

65-117-1A-90

# OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: U.S. NUCLEAR REGULATORY COMMISSION

Title: INTERVIEW OF: KERRY EXLY

Docket No.

LOCATION: WAYNESBORO, GEORGIA

DATE: MARCH 30, 1990

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S PDR



P R O C E E D I N G S

1  
2 MR. LYON: We are on the record. What I am going to  
3 do is -- excuse me, can we go off the record a minute? I am  
4 sorry.

5 (Discussion off the record.)

6 MR. LYON: This is Warren Lyon of the IIT  
7 investigating the Vogtle event of March 20. It is presently  
8 10:03 a.m. on March 30 and we have with us one of the  
9 gentlemen that was working at the plant at the time of the  
10 event.

11 Whereupon,

12 KERRY EXLY

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

15 EXAMINATION

16 BY MR. LYON:

17 Q Would you state your name, please, and tell us your  
18 position?

19 A My name is Kerry Exly. I am employed by Georgia  
20 Power Project Facilities Services as a Boilermaker Foreman.

21 Q And would you describe for us the things that you  
22 did during this event and anything that you observed, any  
23 observations, anything else you think might be of interest  
24 or help us to understand?

25 A That morning, we were in the process of installing

1 primary manways on generator 3 and 2 and we had -- the  
2 manways were already up. They didn't have all the bolts in  
3 them. They had enough bolts to hold the manway in place,  
4 and we had the bolts standing in buckets. They had already  
5 been cleaned and lubricated, ready to install, and we had  
6 just finished getting the manways up and we were in the  
7 process at the time of coming out. We were dressed in  
8 plastic with bubble suits, and as we came out, we were told  
9 that, you know, the problem with the plant and we needed to  
10 go ahead and get the manways up as soon as possible by Mike  
11 Cagle, who was my supervisor.

12 And we went in and he said do not worry about  
13 sorting out which bolt--we had to sort out which bolts went  
14 to which generator. They was there but we had--he said  
15 don't worry about anything like that, just go ahead and  
16 button them up and button them up as soon as we could. So  
17 that is what we did. We just put bolts anywhere, just not  
18 taking into consideration which bolt went into which hole  
19 like you would normally, and torqued them up with a hammer  
20 wrench and a sledge hammer.

21 Part of the bolts were--HP even got into handing us  
22 bolts and stuff. Everybody was working. Everybody worked  
23 good.

24 Q Gee, it must be nice having HP guys handing you  
25 bolts?

1           A     They were right there and they would bring bolts  
2 over from one generator. We had too many on one generator,  
3 part of them that went to the other one and they walked them  
4 across and handed them to us and everything went smooth.

5           Q     Would you guess about how long it took to get all of  
6 the open ones closed up?

7           A     Probably 30 minutes, maybe 45.

8           Q     Uh-huh, and then you just--

9           A     We got those on and we came down. Like I said, we  
10 had already been cut out of our plastic. We slipped on more  
11 plastic and just put on a respirator to go back up there  
12 instead of getting in a bubble suit.

13                     We came down and I looked at Mike Cagle, who was  
14 still on respirator and he gave me a signal, which, you  
15 know, go ahead and go, and I checked with the HP. I told  
16 him we were leaving the area and the HP down there, Kerry  
17 Brown, who is HP Supervisor, I give him a list of the names  
18 of the people that I had down there going out with me, and  
19 we left and proceeded to top of containment and undressed  
20 and went on out.

21           Q     And then you didn't go back in?

22           A     We didn't go back in.

23           Q     You didn't get involved in the pressurize the  
24 manway?

25           A     I had, at the time, I had four people working other

1 jobs that were in the turbine building and when it came  
2 down, we were tied up on the manway, so Steve Young, who is  
3 another supervisor, he went and got these people and brought  
4 them into the building to do those other jobs.

5 Q So you had all the help you needed?

6 A Yeah.

7 Q Good.

8 A Out of the nine boilermakers that were on the shift,  
9 five of them were on the steam generator manways and the  
10 other four took care of closing the hatch and the  
11 pressurizer with the help, I think, or what I was told,  
12 there was two maintenance persons with them.

13 Q Then you didn't get involved in the hatch work?

14 A I didn't get involved in the Hatch nor the  
15 pressurizer.

16 Q Did you hear the declaration of emergency?

17 A I heard the talk on the intercom in the building  
18 about it was a site emergency and all non-essential  
19 personnel leave the area and I remembered through general  
20 employee training that we were not considered essential  
21 personnel.

22 Q Uh-huh.

23 A From what I remember in school, they told us that  
24 only plant people would be considered essential personnel.

25 Q Uh-huh.

1           A     Unless it was a real emergency, but under the  
2           circumstances, I can understand being we were right in the  
3           process of doing that job, we could do it a lot quicker than  
4           anybody else.

5           Q     U'-huh.

6           A     And so--

7           Q     So that didn't slow you up?

8           A     No, it didn't. They wanted the job done and so--

9           Q     And you considered yourself essential and just kept  
10          right on going?

11          A     Right on going.

12          Q     In the process of--well, I am not sure I fully  
13          understand these manways. When you say they were already in  
14          place and there were some bolts holding them, had those  
15          bolts been tightened at all, or were manways sort of hanging  
16          down a little bit?

17          A     Those bolts were--what you do, you pull those  
18          manways up with a wench, it has got little hand wenches.

19          Q     Uh-huh.

20          A     You pull them into place and then we put four bolts  
21          in them and tightened those with a hand wrench, just snug  
22          enough to hold them up there, and then you take your wenches  
23          off and put your other bolts in.

24          Q     Okay.

25          A     And they were at that point.



1 Q So you used four bolts and you just take a--what, a  
2 guy about like this for a wrench (indicating) or was it a  
3 bigger job?

4 A No, the wrenches we had really was shorter than  
5 this, about that long (indicating).

6 Q Okay.

7 A Pulled it up tight, we tapped it with a small  
8 hammer, not with a sledge hammer, but we just tapped on it.  
9 It is a hammer wrench. As a matter of fact, the same one we  
10 used to tighten it with; but we didn't put nearly the effort  
11 in it, you know, just holding the cover in place, until you  
12 get your tensioner on it.

13 Q Okay, so when you went in, those manways were held  
14 with four bolts?

15 A Four bolts.

16 Q And you had to add all the rest.

17 A There was 16 bolts per manway.

18 Q Okay. Would you hazard a guess as to, if they were  
19 up there with four bolts, are they going to leak a lot?

20 A They would leak greatly.

21 Q Even if they were just covered with a few feet of  
22 water?

23 A Yeah, it would have been a lot of leakage, because  
24 we hadn't done nothing like compressed that gasket at all.

25 Q Okay.



1           A     In that set up, you have got your gasket and you  
2     have got a diaphragm plate which is a stainless steel plate  
3     approximately half an inch thick.

4           Q     Uh-huh.

5           A     And it was held in place with three set screws to  
6     hold it, more or less just holds your gasket in place.

7           Q     Uh-huh.

8           A     And then your big cover pulled up to that.

9           Q     Okay.

10          A     The cover is four and a half inches thick.

11          Q     You have really got to compress that gasket to  
12     really get a fairly tight seal.

13          A     You have got to really get on it.

14          Q     When you said it would leak greatly, could you  
15     hazard a guess, are we talking maybe a gallon a minute or  
16     500 gallons a minute or any feel that might give us an  
17     indication of what we are talking about here?

18          A     With just head pressure only, it would probably, I  
19     would be scared to say really, because I am not--

20          Q     Okay, that's fair. To me the easiest questions to  
21     answer are the ones where I can just say, "I don't know."

22          A     Yes. It was probably. I would just be scared to  
23     say.

24          Q     Okay.

25          A     I know if the pumps were fired up, you would have a

1 shower coming out, you know, just an overhead spray.

2 Q Oh, yes, right, I believe it.

3 A But overhead pressure, I would be scared to say. I  
4 know it would have leaked and leaked considerable.

5 Q Was there any order in which you installed the  
6 manways, I mean like did you put a cold leg on first and  
7 then a hot leg and a hot leg and then a cold leg?

8 A On generator 3, the cold leg was installed and  
9 tensioned up to 10,000 psi. The final tension was 1450 psi  
10 and so part of the guys went on generator 3 to get the hot  
11 leg on there and the first thing we did on generator 2 was  
12 the hot leg and then we torqued the cold leg.

13 Q And that was during the event?

14 A That was during the event.

15 Q Were you involved in putting them up--I guess you  
16 were--putting them up in the first place?

17 A Yes, uh-huh.

18 Q What was the order? I tell you what, could you walk  
19 us through the whole order of the steam generators and tell  
20 us -- do you recall the order in which these were put up and  
21 taken down?

22 A They were, as far as putting them up, we pulled--put  
23 the diaphragm plates in, that is what you have got to do  
24 first.

25 Q And this is after they had pulled the--

1           A     After they had been pulled, and they pulled the  
2 bands.

3           Q     Okay.

4           A     And you go up and you put your gaskets on and your  
5 diaphragm, do that to both generators, and that way you are  
6 eliminating anybody from going in and --

7           Q     I understand; which diaphragms would go on first, do  
8 you recall the order?

9           A     It is really irrelevant, but we put the hot leg on  
10 first. You could put either one on first.

11          Q     Okay.

12          A     And then we pulled the manways up, the big manway  
13 cover.

14          Q     Right, these 680 pound jobs.

15          A     Yes, we pulled those up, we went ahead and pulled  
16 both of them up before we started putting bolts in either  
17 one of them to block, to cut down on the radiation we were  
18 getting from it.

19          Q     Uh-huh, okay.

20          A     Trying to practice ALARA.

21          Q     Uh-huh, yeah, I don't like that stuff either.

22          A     And, as I say, we pulled both of them in place  
23 before we put any bolts, they were just hanging on the  
24 wenches.

25          Q     All right, and was there any order in which that--or

1 just whichever one you happened to hit first?

2 A And we usually put the hot leg up first.

3 Q And what is the reason for that?

4 A Because you probably get more shine at the reactor  
5 to that, straight back to you.

6 Q Okay.

7 A Where the cold leg is coming through the pump.

8 Q All right, and then any order in which you would  
9 bolt those?

10 A We usually put four bolts, like at 90 degrees, and  
11 then just fill in the places and then your tensioner  
12 tensions the whole thing at one time.

13 Q Uh-huh. Do you put the bolts in any particular  
14 order, like hot leg and then cold leg, or cold leg and then  
15 hot leg, or just whichever one is convenient?

16 A Normally, we put the hot leg in first, you know, as  
17 far as putting the bolts in.

18 Q Okay.

19 A You get your first four bolts on both of them. That  
20 way you can take your wenchies off.

21 Q Uh-huh, I got you. Okay, were you involved in  
22 unbuttoning the system?

23 A Yes, sir, I unbuttoned generator 3.

24 Q And this was just after the refueling--I am sorry,  
25 just --

1           A     Just prior to.

2           Q     --Yes, just prior to refueling, do you recall the  
3 operations and steps? Could you kind of walk us through the  
4 opening up of steam generator 3?

5           A     Yes, all right, you put your tensioner on, which  
6 your tensioner comes in four quadrants.

7           Q     Uh-huh.

8           A     And you have got little ring nuts that fit over the  
9 regular nuts, gear nuts that are on your studs. The  
10 tensioner is pumped up to 9,000 pounds and at this time, the  
11 bolt should break loose.

12          Q     Uh-huh.

13          A     And you break your bolts loose, all of them, and you  
14 let off on your tension to 500 pound, and you tighten 4  
15 bolts at 500 pounds.

16          Q     Uh-huh.

17          A     And then you let off on your tensioner altogether  
18 and take your bolts out, all but the 4.

19          Q     Okay.

20          A     All right, and then, from that point, most of the  
21 time those will break with just a little wrench, just hit  
22 them.

23          Q     Uh-huh.

24          A     And if not, you have got a single tensioner that  
25 will fit on one stud. You put it on and break that stud if

1 you have a problem with it, but you install your wenches  
2 prior to taking those 4 bolts out, and your wenches is a  
3 threaded thing that screws in to where your studs fit and  
4 then hooks on to the outside of your cover, and it works  
5 through the bolt hole on your cover is what it does.

6 Once you have taken them four, you lower the manway  
7 down, and you have rigging hanging up above, and you catch  
8 it in the I-bolt and just drift it out of the way.

9 Q Uh-huh.

10 A And then you have to remove the diaphragm, which  
11 there is 3 screws. We--the ideal way is to have a person on  
12 each side, out of the shine, the generator, and one person  
13 with a screwdriver. Some of these, in these generators you  
14 find them, some has got slotted screws, some has got  
15 Phillips screws, and some has got Allen screws, and so we  
16 had all three up there when we went to do it.

17 (Laughter.)

18 But we replaced them at this time and put Allen  
19 screws in everyone of them so they are consistent now.

20 Q Uh-huh. Did you get a lot of water out when you  
21 dropped the diaphragm?

22 A Very little, probably, we had a bag installed under  
23 it.

24 Q Yes.

25 A The HP had us install that, and probably, I would

1 say maximum, a gallon, and that is stretching it.

2 Q Yes, okay. Is there--which cover and --

3 A We took the cold leg off first.

4 Q The cold leg came off first and then--

5 A And then the hot leg.

6 Q And that way you could reduce the radiation?

7 A Instead of staying there with the hot leg open and  
8 taking the cold leg off, yeah.

9 Q I understand, did HP happen to mention any dose  
10 rates kind of thing?

11 A Yes, the HP was there with us, up on it, and he took  
12 smears off of everything, like the diaphragm and all, before  
13 we removed it, he smeared it and checked it.

14 Q Uh-huh.

15 A And they told us the dose rates.

16 Q If you don't remember, that's okay.

17 A I don't really remember, but they had them and they  
18 told us.

19 Q That is okay.

20 A And he cautioned us about staying out of the shine.  
21 The HP was real good. They were very efficient.

22 Q Yeah, I trust those guys to keep me out of trouble.

23 A Yes, sir.

24 BY MR. DIETZ:

25 Q Did you receive any training or was there involved



1 in training in taking off these manways or anything like  
2 that?

3 A Well, I had done it before during construction days.

4 Q Uh-huh.

5 A And we also built a mock up of a manway, which was  
6 up at the construction-fab shop and we set the tensioner up  
7 on it and did a walk through on taking them off, the ones  
8 who hadn't ever been through it before.

9 Q When you had went through that, was there any  
10 discussion of the order, the hot leg or the cold leg, to do  
11 first?

12 A No, we really didn't discuss that. We talked about  
13 staying out of the shine and, you know, if, when you do  
14 actually break the diaphragm that if you see anything or if  
15 anything is on that, don't pick it up, just get out of the  
16 way.

17 Q Was this training conducted by RP, was it more of a  
18 health physics or ALERA concern, is what you--

19 A No, it was more of an on-hands actually operating  
20 the tensioner and de-tensioner device.

21 Q And the sling and everything for pulling it up and  
22 down?

23 A Right.

24 BY MR. JONES:

25 Q The tensioner/de-tensioner, is that two persons, two

1 men or one person?

2 A It comes in four pieces. It takes four.

3 Q Four quadrants.

4 A Four quadrants, and you put it on and it has got  
5 nuts on it to hold it actually in place, so it takes at  
6 least two people to set it up.

7 Q So you put the four pieces on and then you work with  
8 the pressures, is that how that works?

9 A Yes.

10 Q Okay.

11 A It has got a pneumatic hydraulic pump and it is  
12 hydraulic is what it is off of.

13 BY MR. LYON:

14 Q Have you done any work on those hatches since the  
15 event?

16 A Yeah, we closed, we went down and sorted out the  
17 bolts and one of them on the cold leg on generator 2, we  
18 replaced the gasket in it, because they were--according to  
19 engineering, the torque value that we put on it wasn't  
20 possibly enough to compress the gasket and with a flex  
21 pallet that gasket once it is compressed.

22 Q It jumps.

23 A It is gone.

24 Q So you did go back in then and you pulled the hatch,  
25 the diaphragm, the whole business?

1 A On that cold leg.

2 Q And you resorted all the bolts?

3 A Resorted all the bolts out.

4 Q Did any of the other manways need new gaskets or  
5 anything like that?

6 A No, what we did. We carried a torque wrench down  
7 with us and tried backing at random--I think it was three  
8 bolts out on each one, it might have been four.

9 Q Uh-huh.

10 A To see what torque they actually broke loose on, to  
11 find out how much torque was on the manway.

12 Q Uh-huh.

13 A And the cold leg on 2, like I say, was the only one  
14 that had an excessive amount.

15 Q Now, how could you tell whether you had the right  
16 bolts or not?

17 A Because each stud is scribed, a number is scribed on  
18 it.

19 Q Uh-huh, so you can tell by just looking at the  
20 outside?

21 A Right, and looking at the generator, when you look  
22 at the generator manway, you have got--for the top, right of  
23 center is number one, on each one of them.

24 Q Uh-huh.

25 A And each bolt has got like, say, it like had 2-H-1,

1 that is 2 hot leg, bolt 1.

2 Q Got it.

3 A And right on around through 16 and the same thing,  
4 2-C-1, like that is generator 2, cold leg, bolt 1.

5 Q Okay. Did you get involved with the pressurized  
6 manway at all?

7 A I was involved. I set the tension up on it to  
8 remove it, and I tensioned it back in place after the event.  
9 It was removed, a new gasket was put in.

10 Q So effectively, they did the whole thing over?

11 A Over again.

12 MR. LYON: Okay. Anything else?

13 BY MR. DIETZ:

14 Q In the area of training that you received at the  
15 construction/fab shop, was that conducted by folks coming  
16 out of the utility training department or by shop people?

17 A It was by Mike Cagle and I guess he was the only one  
18 down there really that actually did any training, as far as  
19 direction on it.

20 MR. DIETZ: That is what I needed. Thank you.

21 MR. LYON: Anything else?

22 Kerry, I really thank you. The things that you have  
23 told us give us the insight we were looking for and i think  
24 it is going to be very valuable to us.

25 THE WITNESS: Okay.

1 MR. LYON: There were things we didn't understand  
2 and you have helped clear them up.

3 THE WITNESS: Okay.

4 MR. LYON: Thank you.

5 (Whereupon, at 10:24, the interview was concluded.)

C E R T I F I C A T E

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

Interview of: KERRY EXLY

Place: Vogtle Nuclear Generating Plant, Waynesboro, GA

Date: March 30, 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