

35-7A

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: U.S. NUCLEAR REGULATORY COMMISSION

Title: INTERVIEW OF: WILLIAM FIRTH KITCHENS

Docket No.

LOCATION: WAYNESBORO, GEORGIA

DATE: TUESDAY, MARCH 27, 1990

PAGES 1- 44

ANN RILEY & ASSOCIATES, LTD.

1612 K St. N.W., Suite 300

Washington, D.C. 20006

(202) 293-3950

9202190562 920116
PDR ADOCK 05000424
S PDR

ADDENDUM TO INTERVIEW OF WILLIAM FIRTH KITCHENS
(Print Identity of Interviewee)

<u>Page</u>	<u>Line</u>	<u>Correction and Reason for Correction</u>
10	24	change "requested" to "questioned"
14	3	change "dead" to "done"
27	17	change "determination" to "termination"
31	23	change "Cobb" to "Hobbs"
32	24	change "a" to "on"
32	25	change "section" to "suction"
39	5	change "Hollmen" to "Hallman"
40	19	change "Holman" to "Hallman"

U. S. NUCLEAR REGULATORY COMMISSION

INTERVIEW OF:

WILLIAM FIRTH KITCHENS

)
)
)
)
)

Main Conference Room
Administration Building
Vogtle Electric Generating Plant
Waynesboro, Georgia

Tuesday, March 27, 1990

The interview commenced at 1:23 p.m.

APPEARANCES:

On behalf of the Nuclear Regulatory Commission:

WILLIAM AZARUS
AL CHAFFEE
GEORGE TRAGER

On behalf of INPO:

PAUL DIETZ

On behalf of CP&L:

MIKE JONES

P
E
N
N
S
I
A
N
C
O
D
E
B
A
Y
O
N
N
E
N
7
0
0
2
F
O
R
M
E
D

PROCEEDINGS

1
2 MR. LAZARUS: The date is March 27, 1990, the time
3 is 1:24 p.m.

4 We're interviewing Mr. William Firth Kitchens at
5 Vogtle Station regarding the incident of March 20 on the
6 loss of power.

7 Whereupon,

8 WILLIAM FIRTH KITCHENS

9 appeared as a witness herein, and was examined and testified
10 as follows:

11 EXAMINATION

12 BY MR. LAZARUS:

13 Q Mr. Kitchens, would you for the record provide us
14 with your name and your title?

15 A right, my name is William Firth Kitchens, I go by
16 Skip Kitchens. My title is Assistant General Manager for
17 Plant Operations. During the site area and alert
18 emergencies that we had on March 20, I fulfilled the
19 function of the Technical Support Center Manager.

20 Q Would you tell us where you were, what you did when
21 the incident occurred on March 20?

22 A Yes, sir, I will. Because of the irony of where I
23 was -- I don't mean to make light of this, but I was going
24 to go into a little bit of detail just for your information
25 -- I was -- I'm a licensed senior operator on Unit 1 for

1 Plant Vogtle and I was in requalification training that
2 week. At 9:00 -- can I just say if you'd like, I'll talk
3 Eastern time.

4 Q Fine.

5 A -- throughout. The logs are in Central time that I
6 just gave you, so that might cause some confusion, but
7 approximately 9:00 Eastern time is when I started class.
8 The class that I was in was called "Managing Radiological
9 Emergencies". I was actually in a "Managing Radiological
10 Emergencies" class. At -- this class is a refresher for
11 senior reactor operators to be able to be emergency
12 directors basically. And what we were going over during
13 that time was changes to our procedures and improvements and
14 critique items and an NRC finding that we'd had during our
15 previous drill.

16 We took a break at approximately quarter till ten,
17 about 45 minutes after the class started, the instructor
18 called for a break, he had just issued us a packaged call
19 "Site Area Emergency/General Emergency, Emergency Director's
20 Kit" and said we came back from the break we would go
21 through some examples of how to fill out
22 classification/notification paperwork.

23 During the break, we have in the training center
24 hallway a CRT monitor that shows the status of all the units
25 in Georgia Power's system. I happened to notice that Unit 2

1 was showing minus 27 megawatts, which is very unusual since
2 when I had left the plant at 8:30 that morning -- I had been
3 over in the plant that morning for a couple of hours -- when
4 I had left the plant to go to the training center, Unit 2
5 was at full power.

6 So I suspected one of two things, you know, either
7 the unit had tripped or there was a problem with the
8 telecommunications equipment that data is sent over. Minus
9 27 megawatts is unusual. I would expect if the unit
10 tripped a normal trip, it would have been like minus 40
11 megawatts or so.

12 So I went downstairs -- myself and Ed Kozinsky went
13 downstairs to the training center where we have an emergency
14 response facility. There was also some ERF computers there,
15 they're actually tied to the plant to get information. I
16 did go there and I confirmed that Unit 2 had tripped and I
17 also was able to tell from the computer that we had lost
18 power to one of the RATs.

19 Q How could you tell that?

20 A Because I pulled up the screen, the electrical
21 diagram screen, to see the status of the electrical. That
22 was the first screen I pulled up because it also has
23 megawatts on it, to see if the unit was on line. I happened
24 to notice that not only was the unit not on line but one
25 diesel generator was running on Unit 2 and one -- basically

1 one diesel generator was running on Unit 2 and was tied to
2 the bus, that was what I could tell.

3 Q What was the location of this ERF computer you were
4 using?

5 A It's downstairs in the training center. Our
6 training center is approximately a mile and a half, right
7 over here, away from the plant site, but we do have -- it
8 serves -- the basement of the training center serves as our
9 emergency operations facility, so we have terminals there
10 for our ERF computer. That is one of the plant's computers
11 that you can get information on.

12 Since it looked pretty strange, I also decided to go
13 to the other computer that was connected to Unit 1 and I
14 noticed a problem with Unit 1. It was kind of hard to tell
15 what was the problem with Unit 1, it looked like we had --
16 when I looked at the safety related busses -- one dead bus
17 and one bus that a diesel was tied on with no power. As it
18 turns out, I believe that an ERF computer problem, there
19 was one dead bus -- there was two dead busses but there was
20 no diesel running.

21 I decided I should come over to the plant at that
22 time because it looked like we were in trouble. At least we
23 had a unit trip and it appeared it may have affected two
24 units. So I went over to the plant, probably around 10:00,
25 maybe -- if the logs are correct on when the announcements

1 were made, it must have been about 10:02 Eastern time or
2 10:01, I came through the plant entry in the security
3 building and I heard the tail end of an announcement about
4 an emergency.

5 So I went to my office, got a hard hat and a
6 flashlight and went directly to the Technical Support
7 Center. I arrived at -- I'm going to refer to this log.

8 Q Fine.

9 A I'm not going to go over every entry but just to
10 tell you in general and then see how much you want me to
11 tell.

12 Q Fine.

13 A I arrived at the Technical Support Center at 10:14
14 Eastern time. There was already a good number of people in
15 the Technical Support Center, it was being set up and there
16 was pretty good representation from the people who were
17 supposed to be there already.

18 I received a briefing from Jimmy Cash, who is one of
19 our operations superintendents. He had come to the TSC to
20 be operations supervisor function in the TSC. Jimmy
21 explained to me what had occurred briefly, associated with
22 both units and the fact that we had lost both safety related
23 busses on Unit 1 for a short period of time, the declaration
24 of a site area emergency was based on loss of all AC power
25 for greater than 15 minutes.

1 Q Was that really correct, had you really lost all AC
2 power?

3 A We had lost both safety related busses. We didn't
4 lose the 4160 and below, non-safety related busses on Unit 1
5 were in a configuration, we call it backfeed. We were using
6 the step up transformers as a step down transformer, going
7 through the unit auxiliary transformers. I knew that and
8 that was --

9 Q So you interpret the loss of all vital power as the
10 loss of all AC power in this case?

11 A Yes, sir. Let me address your question for a
12 minute. The -- our emergency plan is built on -- emergency
13 classification scheme is built on two things; one is on the
14 three fission product barriers which is the -- in my opinion
15 is the best way to do it. We also have what I call cats and
16 dogs thrown in that I believe come from a NUREG that are
17 specific things like fire in the plant greater than ten
18 minutes, loss of all AC greater than 15 minutes, loss of the
19 MET tower, various things required by our security -- by our
20 emergency plan. One of those happens to be loss of all AC
21 power.

22 Now the worse case of losing all AC power, even for
23 a short time would probably be when you are at full power,
24 to immediately lose all AC power. Our emergency procedures
25 address a loss of all AC power in some of our EOPs.

1 However, we made an interpretation some time back that that
2 really meant enter that procedure when you lose both safety
3 related 4160 busses. Previously we had said all AC power,
4 but we changed and actually made a procedure change to go to
5 that procedure if we lost bus AA02 and BA02, because I think
6 that was really the intent of that. Basically lose your
7 heat sink.

8 Q Right.

9 A For either normal reactor power or decay heat
10 removal if you lose those two busses. I believe that
11 probably the operators having been trained in that so much,
12 during our emergency drills and during the emergency plan
13 training, we trained them that way, that if you lose both
14 safety related busses, go to loss of all AC power.

15 In the condition that we were in, I think that was
16 a conservative thing to do and I don't think it was overly
17 conservative but I personally don't know the intent of that
18 thing, loss of all AC power great than 15 minutes, why it
19 would be in there. So I believe that -- I wasn't involved
20 in the classification of this event because I was in the
21 training center, but I believe that was probably correct.

22 Q I think that's a reasonable interpretation.

23 A I was -- we had the non-safety related busses
24 powered so there was a good amount of other equipment that
25 worked, the lights were generally working although some of

1 the lights in the control room and the TSC come off the
2 safety busses. So what we really were concerned about at
3 this time and about the time I arrived approximately -- I
4 guess I can look in here and see, but I think approximately
5 the time I arrived or shortly thereafter, we had gotten the
6 diesel generator to run and had begun initiating decay heat
7 removal.

8 So I got a quick briefing from Jimmy Cash. I won't
9 go over the briefing, but my secretary did write some of the
10 stuff that I was told in there, I believe.

11 At 9:15, which is right after the briefing that
12 Jimmy Cash gave me, I checked -- like I told you, most of
13 the other people who would normally man the Tech Support
14 Center were there, I was one of the later ones to arrive.
15 So when I got there, I believe Jimmy Cash was not knowing if
16 I was going to show up, he was making arrangements that he
17 may become the TSC Manager, which he is an alternate to do.
18 When I did show up, after the briefing, I went around and
19 asked our people if they were ready to activate the TSC --
20 we had a quick status, again I believe probably Jimmy Cash
21 told the group what he knew at the time having talked to the
22 control room, asked the members their readiness. All but
23 one stated they were ready to activate at this time. The
24 one being Gary Brenborg, who was acting as health physics
25 supervisor for the TSC, he stated that he still had some

1 preparations to do. In the TSC we have a PC and some other
2 equipment here that he was getting people ready. So I did
3 not activate it at that time.

4 In the meantime, I got a call from the corporate
5 office, Paul Rushton called me to ask me for a plant status,
6 hey, what's going on. He was calling from the General
7 Office Operations Center I believe they call it, their
8 emergency office. I gave him a brief status. I got -- we
9 held a status -- just prior to that we did hold a status
10 meeting that I talked about in the TSC.

11 At 9:20, I received a call from George Bockhold who
12 was in the control room, updating me on the status of the
13 plant. He had just downgraded the emergency to an alert
14 emergency at 9:15 and he had assumed the Emergency Director
15 position from John Hopkins. He was informing me of those
16 two things and he talked to me -- told me that the B RAT
17 would be restored in approximately ten minutes.

18 After talking with George Bockhold, I activated the
19 TSC at 9:26. Mr. Brenenborg told me that he was now ready.
20 We could have activated probably ten minutes earlier.

21 At 9:27, I got a call from the EOF Manager who was
22 Mike Lackey, and I gave him a plant status. He gave me some
23 information, so it was a briefing. At 9:28, Harvey
24 Handfinger, who was the OSC Manager, called and requested
25 did we want to evacuate all the personnel from containment

1 who were working on restoring the reactor coolant system
2 integrity -- did we want to evacuate them or have them
3 continue work. And I stated I would like them to continue
4 work.

5 A: I going into too much detail?

6 Q No. Was anyone in addition dispatched to assist
7 people already in containment or did you have sufficient
8 manpower already in containment to do what you needed to do
9 as far as closing up systems?

10 A At that time, I wasn't completely aware of how many
11 people we had closing up systems in containment. I was
12 aware from the briefing that personnel had dispatched. I
13 had not dispatched any additional ones. The control room
14 Emergency Director had been in contact with maintenance and
15 the OSC and requested that to be done. I guess -- I'm not
16 sure why Harvey called and asked that but I believe it was
17 because of conflicting information about evacuating the
18 containment or not. I believe what the emergency director
19 -- they wanted was for all non-essential people to evacuate
20 the containment, but he wanted the specific work crews to
21 remain and do their work. Harvey wanted to clarify that and
22 so I told him no, those particular persons who had been
23 dispatched to do that work could stay in the containment,
24 and should do so.

25 Q So at any time during the incident, did you have to

1 dispatch additional people from the Operations Support
2 Center to support the work that was going on?

3 A Yes, we dispatched some additional people.

4 Q Okay.

5 A Do you want me to go through this chronologically or
6 how -- you know, not in the immediate future, but later we
7 had some people go to work on various pieces of equipment
8 that needed to be worked on.

9 Q Continue on with what you have as far as chronology
10 then.

11 A Am I going into too much detail?

12 Q No, that's fine.

13 A Okay.

14 Q Just cover the major events.

15 A I won't tell you when we had briefings and stuff
16 unless it has --

17 MR. CHAFFEE: Are these logs that you kept or
18 somebody kept for you?

19 THE WITNESS: Yes, this is the TSC Manager log and
20 my secretary kept this log. One of the positions we have in
21 the Technical Support Center is a TSC Manager's secretary
22 and there's two or three persons that can fill that job. My
23 real live secretary also fills that job and she was there
24 already when I showed up in the TSC and had begun this log,
25 she even logged in when I arrived.

P
E
N
N
S
I
A
N
C
O
N
F
I
D
E
N
T
I
A
L

1 This log is -- for your information, I gave copies
2 of the emergency -- the day of the emergency, but all this
3 is drills. We had -- I'm sure this is getting off track but
4 --

5 MR. CHAFFEE: Can we have a copy of that log?

6 THE WITNESS: I just gave four copies to them. Do
7 you want a copy of all the drills too?

8 MR. CHAFFEE: No.

9 THE WITNESS: Okay. You know, just for your
10 information, I looked at it today and I looked through it
11 and I said gosh, this thing goes back to 1986, but there's
12 24 separate drill events that have about six or eight pages
13 each since February of '86. I think I'll make a new log and
14 file this in document control, to start a new one for
15 hopefully drills. But that's why it's in the middle, we
16 haven't had that many real emergencies.

17 MR. CHAFFEE: Were any of those drills for
18 something occurring during mid-loop operation?

19 THE WITNESS: I'd have to look back and see, I don't
20 recall.

21 MR. CHAFFEE: Okay.

22 MR. BOCKHOLD: I'd like to correct one thing over
23 here. There's a circuit switch in here. So you wouldn't
24 have to worry about this thing. This is -- actually at the
25 time of the event, this was open.

P
E
N
N
S
I
A
N
C
O
U
N
T
Y
C
L
O
U
D
S
H
I
P
S
I
M
U
L
A
T
O
R
S
I
N
C
O
R
P
O
R
A
T
E
D

1 MR. LAZARUS: Thank you.

2 THE WITNESS: I'd have to look back and see, I
3 believe that was dead. We did have loss of all AC in some
4 of our drills. The only ones logged in here are drills,
5 site-wide emergency drills where we actually activated the
6 TSC.

7 MR. CHAFFEE: So you were the TSC Manager during
8 this event?

9 THE WITNESS: Yes. Should I go back and repeat some
10 for Mr. Chaffee?

11 MR. LAZARUS: No, that's all right.

12 MR. CHAFFEE: You were just going through the
13 sequence, right?

14 THE WITNESS: Yes. I'm halfway into it.

15 MR. CHAFFEE: Finish it up and I'll go back and ask
16 some questions at the end.

17 THE WITNESS: All right.

18 At 9:36 -- I'm going to hit the significant things
19 and y'all ask me if you think I'm skipping over something
20 that you want to talk about.

21 At 9:36 I received a call from Ken Holmes --

22 MR. CHAFFEE: What position was he?

23 THE WITNESS: I don't know what position he was
24 holding, if any, he was in the Emergency Operations
25 facility.

P
E
N
S
I
O
N
S
I
N
G
C
O
N
F
I
D
E
N
T
I
A
L

1 MR. CHAFFEE: What is he?

2 THE WITNESS: Ken is our Manager of Training and
3 Emergency Preparedness.

4 MR. CHAFFEE: Okay.

5 THE WITNESS: Ken called me and told me that he had
6 received a call I believe in the EOF, I guess I'd better say
7 I assumed he was there, he's always there in all these 24
8 drills that I've ever been in. He said that he received a
9 call from GEMA, Georgia Emergency Management Agency, who
10 stated that they had not received any messages yet.

11 BY MR. LAZARUS:

12 Q What time was this?

13 A At 9:3 -- I'm sorry, at 10:36.

14 MR. CHAFFEE: 10:36 Eastern time?

15 THE WITNESS: Yes, sir, 10:36 Eastern time. I'm
16 trying to do all this in Eastern time but our logs are kept
17 in central because the two clocks in the TSC are on central.
18 At 10:36 Eastern time, I got a call from Ken saying hey,
19 GEMA just called to say they heard we have an emergency but
20 they haven't received any messages of what's going on. So
21 at 10:37, I called the Emergency Director in the control
22 room and told him -- relayed the information and said GEMA
23 has not received any messages and we need to call them. He
24 said I'll take care of it, we'll call them.

25 MR. CHAFFEE: Who was that you told to call?

P
E
N
N
A
D
C
O
B
A
Y
O
N
N
E
W
T
O
D
A
Y
F
O
R
M
E
R

1 THE WITNESS: That was George Bockhold.

2 BY MR. LAZARUS:

3 Q This is 9:36 Eastern time that we're talking about?

4 A No, sir.

5 Q 10:36 Eastern standard time.

6 A 10:36 Eastern standard time.

7 MR. CHAFFEE: That was a test.

8 (Laughter.)

9 THE WITNESS: One thing we might get out of this is
10 we may quit doing this Central.

11 MR. LAZARUS: There's a human factors problem there
12 someplace.

13 THE WITNESS: Yes, sir, it's a human factors problem
14 and it's not just a human factors problem during emergency
15 situations.

16 Are there any questions on that?

17 BY MR. LAZARUS:

18 Q Yes. Amplify a little bit, you said you called back
19 GEMA --

20 A No, sir, I called the Emergency Director.

21 Q Okay.

22 A And informed him that GEMA had not been notified. I
23 would liked to have called GEMA. We had -- maybe I should
24 back up and explain this to be sure that you understand
25 where people were. The Emergency Director was still in the

1 control room at this time. I was in the TSC which is next
2 to the control room. Then where the Emergency Director is
3 is where -- the Emergency Director has to authorize the
4 notifications that go out, by our procedures. He was still
5 in the control room, that's where the forms were and the
6 notifications were being made from.

7 We did have two trained communicators in the TSC and
8 later on -- I don't remember if this is in here, so I'll go
9 ahead and tell you and if I get to it, we'll save time --
10 but later on one of them also let me know -- I believe John
11 Stanley tapped me on the shoulder, the two communicators sit
12 right behind me at a desk -- he tapped me on the shoulder
13 and said hey Skip, GEMA still hasn't got notified. In other
14 words, he was making a -- you know, one of the things they
15 have a checklist to do is pick up their phones and verify
16 the phones work and the one in the TSC worked for even GEMA,
17 so he made the roll call and said -- I don't know what he
18 said but I assume he said this is testing equipment in the
19 Technical Support Center. And he received some confusion
20 because he got GEMA and they said we haven't got any message
21 and we don't know what your emergency is.

22 If we had had a copy of the form there, I would have
23 told him read the form to this person, but I did not know
24 what the form said, I did not know if the Emergency Director
25 had classified the conditions as stable or improving or what

1 they were told. I thought it would be dangerous for us to
2 say yeah, we've got a site area -- I think by this time it
3 was an alert -- we have an alert emergency and this is
4 what's going on when all the other people on the phone had
5 been told -- had just received something.

6 All I'm saying is there's a lesson learned. What I
7 would do next time is I would say Mr. Stanley, go to the
8 control room and get the form and he could have called from
9 the TSC and I think we would have made it 10 or 15 minutes
10 quicker.

11 Q As an aside, there is something that several
12 utilities have done using broadcast fax, they list all their
13 emergency response facilities when a notification goes out,
14 so all the ERF's for the licensee get a copy of the form
15 that's being transmitted to the off-site agencies. A lot of
16 the off-site agencies also have a fax, so you can just
17 broadcast the same thing to everybody.

18 A That would have helped us. Had we had one, we would
19 have read it to GEMA at 9:37. We didn't. As I said, at
20 9:36 when I talked to the Emergency Director, he was aware
21 of it and said hey, I'll correct that right away. I don't
22 know exactly what happened after that. I've read some of
23 the logs from the critique team that sounds like he did do
24 that but it still took him a few minutes to actually get
25 GEMA notified.

1 MR. CHAFFEE: How long after you called up George to
2 tell him that GEMA hadn't been notified did this thing
3 happen & were they used the TSC phone, a couple minutes, ten
4 minutes or 20 minutes?

5 THE WITNESS: Let me look and see if I have it in my
6 log. It was very shortly thereafter.

7 MR. CHAFFEE: Few minutes type thing?

8 THE WITNESS: Yes, sir, a few minutes. I think it
9 might be on this time line that the critique team did.
10 Again it's confusing, theirs is in Eastern time.

11 MR. CHAFFEE: This Central time and Eastern time
12 concept, was that imposed on the station?

13 THE WITNESS: Yes, sir, the Central time concept --
14 all of our power plants at Georgia Power are on it, fossil
15 plants as well. It's imposed in that that's the way we do
16 business. If we call up our control center, our
17 dispatchers, we talk to them in Central time because they're
18 on Central time and that makes it easier -- I believe that
19 makes it easier for them because the Central dispatcher for
20 our system is in Birmingham and we have power plants in
21 Birmingham and Alabama and Mississippi and in Georgia that
22 the central in Birmingham has some control over. There's
23 another -- the one that we talk to is in Atlanta, our
24 Georgia Control Center, but they're in Central time. So
25 ever since we've begun having logs here in 1983 or '82,

1 we've done them in Central time. It's a self-imposed thing
2 by Georgia Power Company and the Southern Company, as far as
3 I know. It is a policy.

4 Plant Hatch, I worked there before, also -- they
5 also use Central time. We're not the only utility that does
6 that either. TVA also does it, they have theirs all on
7 Central time. We're not the only ones out there that have
8 this problem.

9 I don't have the latest one they have there, I
10 believe this was within a few minutes. In other words, I
11 began getting worried because I had received this word from
12 the EOF that GEMA wasn't notified. A few minutes later the
13 -- one of the communicators in the TSC told me the same
14 thing. He said hey, I just talked to somebody at GEMA and
15 they haven't been -- they know we have an emergency and I
16 told them, but they haven't been read the official form. I
17 said okay, they're doing that in the control room right now,
18 I've just talked to George, not to worry.

19 MR. CHAFFEE: When GEMA called EOF and asked them
20 what was going on, did the people in the EOF tell GEMA at
21 that time, you know, yeah, we do have something going on?
22 Do you have any idea what they told them?

23 THE WITNESS: I do not know what they told them. I
24 told Ken that I will get ahold of the Emergency Director
25 right away, I'll do what I can to get GEMA notified. I did

1 not call him -- I may have called him back later or he may
2 have called me back, but I didn't say I'll call you back and
3 verify that they have done that. I think that in addition --
4 -- I don't know that -- I do not know how he would have known
5 or how he would have verified it. The people at GEMA work
6 closely with Ken and with Jim Roberts and our other
7 emergency preparedness staff and that's probably why they
8 called.

9 MR. CHAFFEE: Did you in the TSC know when the site
10 went to site area emergency?

11 THE WITNESS: When the site went to site area
12 emergency? The TSC wasn't activated until there was a site
13 area emergency.

14 MR. CHAFFEE: Is that how it was activated?

15 THE WITNESS: Yes, sir, we went right into a site
16 area emergency. I wasn't here, I was coming over here from
17 the training center.

18 MR. CHAFFEE: So how did you become aware that the
19 plant was in a site area emergency?

20 THE WITNESS: I don't want to go over that in
21 detail, but needless to say I knew something bad was wrong
22 because I looked at the computers at the training center. I
23 was at the training center in regular training. I noticed
24 something funny about Unit 2, so I went down and looked at
25 the ERF computers for both Unit 1 and Unit 2 and it looked

1 odd to me, so I left training right away, came to the plant
2 and I heard the end part -- as I came through the plant
3 interior security building, I heard the end part of an
4 emergency announcement stating all emergency response
5 personnel report to your assigned duty station. I went to
6 the TSC and assumed duties as the TSC Manager at 9:14 -- I'm
7 sorry, at 10:14.

8 MR. CHAFFEE: When did you hear the words that the
9 plant was in a site area emergency?

10 THE WITNESS: Sometime between -- probably sometime
11 between 10:01 and 10:14. When I heard the emergency
12 announcement, I only heard the end part of it. I went to
13 the TSC, got a briefing from --

14 MR. CHAFFEE: Was this a general or a site
15 emergency?

16 THE WITNESS: As soon as I got to the TSC, I knew
17 that we were in a site area emergency and I knew it was
18 because we lost both RATs, we lost both safety related busses
19 on Unit 1.

20 MR. CHAFFEE: And somebody told you that or --

21 THE WITNESS: Yes, sir, Jimmy Cash, who was the
22 Operations Supervisor in the TSC met me -- when I first got
23 to the TSC -- I wasn't real late, I actually arrived at the
24 TSC within 10 or 15 minutes of the emergency announcement
25 but everyone else who wasn't at the training center, that

1 was already in the protected area, beat me there. So I was,
2 if not the last, the last two or three people who work in
3 the TSC to show up. So Jimmy was already there. They had
4 set the TSC up, got all the procedures out. As soon as I
5 got there, he briefed me on what had happened, the plant
6 status, that Unit 2 had tripped, they'd lost a bus. I
7 already knew that from looking at the computer at the
8 training center.

9 He told me that Unit 1 -- I did not know the status
10 of Unit 1 as well because I think there was an error on the
11 ERF computer. But I knew we had a dead bus. Jimmy told me
12 what had happened, we had a dead bus, he briefed me on the
13 plant status and why we were in a site area emergency.

14 BY MR. LAZARUS:

15 Q You mentioned that when you looked at the ERF
16 computer, it showed a diesel running on one of the busses.
17 Could it have been --

18 A No, sir, it didn't show the diesel running. It
19 showed the output breaker closed and a diesel at zero
20 kilowatts.

21 Q Oh.

22 A Which can't be. So that's what I say, I looked at
23 the computer in the training center. Our emergency
24 operations facility is in the basement of our training
25 center about a mile and a half away.

1 MR. CHAFFEE: Let me ask a question -- let's assume
2 -- is what you saw in terms of the breaker shut, the diesel
3 at zero kilowatts, is that something that can be obtained
4 within the computer system someplace?

5 THE WITNESS: Probably. I wasn't the only one that
6 saw it. Everyone at the TSC saw it, it stayed that way.
7 Let me explain.

8 MR. CHAFFEE: Maybe it was real.

9 THE WITNESS: It wasn't real. I sent someone down
10 to check the breaker, personally. It's the level below the
11 TSC, and engineer, Steve Kerstiens I believe, went down and
12 checked it out and said no, that's wrong.

13 MR. CHAFFEE: So the breaker was in fact open at the
14 same time you were seeing it being shut?

15 THE WITNESS: Right. This was on the diesel that
16 was torn down anyway, it was not in service. I think I
17 confused you.

18 All I'm saying is I was over at the training center
19 a mile and a half away, I noticed from a computer monitor
20 that tracks all our power plants --

21 MR. CHAFFEE: Yeah.

22 THE WITNESS: -- that Unit 2 was reading negative 27
23 megawatts, so I assume something bad had happened. So I
24 went downstairs and looked at the ERF computers that's in
25 our EOF there, Emergency Operations Facility. I was able to

1 determine from those two things that Unit 2 had tripped and
2 that a diesel was tied onto one of the busses. I said gee,
3 I'd better look at Unit 1. I went to the next terminal that
4 was on Unit 1 and pulled up Unit 1, looked at the electrical
5 diagram, looked at RHR, looked at a bunch of stuff. And one
6 of the things I noticed on Unit 1 was there was -- let's
7 see, the A bus had no power to it, dead as a door nail, no
8 diesel running, at the time I looked at it, just dead bus.
9 The B bus looked like a dead bus. However, there's a little
10 diagram, sort of a fake one-line diagram that you put on the
11 computers and they change color as to whether a breaker is
12 open or closed. That breaker was showing closed. That
13 confused me so I knew something was wrong. The breakers was
14 showing closed but the diesel was showing zero kilowatts.
15 That diesel was out of service for maintenance anyway.

16 Sometime later, after I got to the TSC and got my
17 briefing I knew what was ... you know, the general status. I
18 didn't think about the breaker any longer but one of the
19 engineers in the TSC -- we also staff the TSC with several
20 engineers -- one of the engineers said hey, the diagram is
21 showing I think the B train diesel generator breaker being
22 closed, output breaker. I said gee, why don't you go down
23 and make sure that's not the case because if it is the case
24 we're never going to get B train power back. He went down
25 and checked and came back and said no, it's open. So I

1 believe it was a problem with the display on the ERF
2 computer.

3 MR. CHAFFEE: Okay, do you have a lot of problems
4 with that ERF display or is that --

5 THE WITNESS: No, we don't have a lot of problems
6 with it, that's unusual but it's not error-free.

7 BY MR. LAZARUS:

8 Q Let's go back to the discussion about GEMA not
9 receiving notification. The last thing you said was you
10 called the control room, told the Emergency Director that
11 GEMA was complaining that they hadn't been notified. Did
12 you get involved any further in that notification with GEMA?

13 A The only other thing -- I've already told you that a
14 little bit later, maybe two minutes or maybe five minutes,
15 maybe ten minutes, but very shortly after that -- I don't
16 see it here in the log, it may be in here -- but very
17 shortly after that, one of the TSC communicators told me the
18 same thing. He said hey, I just had GEMA on the phone and
19 they still haven't received their notification.

20 Q Were any subsequent notifications to the state and
21 locals, both South Carolina, Georgia and the counties,
22 transmitted from the TSC?

23 A Yes.

24 Q Okay, at what point did that take place?

25 A That took place when the Emergency Director came to

1 the TSC.

2 Q And we haven't gotten there yet in your narrative?

3 A No, sir, but I can tell you that was at 9:58, the
4 Emergency Director arrived -- I'm sorry, at 10:58, the
5 Emergency Director arrived at the TSC. I talked to the
6 Emergency Director before he came to the TSC. Once again, I
7 don't remember -- let me see if it's in here -- we went over
8 the status of communications and I told him we need to make
9 the communications from the TSC, are you going to come here
10 or do you want us to make them or what and he said we'll
11 make one more communication from here and then I'll come
12 there and we'll make them from the TSC, are you ready. I
13 said yes, sir, we can make the ENN communications from the
14 TSC, we're ready to go.

15 So when he came at 9:58, from then on all follow up
16 communications were from the TSC until the time the
17 emergency was terminated and the determination was also from
18 the TSC.

19 Q At 9:58 Eastern --

20 A 10:58. I did not bring them with me but you
21 probably have them. Have you looked at the notifications?

22 Q I have a copy.

23 A You can tell the ones that were made from the TSC
24 pretty much I think from -- look at who called it in because
25 John Stanley or Elmer Pickett would have called from the

1 TSC. They were the two --

2 Q So in your conversations with the Emergency
3 Director, he was aware that GEMA and Burke County were
4 complaining that they hadn't been notified but he didn't
5 know the reason.

6 A No, not Burke County. I was not aware of Burke
7 County.

8 Q Just GEMA?

9 A Right. I was not aware during any of this event
10 that Burke County had any problems getting notification. I
11 was made aware that GEMA was not notified and was actually
12 complaining that they weren't notified, which is good.
13 That's unusual that they would even know about it enough to
14 complain. I'm not sure how they knew. I've got a feeling
15 that they knew -- also another way they knew is probably
16 from our people doing the communication checks in the TSC
17 because their phone started ringing when we were manning the
18 TSC. John told me that there was some confusion by the --
19 when he got the GEMA person on the ENN line, they wanted him
20 to read them the message and he had trouble explaining to
21 them I don't have a message to read to you. The control
22 room will read that message to you very shortly.

23 Q If they could.

24 A Right. A couple of times --

25 Q But you're not aware of how GEMA even got alerted to

P
E
N
S
I
O
N
S
C
O
D
E
D
F
O
R
M
E
D

1 be on the -- well it must have been when they started
2 testing the ENN from the TSC, would have been the first that
3 GEMA's phone would have rung.

4 A That could well be. One of these time lines that
5 I've seen from Ken Holme, the critique team basically says
6 that, but I don't have first-hand knowledge of that. I
7 don't have first-hand knowledge of how GEMA first got
8 notified that they weren't notified.

9 Q We'll have to match up those times with when they
10 were using the commercial telephone line in the control room
11 as a back up means of notifying them.

12 A If you'll wait just a minute, I think there is
13 entries like that. (Pause.) Maybe it's in the later one.
14 Do you have the later time line that looks like this,
15 probably has a KR --

16 Q Yes.

17 A -- 2 or 3 on it.

18 Q Yes.

19 A I believe that one shows when -- that one actually
20 has on it when the TSC communicators made their equipment
21 checks. I don't have it here.

22 Q Okay.

23 A But they certainly would have known that something
24 was going on because they answered the roll call from the
25 equipment check from the TSC communicator. I believe that

P
E
N
N
O
A
D
C
O
B
R
V
O
N
N
E
N
T
E
O
O
F
O
R
M
E
D

1 John Stanley or Elmer Pickett would be able to tell you more
2 about what was said. But during the event, one of them -- I
3 believe it was John Stanley -- actually told me, hey, GEMA
4 hasn't been notified. I've got them on the phone and they
5 say they don't have the message yet. That was a few minutes
6 after I talked to George and he said we'll call GEMA, I'll
7 get on it right away. So I told John the control room is
8 calling GEMA.

9 You want me to just pick up with the time line?

10 MR. CHAFFEE: Could I ask you a couple of questions?

11 THE WITNESS: Yes.

12 MR. CHAFFEE: Did you -- was there any kind of work
13 going on in the TSC -- I'm sorry, what were the engineering
14 people in the TSC doing? Were they involved in any kind of
15 -- looking at any kind of options or anything that was
16 available?

17 THE WITNESS: Yeah. You're asking me kind of a
18 general question again, I'll be glad to answer it. In the
19 TSC we have an engineering supervisor in the TSC, that
20 happened to be John Aufdenkampe, who is our -- one of our
21 Technical Support Managers. In addition to that, we had Sam
22 Bradley, our Reactor Engineering Supervisor, we had Paul
23 Burwinkel, he's our HVAC Supervisor, we had a couple of
24 electrical engineers including Robert Moye who is
25 engineering supervisor and Steve Kirstiens. I think there

1 were several others. Those are the ones that I remember
2 because they did specific things.

3 One of the things that the electrical engineers did,
4 I've already mentioned to you that they pointed out they saw
5 the same diagram error on the B diesel and they went down
6 and checked it. I figured it was easier for them to do
7 since it was one floor down right underneath where we were,
8 rather than have to call the control room in all the
9 confusion and have them dispatch an operator. He did that.

10 Also the electrical engineers went out to -- George
11 mentioned about the circuit switch awhile ago -- when we got
12 around to needing to -- we had released all our clearances
13 on the B reserve auxiliary transformer, that was the
14 transformer we had had out of service to replace oil in it.
15 Fortunately that work had all been done so we were able to
16 restore the RAT. When it came time to restore the RAT, the
17 control room could not get the circuit switcher closed. So
18 -- we initially contacted the OS -- there's also a
19 maintenance supervisor in the TSC. I don't deal directly
20 with the OSC as my job as TSC manager, although they report
21 in through me. There is a person in the TSC, maintenance
22 supervisor is his emergency response title, that was Mike
23 Cobb, whose sole job is to deal with the OSC and me and the
24 other TSC members and the control room and make sure we get
25 the corrective action. They had already got some electrical

1 people to go out to the RAT switcher to work on it.

2 They were having some difficulties getting it
3 closed, getting the circuit switcher closed, so we sent one
4 of the electrical engineers. I think that's logged here at
5 a certain time. I don't know if you care about the time,
6 but it shows in here when we sent an engineer there. What
7 it turns out is that there's a reset switch on the circuit
8 switcher such that the arm on the switcher has to come all
9 the way open to hit a reset switch before it can go back
10 closed again. He was able to assist them and tell them if
11 you push that switch right there and reset it, we'll be able
12 to close the switcher.

13 We had -- of course we were looking at the core
14 temperatures, core exit thermocouples. We were looking at--

15 MR. CHAFFEE: How high did the temperatures get?

16 THE WITNESS: As I recall, the highest temperature
17 that we saw on the ERF computer -- there's only two core
18 exit thermocouples that were installed. It was
19 approximately 118 degrees. Initially we had gotten a report
20 when I first got my briefing when I got into the control
21 room when I came to the TSC, Jimmy Cash told me that RHR is
22 just now put back in service, we're just getting back. I
23 said how high did the temperatures get to, he said 136
24 degrees. I said how do you know that, he said that was a
25 section of RHR pipe. So for a short while in the TSC we

1 figured out quickly that the temperature raised
2 approximately 46 degrees in approximately 36 minutes, so we
3 were looking at 1.3, 1.5 degrees a minute.

4 MR. CHAFFEE: So you were using the 136 to make that
5 calculation or the 118?

6 THE WITNESS: Right, we used the 136 to make that
7 calculation.

8 MR. CHAFFEE: Why did you use that instead of the
9 118?

10 THE WITNESS: Because that was the information I had
11 at the time.

12 MR. CHAFFEE: Oh, you saw the 118 later?

13 THE WITNESS: Right.

14 MR. CHAFFEE: Which was right?

15 THE WITNESS: I believe the 118 was right. The
16 critique team was still looking at it to make sure that was
17 the highest we ever got.

18 MR. CHAFFEE: Why do you believe that was the right
19 one?

20 THE WITNESS: Why do I believe it was right?
21 Because we had engineers and some people in Operations
22 observing it almost the whole time we were in the TSC. By
23 the time I got to the TSC -- by the time the TSC was
24 activated, RHR was back in service and the temperature had
25 peaked out and was lower.

1 MR. CHAFFEE: By the time the TSC was manned, RHR
2 was back in service, is that what you said?

3 THE WITNESS: If not, it was real close. The RHR
4 was placed in service at 10:00 Eastern time. I arrived in
5 the TSC at 10:14 Eastern time. By the time I got there, the
6 real, real emergency was over. In fact one minute after I
7 arrived at the TSC we downgraded the emergency to an alert.

8 MR. CHAFFEE: I see, and the person you were dealing
9 with was Cash?

10 THE WITNESS: The person who gave me the briefing
11 when I got there was Cash. I asked him how high did RCS
12 temperature get to when we lost RHR. He said 136 degrees
13 was the highest temperature. I said where were we when we
14 started. He said approximately 90 degrees. So that's 36
15 degrees -- how long was it at 36 degrees. I made a quick
16 determination just in my head of that. I later relayed that
17 information to the corporate office -- later, like ten
18 minutes later. So that's probably where they got the 136
19 degrees from, is from me.

20 Later during the scenario, I don't have a time in
21 here, but sometime later engineers were monitoring it and I
22 asked them would you confirm what was the highest -- they
23 were looking at what is the temperature now. It stabilized
24 at about 100 degrees. In fact, it's in my log here
25 somewhere that Esther put down that we stabilized RCS at 100

1 degrees. We continued to monitor and I asked would you tell
2 me what's the highest that we got was and at that time they
3 came up with -- they took a picture of -- took a history in
4 the computer, took a copy of it and brought it to me and
5 said gee, what do you want to call that because it's not
6 graduated, there's 120 degrees and 110 degrees. So I'm the
7 one who called it 118 degrees, it was less than 120 degrees.
8 You probably have the picture, I don't know, of the thing.

9 MR. CHAFFEE: I don't know if I have.

10 THE WITNESS: It's just a graph that shows time
11 versus temperature and goes up to about 118 degrees and
12 starts to come down. The other thermocouple I believe
13 maximum was 112 degrees, but we'd have to look at the curves
14 to verify that. Then I changed my call to 118 degrees
15 rather than 112 degrees.

16 MR. DIETZ: During that same time the operators were
17 monitoring the TCs in the control room I believe on the
18 plant computer, Proteus or something -- what every your
19 acronym is. And they recall seeing 136 or 138 on that
20 computer. That's during the time when the RHR was out of
21 service.

22 THE WITNESS: I wasn't there. What do you want me
23 to say?

24 MR. CHAFFEE: What constituted the TSC being manned,
25 was that your arrival?

1 THE WITNESS: Okay, the TSC was manned -- like I say
2 I was either the last or within two or three people of being
3 the last formal person that's supposed to be in there. The
4 TSC was activated at 10:26 Eastern time just by me saying we
5 are now.

6 MR. CHAFFEE: I see.

7 THE WITNESS: I got activated, you know, just as a
8 formal thing. I asked everyone at -- at 9:15 I had a
9 briefing --

10 MR. CHAFFEE: 10:15.

11 THE WITNESS: 10:15, sorry. At 10:15 I had a
12 briefing and I went around the room and asked all the
13 operations supervisors, there's an engineering supervisor,
14 maintenance supervisor, there's an HP supervisor and a
15 chemistry supervisor as well as the communicators, a
16 security person. There's an admin support supervisor --
17 these are normal emergency response positions. All those
18 people were there, we had a briefing, Jimmy gave them
19 similar information he gave me. I called for a time out,
20 everybody shut up, we had a briefing. I went around and
21 said are you ready to activate the TSC. One person, the HP
22 supervisor, said I need a few more minutes for setting up
23 back here with our computer. They have a PC that they can
24 do off-site dose calculations with. So rather than
25 activate then, I said that's fine and I went through and did

1 some other things. At 9:26 there was enough break in the
2 action -- at 10:26, that I was able to stop again and I
3 activated the TSC. I had also talked to the Emergency
4 Director and told him I was going to activate the TSC.

5 MR. CHAFFEE: Did -- prior to your arrival -- it
6 sounds like at the time you arrived is the time they got RHR
7 back in service, is that what you're saying?

8 THE WITNESS: According to this time line, they
9 started RHR pump at 10:00 Eastern time. They had the trip
10 and lost the power at 9:40.

11 MR. CHAFFEE: Do you know whether or not the
12 engineering staff in the TSC had been there long enough to
13 be involved in the event, looking at alternatives, before
14 they got the RHR pump back?

15 THE WITNESS: Sir, you're only talking about 10 or
16 15 minutes, there's not enough time for anyone to come in --

17 MR. CHAFFEE: So they had only been there for 10 or
18 15 minutes.

19 THE WITNESS: Let's go through the time line, just
20 to give you I think a better feel for it. The man ran into
21 the tower at 9:20 Eastern time. They actually declared a
22 site area emergency at 9:40 Eastern time. However, they did
23 not make any page announcements until 10:01 Eastern time.
24 so at 10:01 Eastern time, there was a page announcement made
25 that initiated everyone to go to their emergency response.

1 I arrived at 10:14, that's only 13 minutes. I don't believe
2 there would have been enough organizational time for anybody
3 to have gotten involved. They would have only been in the
4 way of the control room had they all started calling.

MR. CHAFFEE: I understand that.

THE WITNESS: When I got there at 10:14, because of
5 the fact that I had come from the training center, I believe
6 I probably heard the last part of the second announcement.
7 They usually announce it twice. I can't say how many times
8 they announced it, I wasn't there, but most of the other
9 people that beat me there to the TSC -- the ERF computers
10 were on. I have a TSC Manager checklist, my secretary had
11 gone there and laid it out for me. She had started this
12 log. The chemistry supervisor had already started to look
13 at PERMS information. Everybody was doing their thing when
14 I showed up but they still weren't organized enough. I
15 believe that when I had the briefing at 10:15 Eastern time
16 and made everybody shut up, let's have a briefing here, was
17 probably the first organizational meeting that now the TSC
18 is underway to do something.

19 That doesn't mean -- some of the people that came to
20 the TSC, at least Jimmy Cash I believe had gone to the
21 control room first and knew enough of what was going on that
22 he then came to the TSC. He was sent there by Swartzwelder
23 who said would you go and be the Operations Supervisor and
24
25

1 if Skip doesn't show up be the TSC Manager.

2 BY MR. LAZARUS:

3 Q Were you aware of any problems with the PERMs
4 system?

5 A Yes. Don Holman told me -- he was the chemistry
6 supervisor in the TSC -- I'm looking to see if she logged it
7 in here, but at some point in time, pretty early on, he came
8 and told me I can't get any PERMs data from the ERF
9 computer. I said see if you can get it from the PERMs
10 computer or whatever because I wanted to know particularly
11 what radiation levels were in the containment. I think
12 other people were doing that also but as part of the TSC we
13 needed to assess that so we could tell people whether or not
14 we could stay in containment.

15 Shortly -- within a few minutes, I don't know how
16 long, three or four minutes maybe, Don came back and told me
17 the radiation levels in containment were fine, they were
18 normal, there was no increase in radiation level in
19 containment. I think he got it from the PERMs computer
20 terminal. In addition to this ERF computer that we have,
21 the PERMS which is Process Effluent Radiation Monitoring
22 System, also is a computer driven system, it has its own
23 terminal. But what is right now broken and was broken
24 before the event on the PERMS, we have a bad circuit card
25 that doesn't allow the PERMS information to be displayed

1 properly on the ERF computer.

2 We were able to get PERMS information fairly soon to
3 confirm the radiation levels in containment and also confirm
4 -- I asked him to find radiation levels in the control room,
5 the TSC. Those are pretty normal things for them to do in
6 an emergency. He came back and reported to me that they
7 were normal. That's in here somewhere.

8 Q That's okay, how about the status of the
9 meteorological tower data received?

10 A We were not able to read the meteorological data on
11 the ERF computer but on Unit 1 ERF computer is where you can
12 read that data, so we dispatched somebody to go and get that
13 information locally.

14 Q And that was to be transmitted back by radio --
15 telephone?

16 A I do not know.

17 Q You didn't get that far?

18 A We got that far but I didn't personally take care of
19 it. I had it taken care of by Don Holman and Gary
20 Brenenborg, who were the HP and Chemistry supervisors.

21 Q Do you know what the problem was with the
22 transmission of the MET data?

23 A Yes, sir, it was also broken even before the
24 emergency. We have a problem with our telecommunications.
25 The MET tower is over here about half a mile and it's

P
E
N
D
A
D
C
O
B
A
Y
O
N
N
E
N
I
D
O
O
F
O
R
M
I
E
D

1 transmitted back to the plant via microwave. I don't know
2 the specific component problem but that's been broken for a
3 couple of weeks at least.

4 Q So it wasn't a loss of power to that communications
5 link that was the problem?

6 A I did not know that at the time.

7 Q Okay.

8 A I only learned that today. But at the time all we
9 knew -- we in the TSC -- we came there and wanted to get the
10 information, we couldn't get it. So I had someone go and
11 find the information so we'd know the meteorological
12 conditions, wind direction and all that stuff. They did,
13 they called back or telephoned back or on the radio, I don't
14 remember, but they did give us that information and also the
15 ERF manager called me and told me they had -- before we got
16 the information back from the MET tower, he called in the
17 meteorological data from Bush Field, they had already called
18 Bush Field and got it, from the EOF. The EOF had not been
19 activated, it stayed in a standby ready. It would have been
20 activated had the site area emergency, by the time they were
21 ready to activate it, hadn't been downgraded to an alert. I
22 requested them to stay in standby readiness.

23 MR. LAZARUS: I don't have anything else.

24 MR. CHAFFEE: Did you get information in the TSC
25 about the diesel, starting, stopping -- any kind of

1 information on that?

2 THE WITNESS: Yes, not very much, but --

3 MR. CHAFFEE: Anything you think we might have an
4 interest in? All of your information is second-hand?

5 THE WITNESS: Yes, sir, it's all second-hand
6 information. It was reports from the control room to Jimmy
7 Cash or to one of the other operations persons in there, but
8 that also was over with by the time I got to the TSC,
9 obviously if RHR was running the diesel was running. I was
10 told that the diesel had tripped and we had to manually
11 start it. During the emergency my belief was that we had
12 had a low jacket water pressure trip and we had overridden
13 that trip by going to the emergency mode. I was also told
14 that the operators had monitored the jacket water pressure
15 and it seemed to be okay.

16 MR. CHAFFEE: What's your job title?

17 THE WITNESS: In the real plant or in an emergency?

18 MR. CHAFFEE: In the real plant.

19 THE WITNESS: I'm the Assistant General Manager for
20 Plant Operations.

21 MR. CHAFFEE: Can you tell me real briefly where you
22 stand in implementing activities associated with generic
23 letter 88 -- I believe it's 17, the one that talks about
24 limited operation?

25 THE WITNESS: Uh-huh.

1 MR. CHAFFEE: Just tell me your procedure
2 implementation, that sort of thing.

3 THE WITNESS: Yes. We have two -- what I'd call two
4 phases of implementation, although I think there may be
5 three. The first one just acknowledges some stuff, but we
6 implemented the first portion of that recently. We
7 implemented the first portion of that, as much as we could,
8 during our first refueling outage and I'll go over what we
9 did if you'd like. We implemented the rest of that during
10 this refueling outage.

11 We have a second portion that we're working on that
12 we just got information from our engineering folks on about
13 a week or two ago, but we have implemented that into our
14 procedures already, even though I do not believe we've
15 submitted that information to the NRC.

16 MR. CHAFFEE: How much time do we have?

17 THE WITNESS: We got some information back on our
18 analysis -- the first part of our response to the NRC we put
19 in, you know, the instrumentation and such.

20 MR. CHAFFEE: We'll go off the record.

21 (Whereupon, the interview was concluded at
22 2:27 p.m.)

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: Interview of WILLIAM FIRTH KITCHENS

Docket Number:

Place: Vogtle Nuclear Generating Plant, Waynesboro, GA

Date: March 27, 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.

WILLIAM L. WARREN
Official Reporter

Ann Riley & Associates

P
E
N
N
S
Y
L
V
A
N
I
A
R
E
G
U
L
A
T
O
R
Y
C
O
M
M
I
S
S
I
O
N