to the beams right
3 above.

4 You pick it up and you have two bullet like bolts
5 that screw into the generators at approximately four and
6 eight o'clock. These have strap wrenches and they have got
7 a crank, like a boat crank, and so you just crank them up or
8 crank them down, and you just let--it is just real easy
9 pushes the manway right up where you want it.

10 Well, the bullet studs guides it and lines all the
11 holes up. Then you start installing the bolts or the studs.
12 You install the studs and you snug-tight the nuts and you
13 remove the two bullet guides, lay them down, and put the
14 last two studs in, and that was the condition we had all the
15 manways in. They were all up. All the I-bolts removed.
16 All the chainsaws removed, and so they were all just setting
17 there ready to be torqued.

18 The night before, we had torqued, like I said, one
19 and four, and that morning, we came in and discovered that
20 we had some studs in the wrong location and we started
21 swapping those out and putting them in the proper location,
22 and, at that point, is when the event happened, and that
23 is -- the statement I said before followed that.

24 Q Let me suppose that the event had happened a little
25 earlier and some of these covers had been down on the

1 platform where you store them. In your judgment, would you
2 have been able to get them on?

3 A That fast, no, sir, but we could have--I feel like
4 with them being able to bring some more men in, because
5 maintenance could have brought more folks in, with the five
6 men I ha' down there and just putting them up, we probably
7 could have done a generator--we probably could have done a
8 generator in about 35 to 40 minutes, but we would have had
9 to have fresh people because of just the exhaustion.

10 Q So that would be two manways covered in 35 to 40
11 minutes?

12 A Or less, yes, sir. From the bottom, I mean, in
13 other words, just being able to pick them up and spin the
14 studs in and then having two men come behind you with a
15 knocker wrench behind--I believe four men could do one in
16 30, one generator in 30 minutes.

17 Q All right.

18 A Okay, and, at that point, I would have asked for
19 more men. I would have asked for probably eight more men,
20 just because of the fatigue factor.

21 Q I understand. Would you, if you had all of them
22 open have tried something like simultaneous all four?

23 A I would have tried, yes, sir. That is what would
24 have been, you know, I would have tried to get enough
25 people. I would have started with the people I had and just

1 continued and as the new people came down, had them directed
2 to go up and start putting the others up and then around.

3 Q When you were putting these on, I noticed the order
4 in which you stated you were putting them on, was that
5 accidental or deliberate?

6 A Just accidental. In other words, I had one on
7 number--

8 Q I don't mean with respect to the number, but I mean
9 cold leg first, hot leg second, or the reverse.

10 A Okay, we always, we prefer to put on the cold leg
11 first, okay, because of radiation. In other words, go back,
12 put it on, and work our way out, is what we prefer to do.

13 Q And so the cold leg is the hottest location?

14 A No, sir. It is just closing--I guess if you look at
15 it logically, it may be that we are better off to close the
16 hot leg and then work ourself back.

17 Q Uh-huh.

18 A But so far, that is the way we had done it,
19 tensioning wise, anyway, because the condition we were at,
20 the radiation is much lower since the manways are up.

21 Q Yes, I understand.

22 A But when the diaphragm is up, we took them off cold
23 leg, hot leg. I cannot tell you that we put the diaphragms
24 in hot leg, cold leg. I cannot, I can't remember if we did
25 that or not, because we did it based on Westinghouse pulling

1 the nozzle down and stepping out of the way.

2 Q But you are certain that you did the cold leg first
3 and then the hot leg?

4 A I am pretty sure. I wouldn't be able to swear to
5 that, no, but I feel like that is what we did.

6 Q Is there a way to confirm which order that that
7 operation was done?

8 A I would just have to discuss it with my guys, and I
9 mean, we have cameras, but I don't think we were videoed.

10 Q Are your people still on site that were popping
11 those up there?

12 A I have one, one guy that is left out of that whole
13 bunch, and he will be leaving tomorrow. Tomorrow is his
14 last day.

15 Q Would you check with him on the order and give us a
16 feedback?

17 A Okay, sir.

18 Q As to which was done first. Is there anything in
19 your procedures that tells you as to order?

20 A No, sir.

21 Q And nothing in the training or anything else?

22 A No, because the procedure is written for if you took
23 one manway off.

24 Q Okay.

25 A So, therefore, they don't assume that you took a

1 cold leg off.

2 Q Uh-huh.

3 A They just assume you took manway off.

4 Q Is the same true with respect to the diaphragm?

5 A Yes, sir.

6 Q Now, you indicated that you pretty much followed the
7 Westinghouse people, so if they removed a cold leg first,
8 then, I take it, if they wanted to do a cold leg first, you
9 would drop a cold leg manway first?

10 A Yes, sir, and we started with the cold leg manway
11 because they wanted to go with the cold leg first.

12 Q Okay.

13 A And what we did is we dropped--when we first
14 started, we dropped a cold leg on number 1 and a cold leg on
15 number 2.

16 Q Okay.

17 A Then a hot leg on number 1 and a hot leg--now, we
18 did this parallel, or pretty much parallel, they released
19 number one thirty minutes to me--thirty minutes earlier than
20 they did number two per training, so we were slightly ahead
21 of the people on number two dropping them, but that is the
22 way we dropped them.

23 Q Okay.

24 A Because we set the machines up that way.

25 Q All right. And so when you are putting them back,

1 do you simply do whichever Westinghouse does first, you are
2 right behind them?

3 A Yes, sir. There is not that I know of any spot that
4 it is written that tells me to do this one first or this one
5 last.

6 Q Okay. You mentioned, sort of handling these covers
7 and moving them around, what do they weigh?

8 A Six hundred and eighty pounds.

9 Q At the time you were doing some of this, of getting
10 ready to -- you mentioned that you heard the site area
11 emergency announcement.

12 A Yes, sir.

13 Q Would you assess how that affected your performance
14 and the performance of the rest of the people?

15 A Well, at that point, since we were down in the
16 basement and I made an assumption that they may need to get
17 water to the vessel.

18 I had heard that the RHR had went off, and there was
19 two things I was worried about. I was worried about the RHR
20 coming back on and them not being able to control mid-loop
21 and the other was I was worried about them needing to dump
22 water to the vessel and those were the two ideas that went
23 through my mind, so what I did was I figured if I could get
24 them sealed up to hold water, then if they didn't hold mid-
25 loop, there would be nothing lost and if they needed to get

1 water to the vessel by any means, they could do it. Those
2 are the two reasonings that I used for what I did.

3 Q Did this site area emergency announcement give you
4 sort of an adrenalin push that caused you to do your job
5 faster and better, and how did the team all work together
6 under those conditions?

7 A Well, as a team, we worked great. We had one man
8 that was in a bubble suit by himself and he had a hard time
9 because he was by himself over there and he could only see
10 us moving around; but as soon as we got suited back up and
11 over to him, he was fine.

12 In other words, he was trying to figure out what was
13 going on. We were making a plan, but we did, we made a
14 plan, then when we heard the site area, we made another
15 plan.

16 We said this--let's go for this, and as for as I
17 could see, nobody panicked. Everybody really, if anything,
18 got cooler. I mean it was just basically, they worked
19 faster, but they didn't panic.

20 In other words, we went at our tasks, we knew where
21 everything was, we picked it up, and we just went to it. HP
22 helped us and they were with us all the way through, so we
23 knew that there wasn't any radiation changes. So, we knew
24 some facts and we used those facts.

25 Q And that helped a lot.

1 A Yes, sir.

2 Q Is what I am hearing. You used two terms here,
3 "knocker wrench," what is that?

4 A Well, it is used by boilermakers a lot. It is a
5 real heavy wrench with -- the end of it is real heavy metal,
6 and you beat it with a hammer. It is to put very high
7 torques on certain things or to break nuts or bolts loose.

8 Q What are the "chokers?"

9 A Chokers are slings, just something to lift, to lift
10 the manway with. Either they can be a nylon or a steel
11 choker.

12 Q You indicated that you saw people working with the
13 equipment hatch, did you observe anything involving all of
14 that?

15 A No, sir, I did not see that. I just knew -- they
16 had told me that my men were shutting the equipment hatch
17 and they were asking me questions on what they needed for
18 the pressurizer and I gave them that and then they told me
19 to set down and rest until they got that stuff, and so I sat
20 down and just relaxed and they came over when they finished
21 the equipment hatch.

22 MR. LYON: You had mentioned one man that was with
23 you--excuse me, let's hold a minute.

24 (Discussion off the record.)

25 BY MR. JONES:

1 Q You had said that you put 24 bolts in all four
2 manways on C-9, 1 and 3, and that confused me, so how many
3 total bolts were in each of the manways when you left?

4 A Okay, there was a full 16, because it was 48 and
5 there is 48 in three of the manways and that is the three we
6 had on. One manway was tensioned, had a tensioner on it and
7 we did not touch it. We left it exactly the way it was.
8 The other one--other three had 8 bolts or 8 studs each and
9 we installed the other 8 and tightened them up at that
10 point, so there was all the manways on all the generators
11 had the full 16 studs installed.

12 Q They had all the fasteners that they could have?

13 A Yes, sir.

14 BY MR. TRAGER:

15 Q I thought there was 48?

16 A Okay, there is 16 per manway.

17 Q Okay.

18 A And I only installed three manways other means than
19 the way, the conventional way, so at that point, like I
20 said, each manway had 8 studs in it when we started. When
21 the event started, each of the manways had 8, we had put 8
22 more in each of the manways, and completed them.

23 MR. TRAGER: Thank you.

24 BY MR. LYON:

25 Q So that each manway has its full complement of 16

1 bolts and, in effect, you had done a total of 48 bolts?

2 A Yes, sir, we tightened 48 bolts. We installed 24
3 before we could start tightening.

4 Q Okay, now, you had mentioned that there was one
5 person left on site?

6 A Yes.

7 Q And that was who?

8 A It is Kerry Exily.

9 Q Would you spell that last name, please?

10 A (Spelling) E-x-i-l-y, I believe is the last name.

11 Q Would it be--I had asked you if you would touch base
12 with him, it would probably be better if we could visit with
13 him and just kind of get this on the record--would it be a
14 big thing to get him to talk with us briefly?

15 A No, sir, it should not be, but he will be laid off
16 tomorrow and so we need to do it.

17 Q He is on site today?

18 A Yes, sir.

19 Q Is there a time, Bill, that you think you could work
20 him in?

21 MR. JONES: Does he work for Flour Daniel?

22 THE WITNESS: No, sir, he is a boilermaker, a Union
23 boilermaker.

24 MR. JONES: Okay.

25 THE WITNESS: He is contracted through what we call

1 the core group.

2 MR. JONES: I will go and talk to Herb now.

3 MR. LYON: Okay.

4 [Mr. Bill Jones left the conference room.]

5 BY MR. LYON:

6 Q You indicated that David Slessinger asked you to
7 close the pressurizer manway, did he provide any additional
8 information as to what was going on or why it needed to be
9 closed or give you any instructions?

10 A Sir, the only thing he said was that he had been
11 informed and I had gathered that it was from Charles Coursey
12 or Dusty Adams, which was in the control room -- not the
13 control room, but that the Maintenance Superintendent had
14 requested, you know, had told him to do that, and he was on
15 the phone back and forth to the maintenance shop. He was
16 using the phone in the airlock.

17 MR. LYON: Okay, anyone else have any comments, any
18 questions?

19 Is there anything that you can think of that we have
20 left out that might be helpful in our understanding of what
21 was going on and the actions that were being taken?

22 THE WITNESS: I don't think so, sir. You know, we
23 have basically covered the exact events, you know, and as
24 close as I can remember them and you all have seen the
25 manway.

1 MR. LYON: Yes.

2 THE WITNESS: And you all have seen the pressurized
3 area.

4 MR. LYON: Yes, you took us around the other night.

5 THE WITNESS: And, you know, we put the pressurizer
6 on approximately 15 minutes or so from when we got the
7 gaskets until we had the manway tightened down, it was
8 somewhere around 15 to 20 minutes.

9 BY MR. LYON:

10 Q Had you put that pressurizer hatch on and taken it
11 off before?

12 A Yes, sir.

13 Q Had you had any trouble in the past?

14 A No, sir. I have had--when they used to have the old
15 bolts, they would--I have had some of the bolts stick.

16 Q Uh-huh.

17 A And doing that, but since we have used the stud
18 system, no, sir; but I have put on manways--generator and
19 pressurizer manways have three different slots, so I am
20 fairly familiar with generators and pressurizers.

21 BY MR. MIKE JONES:

22 Q Let me ask and see if I--I think you said earlier
23 that it would take 35 minutes per manway roughly?

24 A Thirty-five minutes per generator.

25 Q Per generator?

1 A Yes, sir. Generators are harder to put on than the
2 pressurizer.

3 Q Is there always somebody on site during the outage
4 to do that?

5 A Yes, sir, you have got people that--we had around
6 the clock coverage. Our boilermakers, we also--the
7 maintenance people had installed the pressurizer manway and
8 they assisted us in taking down the generator manway.

9 Q So there wouldn't be any time frame where nobody
10 would be on site to be called if needed?

11 A No, sir, there should not be that condition. In
12 other words, that had at least two to three guys that could
13 supervise down there. In other words, them and two other
14 guys could go do the same job I did, because we did have
15 people that were familiar with the stuff.

16 The advantage of us being down there was we knew
17 where every wrench was laying, that would have been the
18 advantage. The time delay would have been getting someone
19 from the shop with the proper tools and we just happened to
20 be there. That may be, you know, a time saving of 30
21 minutes, but it probably wouldn't be much more than that,
22 somewhere in that range.

23 Q That includes suiting up?

24 A Yes, sir, because suiting up and somebody else
25 running, you know, if you were going to do it from cold, you

1 know, just straight out of the shop, then there would have
2 to be somebody that would say, okay, you all go down and
3 start putting up the manways. I am going to bring the
4 wrenches to you.

5 In other words, you would have to break it up, but
6 at that time, when the men got the manways up and were ready
7 for the knocker wrenches and stuff, you could have it all to
8 them.

9 In other words, it would have to be an organized
10 effort, but, yes.

11 BY MR. DIETZ:

12 Q When the cavity is flooded up and the eddy current
13 equipment up in the generator, if one of the dams started
14 leaking, how long would it take you to get a manway on?

15 A I can't answer that, sir, because now you are
16 talking about a piece of equipment that I have seen twice.

17 Q Okay.

18 A Okay, sir.

19 Q So you have no idea?

20 A No, sir, if they could real it in and I dropped it
21 to the floor, let's say I could drop it to the floor in five
22 or ten minutes, then I could get a manway on in 15 minutes
23 or so to hold water, okay, not to hold, you know, it is not
24 going to hold high pressure and high temperature, but it
25 will hold water in that condition.

1 You know, the eddy current is Westinghouse's stuff,
2 so I don't know how quick you would want to bring it out.

3 In other words, I couldn't say, well, we have got to
4 travel it in and it takes this long and now you have got to
5 bring it down.

6 MR. DIETZ: Thank you.

7 BY MR. TRAGER:

8 Q The work that was going on, I think you mentioned
9 that was putting on the manways on the steam generator, and
10 then your people were helping to close the equipment hatch?

11 A Yes, sir, I had nine men on shift. Nine men.

12 Q Five of them went to work on the pressurizer?

13 A Yes, sir, the five that helped me came on out and
14 left. Okay, I was the last one up and -- cause I had went
15 and made the announcement and I wanted to make sure all of
16 my men were out of there.

17 Well, when I came up, I had a page, I had heard a
18 page on the way to meet someone at the step-off pad on level
19 one, and so when I got there, they told me that my men were
20 shutting, which was the other four men I had on shift, which
21 was the Mineworkers, that worked for our group, and they
22 were over there shutting the hatch, and that is when they
23 asked me what we needed for pressurizer and I gave him the
24 list, and I sat down there and waited for a few minutes on
25 that.

1 And then I went upstairs to make sure we had
2 everything like we had left it. It was there. You know,
3 everything we had gave them was a complete list. We didn't
4 need anything else.

5 Q Was all of this planned in advance?

6 A Sir?

7 Q Was all of this planned in advance in the sense that
8 did you know that if you were told to, whether this
9 happened--

10 A No, sir, I knew this from experience. The bottom
11 line is I knew what wasn't up there. If you want to say
12 that, yes, sir. I knew what wasn't up there and what I
13 needed.

14 Q Well, I guess I meant written procedures.

15 A No, sir.

16 Q Saying if you had--

17 A No, sir, I don't think I have ever read a procedure
18 with that in it.

19 MR. LYON: Do you need such a procedure?

20 THE WITNESS: No, sir. In my opinion, I do not.
21 That is my feeling. You need people that know what they are
22 doing, not a procedure.

23 BY MR. LYON:

24 Q When you tackled the pressurizer manway, was that
25 manway totally off?

1 A Yes, sir. Totally off with the screen.

2 Q Laying on the floor?

3 A Yes, sir.

4 Q Up there.

5 A You had both I-bolts in it. Now, it has two drill
6 holes.

7 Q Uh-huh.

8 A The manways have two drill holes also, because we
9 used to have a different style of lifting them, so with the
10 pressurizer, we use both holes and turn them at 3 o'clock
11 and 9 o'clock and that makes them easier to put on because
12 of the way that they are angled.

13 Q And you indicated that the equipment you needed to
14 lift the manway was already up there?

15 A Yes, sir.

16 Q Is it normal to leave it up there?

17 A Yes, sir. We tend not to remove rigging, because,
18 unless, in other words, if it interferes with something.

19 Q And what does that pressurizer manway weigh?

20 A Six hundred and eighty pounds. The diaphragm
21 weighs--

22 Q The same as the C generator?

23 A Yes, sir, and the diaphragm is 51 pounds, held on
24 with three screws. We did not install the three screws
25 because on the pressurizer, gravity holds it in place

1 instead of on the generator you would need the screws to
2 hold it in place.

3 Q Yes, and the only function of that diaphragm is to
4 keep dirt from falling through the holes?

5 A Well, it is stainless.

6 Q If you know?

7 A It is stainless so it is your stainless inside. In
8 other words, it allows you to have a carbon manway.

9 Q So it is a water tight seal?

10 A Yes, sir. The seal, the carbon seal never sees--the
11 actual manway cover never sees the gasket surface or
12 anything, it is just a plate, a thick plate laid on top of
13 this stainless plate to reinforce it and hold it in place.

14 Q I understand. Once you and all of your people were
15 outside in containment--let me see, was the personnel
16 interlock, the personnel hatch interlock operable at that
17 time?

18 A Yes, sir, we had a man working that, letting people
19 in and out.

20 Q Okay, if all of your people were outside of
21 containment, let's say, you had dressed out, you were
22 starting to disperse and you received a request to remove
23 the pressurizer manway, in your judgment, approximately how
24 long would it take to do that?

25 A A maximum of probably 20 minutes, because it is

1 going to take you about five to suit up.

2 Q Are you double again?

3 A No, sir. No, we would have had to grab a
4 respirator, so what we would have done was we would probably
5 have only took three or four men.

6 I would send someone after four respirators, okay,
7 with the guys' numbers, those four guys would suit up and
8 head up, because they don't need the respirator until we
9 pulled them up, so we would start taking out studs and
10 screwing in the lifting device, tightening up on it and by
11 then we should have the respirators in there.

12 We would pick it up, put it on the floor and then
13 take the diaphragm off and cover it up and then leave the
14 area.

15 You may could even do it in as short as 15, but I
16 know you can do it in 20, which it would be--it would still
17 be a case of organization, you would just have to make sure
18 you went at it in an organized manner.

19 MR. LYON: Any other questions, comments?

20 BY MR. JONES:

21 Q Do you know who, if we wanted to talk to somebody
22 about what was going on at the hatch, the equipment hatch,
23 who we would speak to?

24 A Mr. Young. Steve Young.

25 Q Was he inside? Did he see what was going on?

1 A Yes, sir. And maybe Ralph West. Ralph West was on
2 the outside, and so he could tell you what was going on on
3 the outside. He was moving the tracks out of the way.

4 Q With a gurney?

5 A Sir?

6 Q The tracks, he picked them up?

7 A Yes, sir, with a--we keep a picker over there at all
8 times.

9 Q But for inside, Steve Young?

10 A Steve Young, yes, sir. And I think there is one
11 boilermaker or two boilermakers left on that crew.

12 Q This Steve Young, who is he, do you know who he
13 works for?

14 A Yes, he works for Georgia Power.

15 Q Okay.

16 A He works for the ENC group, or the core group.

17 MR. LYON: Well, as I said when you were going
18 through containment with us, and I will repeat it on the
19 record, I think you and your people did some real fine work
20 under rather trying circumstances.

21 THE WITNESS: Well, they were--like I said, the guys
22 were, nobody panicked, we just had a job to do and everybody
23 did what they needed to do.

24 We made a small plan and worked the plan.

25 MR. LYON: Thank you for sharing that with us.

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THE WITNESS: Okay, sir.

MR. LYON: And that concludes our interview.

(Whereupon, at 2:54 p.m., the interview was
concluded.)

C E R T I F I C A T E

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

Interview of: MIKE CAGLE

Place: Vogtle Nuclear Generating Plant, Waynesboro, GA

Date: March 29, 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.

Rose Arnold

ROSE ARNOLD
Official Reporter

Ann Riley & Associates