

OFFICIAL TRANSCRIPT OF PROCEEDINGS

Agency: U. S. NUCLEAR REGULATORY COMMISSION

Title: INTERVIEW OF: JAMES ROBERTS

Docket No.

LOCATION: Waynesboro, Georgia

DATE: March 27, 1990

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ADDENDUM TO INTERVIEW OF Jim Roberts
(Print Identity of Interviewee)

Page	Line	Correction and Reason for Correction
20	24	Change "UF" to "EOF"

Page 1 Date 3/31/90 Signature James Roberts

U. S. NUCLEAR REGULATORY COMMISSION

INTERVIEW OF:

JAMES N. ROBERTS

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Site Manager's Conference Room
Administration Building
Vogtle Electric Generating Plant
Waynesboro, Georgia

Tuesday, March 27, 1990

The interview commenced at 5:03 p.m.

APPEARANCES:

On behalf of the Nuclear Regulatory Commission:

WILLIAM LAZARUS
GENE TRAGER

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PROCEEDINGS

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2 MR. LAZARUS: It's March 27, 1990, 5:03 p.m., at
3 Vogtle Plant. We're interviewing Mr. Jim Roberts regarding
4 the loss of vital power incident of March 20.

5 Whereupon,

6 JAMES N. ROBERTS

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

9 EXAMINATION

10 BY MR. LAZARUS:

11 Q Mr. Roberts, for the record, would you state your
12 name and title?

13 A James N. Roberts, I'm the Emergency Preparedness
14 Coordinator for Plant Vogtle.

15 Q Okay. I understand you were not here during the
16 incident on Tuesday. What has been your role since that
17 time?

18 A I have been assigned to the critique team as the
19 emergency preparedness representative and participating in
20 the critique. We have been gathering information from the
21 ERF, emergency response facility, data, the logs from the
22 managers, we've gathered data from the paperwork that was
23 filled out such as the notification forms. We've reviewed
24 some of the player critique items. I've made informal
25 interviews of some of the players that I happened to know,

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1 some of the communicators, I've talked to them informally
2 and participated in the critique process, formal critique
3 process with meetings.

4 Q What will be the product of this critique?

5 A We'll write a critique report in accordance with a
6 procedure, plant procedure, I think it's 0057, will be the
7 primary product and that will be a narrative summary, time
8 line, problems, corrective action, root cause analysis, an
9 analysis of the whole event. It'll cover more than just
10 emergency plan implementing parts of the event. It'll also
11 cover initiating conditions, those types of activities.

12 Q To try to get us up to speed and make sure we have
13 the same view of what the problems are for our report, could
14 we try to break them down into I guess hardware, procedure
15 and then performance problems I guess is probably the
16 easiest way to approach it. I understand there were a few
17 hardware problems involved in this. Are you aware of
18 problems with the plant emergency radiation monitoring
19 system? Can you share a little bit with us about what you
20 believe the problems with that were?

21 A Okay, now I caveat the PERMS, the plant effluent
22 radiation monitoring system, is not part of my area. PERMS
23 data is normally displayed on the ERF computer as one
24 display item. It's also displayed in the TSC on a local
25 PERMS CRT or terminal which gets its output off the PERMS

1 computer. Some of the PERMS data is also displayed in the
2 control room on the safety grade display panel and of course
3 all the PERMS have their local display. So in this case
4 when we lost power, PERMS was not available on the ERF
5 computer until power was restored. Even after power was
6 restored there was apparently a fault with -- there's two
7 faults that concern PERMS feeding information to the ERF
8 computer. There's a communications computer in the control
9 room which normally provides PERMS data. It was not
10 functioning properly. There's also a separate supply from a
11 mini-computer through a data concentrator and that was
12 working intermittently. Once power was restored, the
13 intermittent operation of the PERMS, from the people I
14 interviewed, caused no significant problem. In other words,
15 if it failed, it was reset and they were able to get the
16 required information.

17 Q From the ERF computer?

18 A From the ERF computer. Now we have to understand
19 also that they weren't that concerned because there wasn't a
20 radiation problem. So they may not have been looking at it
21 as closely as if there was a radiation problem. But on the
22 other hand, there were alternate sources of the
23 information, PERMS computer, TSC. They could have gone
24 there.

25 Q I've heard so many different -- at one point someone

1 mentioned that there was a bad card in the system and even
2 if power was available it would not have been available.
3 But that may have been something else I'm thinking about.

4 A Well there is a -- the normal communications line is
5 not working, has not been working for some period of time I
6 guess. Even if power had been restored, they would not have
7 gotten their normal communications from the PERMS. The
8 alternate communications, it's my understanding, is the
9 mini-computer and it goes through a data concentrator and it
10 worked but it was intermittent. It failed and they'd have
11 to reset it. Now I caveat all this with the fact that I'm
12 not the right person to give you detailed technical data
13 about the PERMS and how it interfaces with the ERF.

14 Q How about the meteorological tower?

15 A The meteorological tower normally feeds Unit 1 ERF
16 computer through an interface device in the control block.
17 The tower is obviously remote from the plant site up on the
18 hill, and the communications means is via microwave.
19 Apparently the microwave equipment is not operating
20 satisfactorily from what I have been told. Again, I'm not
21 the technical expert on that particular fact, but --

22 Q But that was known before the incident?

23 A Yes. There was trouble with the microwave, with the
24 communications panel. Now alternate means of obtaining MET
25 data is to send a person to the tower and to talk on the

1 telephone, which was done and which was satisfactory. The
2 telephone worked fine. So those people were dispatched and
3 they got the meteorological data for the TSC as necessary.
4 Of course the times are on the time line. And that is the
5 prescribed alternate means of obtaining that information.

6 One of the people told me in the TSC that the HP
7 supervisor didn't see any MET data so he sent somebody
8 outside to look at the tower and they got the general wind
9 direction from the cooling tower. The EOF dose assessment
10 manager called Bush Field to find out what conditions were
11 at Bush Field which is an alternate source of MET data.

12 Q The other area that I know there was a malfunction
13 was with the emergency notification network in the control
14 room.

15 A Yes. Now we have an emergency notification network
16 which operates similar to a radio except it goes over
17 telephone lines. In some cases microwave and in some cases
18 copper. You have a speaker and a telephone set with a
19 button in the center. So that's the way it normally
20 operates, it's a broadcast mode and it goes to both Georgia
21 and South Carolina, about seven primary stations off-site of
22 Plant Vogtle. It is powered in the control room off a plug
23 in strip, a 120 volt plug in strip, underneath the table
24 where it sits which is powered off the 1-E bus. The 1-E bus
25 did not have power available, therefore the control room ENN

1 did not work. On the other hand, the TSC did have power and
2 the TSC ENN worked, it was tested by the communicators in
3 the TSC at 10:10 Eastern time and they were able to
4 establish communications with most of the people on the net.
5 So it did work satisfactorily out of the TSC. So that's the
6 situation on the primary ENN, it did not work from the
7 control room.

8 Now we also have a backup ENN that talks to South
9 Carolina only. That is powered off the security diesel, the
10 control box is located in the TSC. The security diesel
11 operated satisfactorily and provided power to the TSC so
12 that system was operational and worked satisfactorily and we
13 were able to contact the South Carolina counties, the state
14 and the Savannah River Site, as soon as they picked it up.
15 It is a selective dial circuit where you dial a two-digit
16 number and it rings all the connected stations. The two-
17 digit all call is 9-9 or you can dial individual stations.

18 The backup system for the Georgia -- two stations in
19 Georgia -- commercial telephone and the tertiary system is a
20 radio with a relay. We can only reach Burke County on the
21 radio and we have to ask them to relay to Georgia Emergency
22 Management Agency in Atlanta. The backup system for Georgia
23 also worked satisfactorily as far as the equipment went.

24 Q That was commercial telephone?

25 A Commercial telephone. And they were able to

1 establish contact as far as equipment is concerned, in both
2 cases.

3 Q One of the things that I've learned from this is I
4 don't think either the people in the TSC or the control room
5 realized that the ENNs were powered from different sources
6 and that the one in the TSC worked and the one in the
7 control room wasn't working.

8 A I do not know, I've had no direct contact whether
9 they were informed of this situation of what the power
10 supplies were. But I think your observation is probably
11 correct that they did not know, although the people in the
12 TSC knew theirs worked.

13 Q They weren't aware why the control room was having
14 difficulties since theirs was working.

15 A Apparently not. Now the TSC was handicapped -- well
16 not handicapped, but the TSC, we procedurally don't take
17 communications control in the TSC until the Emergency
18 Director goes to the TSC because the Emergency Director is
19 the only one that's authorized to release information
20 concerning plant status and he has to sign the notification
21 forms. So the TSC normally waits for him to get there
22 before they take over communications. As part of their
23 activation procedure, they check out their equipment, so
24 that's what they were doing in the early stages of the
25 emergency.

1 Q Was there some indication that -- I guess even when
2 they were using the backup ENN, that they did not get all of
3 the South Carolina alerting points on that, they had to call
4 -- did they have to call some of those commercially, are you
5 aware of that?

6 A No, I'm -- my information is that all stations
7 responded to the backup ENN first call.

8 Q My recollection may be faulty, I was just trying to
9 learn.

10 A We had a problem on the NOUE in February where
11 Allendale did not answer either the primary or the backup
12 and they had to be called on commercial. But this time,
13 they all answered the backup on the 9-9 call as far as the
14 information I have available.

15 Q Okay. I guess that's really it as far as the
16 hardware. Is there anything else hardware-wise that you
17 know where there were problems during the incident?

18 A No, not that I'm aware of. The only real hardware
19 problem is we lost power to the primary ENN and that caused
20 us some difficulty in notification times.

21 Q One of the other things that resulted in some
22 confusion were announcements made by the control room and by
23 the security force regarding evacuation of non-essential
24 personnel. Have you had a chance to look into that at all?

25 A Yes. My evaluation of that situation, the initial

1 page announcement is scripted in the procedure and the
2 scripted portion that tells people to assemble, non-
3 essential people leave the protected area and go to their
4 assembly points and that's not a direct quote, I don't have
5 the procedure in front of me -- was purposely lined out and
6 omitted by the Emergency Director. In doing that, I think
7 his reasoning -- I say think because I haven't talked to
8 him, but other people have -- we think the reason he did
9 that is because he didn't see any danger of radiation
10 because by that time they had restored power, and he didn't
11 feel he needed to evacuate the site and therefore, he chose
12 to delete that.

13 In deleting that, he caused a lot of confusion on
14 the part of the people, the recipients as to what they were
15 to do. Their training told them that if site area emergency
16 is declared, they should either be going home under early
17 dismissal or they should be told to evacuate and at a
18 minimum they should be assembling. So people were confused
19 and they weren't given any contradictory information, they
20 were just not given any information or any orders.

21 Q It was contradictory to their training.

22 A Right. So some people apparently did the right
23 thing, according to their training, and went out to the
24 recreation area, which is the primary relocation center for
25 a site evacuation. Some people went and assembled in the

1 parking lot of the administration building. I'm not sure
2 why they went to the parking lot first-off -- I'm sure later
3 why they went -- and in general there was a lot of
4 confusion.

5 That initial page announcement occurred about 10:01
6 -- and all times I'm talking are Eastern. About 10:17 the
7 emergency page announcement was made to declare the
8 emergency had been downgraded to an alert and for people to
9 report to their assembly areas, which is the proper scripted
10 announcement for an alert. A number of people apparently
11 did not remember what their assembly area was and called the
12 control room or security and a subsequent page announcement
13 was made that they should assemble in the administration
14 building parking lot, and a number of people did that, two
15 or three hundred I guess. I don't have any exact numbers.

16 Those announcements were made in an effort to get
17 accountability inside the protected area, but you can't give
18 accountability until you do assembly. Our procedures are
19 such that you've got to assemble people. They either go to
20 an emergency response facility or they exit the protected
21 area and then we account for all people that didn't do one
22 of those things, it also includes CAS and SAS, but if you
23 don't assemble them and get them out of the protected area
24 then your list of people that are not in the emergency
25 response facilities and yet are still in the protected areas

1 is too long for you to do an acceptable accountability.
2 That's apparently what happened to us here. And we weren't
3 -- they weren't able to rectify the situation by making
4 additional page announcements.

5 Q That's my understanding of the situation and I -- a
6 big part of the problem, the way I see it, is that the site
7 area emergency along with most of the designations and the
8 resultant actions are based on power operations and not
9 really -- these are designed around the situation where
10 you're in a shutdown condition with almost 1200 people on
11 site, some doing critical work that you don't want to stop
12 immediately.

13 A Well it's hard to what-if this situation but I don't
14 think -- I think had the scripted announcement been made, we
15 would have seen an assembly. I think there would have been
16 enough people that would have reacted properly that would
17 carry along some of the people that may have had a fuzzy
18 memory and that people would have left the protected area
19 and assembled -- I really think they would have. But it's
20 hard to say, that's a guess.

21 Q That's probably correct but the shift
22 superintendent's concern was he had some critical work that
23 he considered important to be completed to avoid them
24 packing up their tools and taking off. So I can't fault his
25 judgment for being in one of those areas where the procedure

1 didn't really seem to fit his situation of trying to ad lib
2 it, if you will, at the time. But I think what he did was a
3 reasonable -- was reasonable safety-wise. It resulted in
4 some confusion and difficulty as far as accountability goes,
5 but --

6 A Yeah, and in reality the need for accountability was
7 not present. It's a procedural thing and you really don't
8 need accountability.

9 Q There was no release in progress.

10 A And there was no fire, you know, nothing that you
11 would worry about danger to people. So that the subsequent
12 need for accountability at the alert level, which they did
13 follow the script, but since they had modified the script at
14 the site area emergency level, I think they probably should
15 have also modified the script at the alert level and not
16 tried to do accountability. There was no need for it. They
17 made that judgment once, why not carry it on through.

18 Q Some different pre-scripted messages may be
19 appropriate in shutdown conditions, is that what --

20 A Well I think, you know, ultimately this whole
21 problem will be solved if we look at our emergency action
22 levels a little bit closer as NUMARC has done and in this
23 particular one, I looked at the NUMARC draft emergency
24 action levels.

25 Q The latest draft?

1 A Yeah, they're mode dependent and in the mode we're
2 in, loss of all off-site and on-site power is an alert, not
3 a site area emergency. So that would have alleviated a lot
4 of these problems. So I think that effort to look at the
5 EAL's a little bit closer may have alleviated some of these
6 problems. That's an ongoing thing I understand.

7 Q Are you aware of the current sensitivity to revise
8 EAL's, have you talked to anyone in Region II?

9 A No, I was most recently at a meeting in Phoenix
10 where there was an NRC representative -- I don't remember
11 his name -- which we discussed the NUMARC effort.

12 Q Bob Erickson?

13 A Bob Erickson -- Erickson was his last name. And he
14 said the NRC was reviewing that and it was possible that
15 they would issue that as a NUREG with some caveats which
16 would allow the utilities to either use the NUREG 0654
17 guidance or the NUMARC guidance as modified by the NUREG.

18 Q One of the concerns though is having half of the
19 utilities doing it one way and half doing it another way
20 since the state and NRC responses are built on the emergency
21 classifications design and defined in NUREG 0654. So
22 there's a big sensitivity to that, that's being discussed,
23 what is some uniform way so that everybody can get down
24 their advisory EAL's in a period of time.

25 A Yeah, I understand, but I think the effort to revise

1 EAL's is badly needed and in this case we wouldn't have been
2 at a site area if we had taken the new EAL's, we'd have been
3 at an alert.

4 MR. TRAGER: But in this case -- I mean the action
5 that was taken though, had the circumstances been other than
6 they were, everything went right.

7 THE WITNESS: Right.

8 MR. LAZARUS: And if power had not been restored,
9 I'm not totally convinced that an alert was the right place
10 to be. When would you get to the site area emergency if the
11 diesel didn't start?

12 THE WITNESS: Well you'd obviously get to it at some
13 point and I haven't had a chance to research the EAL's that
14 adequately to determine when you'd go to a site area
15 emergency but I'm sure the provision is in there. I don't
16 know, you'd have to look at it, but I do know the initial --

17 I mean we went to a site area emergency because we lost all
18 on-site and off-site power in a refueling condition. That
19 under the new EAL's scheme would be an alert. If you grade
20 it past that then I don't know where the next step would be.
21 What the degradation step would be but obviously there would
22 need to be a next step to get you to a higher condition.

23 So, you know, that's I guess the EAL look at it, but
24 there's obviously some improvement we could make in the
25 EAL's.

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1 Q Is there anything else that we haven't discussed
2 that you've identified in your critique that you feel is
3 significant as far as needing to re-evaluate and take
4 corrective action?

5 A Well we feel that we've never run a drill where
6 we've required people to assemble -- everybody. We've run
7 token assemblies.

8 Q Through licensing?

9 A We didn't even -- through licensing, we didn't have
10 a protected area when we ran the drill so we couldn't run an
11 assembly. So we need to do that -- we need to do that.

12 Q It appears though that the procedures and the
13 computer worked fine, if people understand the messages that
14 -- you know, within ten minutes I think they had the first
15 list of 100 and some names.

16 A Oh, yeah, we drilled hard enough and I'm reasonably
17 certain the procedures will work. I don't have any problem
18 with that. I just think we need to show people that we're
19 serious and we can do it.

20 Q And people need to be trained on where their
21 assembly areas are.

22 A Fortunately there's only one so that shouldn't be a
23 problem. Initially we put in the script as I recall,
24 assembly areas, because there was more than one. Now we've
25 eliminated and there's only one. Everybody goes to the

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1 administration building and the major reason for that was so
2 they'd be in ear shot of the plant public address system so
3 we could give them further instructions if that was deemed
4 necessary.

5 So I think the procedures are good and I think we've
6 trained people and you know, there were a couple of mistakes
7 that were made that need to be corrected.

8 Q Does the procedure now call for -- when you ask
9 people to report to their assembly area, does it say to
10 report to the administration building?

11 A Our plans are to revise that.

12 Q So it still says assembly area, so they would have
13 to remember what that means?

14 A Yes. But there's only one place, only one place to
15 assemble, and you know, if nine out of ten or whatever
16 percentage says we're supposed to go to assembly area, the
17 rest are going to follow like cattle. I mean that's
18 normally what happens in an emergency. You get one leader
19 and the rest are going to follow. And it's not
20 unsatisfactory to go to the parking lot, totally. They're
21 outside the protected area, they're in one location.

22 Q They're carded out.

23 A They're carded out and you can get people over to
24 tell them what to do. So even though they may not have gone
25 to the admin building, I don't think it was totally

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1 unsatisfactory that they went to the parking lot, but if
2 it's raining of course they can go inside the admin building
3 and it's better because they're in earshot of the page. So
4 that would be a better thing to do. But I think we'd have
5 more confidence that the people knew what to do if we
6 actually had them do it once. I don't know how often you'd
7 have to do it, but we need to do it at least once.

8 Q Yeah, in Region I, for initial licensing, even if
9 the system isn't ready during the appraisal we go back and
10 make the licensee perform accountability drill and
11 demonstrate that, that's part of that process.

12 A We've done it with a number of people, we might
13 evacuate 30-40-50 people and send them out. And the
14 procedures work, the computer works.

15 Q Anything else you can share with us? Gene's looking
16 at human factors problems, any particular human factors jump
17 out of this other than the assembly area issue or --

18 A Well I think -- it's sort of my own personal opinion
19 that we're asking the control room staff under a very tense
20 and stressful situation to make key communications in a
21 short duration and giving them antiquated equipment to do it
22 with. We're still talking on the telephone. I mean
23 basically that's a telephone, a radio. We probably ought to
24 be able to do better than that and give them a hardware
25 system that's robust, simple and doesn't take a lot of

1 supervision to make it work. And I don't know what that
2 system is, but we ought to take a close look and see if we
3 can find one. And there ought to be one.

4 Q A teletype with a bell that goes ding-ding-ding.

5 A Well I'm an old Navy guy.

6 MR. TRAGER: The hardware now is based on what kind
7 of technology, how many years old?

8 THE WITNESS: Oh, I'd guess 30-40.

9 MR. TRAGER: Well I'm sure we have things now that
10 are better than that.

11 MR. LAZARUS: One thing that is done that I've seen
12 at several utilities in Region I that cuts down on a lot of
13 repeated questions, what did you say, what does that mean,
14 is they've installed facsimile machines at the off-site
15 agencies and they fax the notification.

16 THE WITNESS: Yes, it all works very fine if you
17 have power, but the more complex you get, the more difficult
18 it gets. I just think there's a real simple way that
19 doesn't require a skilled operator to operate and still
20 communicates the basic message.

21 Now the other problem you see in the human factors
22 area is you make the head guy review the form anyway to make
23 sure it's right and there's an awful lot of information that
24 probably doesn't need to be on there, even though we --

25 MR. TRAGER: That hasn't been done?

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1 THE WITNESS: What's that?

2 MR. TRAGER: It hasn't been reviewed that way?

3 THE WITNESS: We do it, yeah, but that adds an extra
4 delay in the process. So you look at what happens.

5 MR. TRAGER: You haven't had human factors people
6 look at that?

7 THE WITNESS: Yeah, we have.

8 MR. TRAGER: You have, okay.

9 THE WITNESS: Well you know, our own people. We're
10 down to a one-page form.

11 MR. LAZARUS: But that form is negotiated with the
12 state and local communities and there's not a lot of
13 flexibility you have in changing it.

14 THE WITNESS: Yeah, but we've done pretty well.
15 We've got a pretty simple form now, it's one page long and
16 still it causes people problems -- not big problems but it
17 takes time to fill it out and so, you know, getting that
18 initial communications off I think is what we really need to
19 look very closely at. Most of the time we work our way up,
20 you know, we run the drills and we started at NOUE, we go to
21 an alert, we go to site area emergency and we go to a
22 general. And so by the time you need to make some of these
23 key communications, you're -- we have engineers as
24 communicators, for instance, in the TSC and the UF and so
25 we've got very capable people, skilled people making these

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1 critical communications.

2 But in the control room, you're short on skilled
3 people to make communications. I think we're going to come
4 up with a better hardware system.

5 MR. TRAGER: Your system is designed by Vogtle and
6 you get approval from that system?

7 THE WITNESS: Right now our system is designed by
8 Georgia Power.

9 MR. TRAGER: Okay.

10 THE WITNESS: The ENN system.

11 MR. TRAGER: Yeah, I was thinking, for example,
12 emergency operating procedures. They're put together with
13 certain -- you know, I guess there's sets of rules for
14 writing good procedures and I was just wondering whether the
15 same thing had been done and whether you had, you know,
16 human factors professionals looking at those, the
17 procedures. I guess I would assume you had.

18 THE WITNESS: Well we have our own on-site human
19 factors person that's been very closely associated with us
20 in the procedure development and modification, so yeah,
21 we've had it looked at from that aspect. Now whether we've
22 had an outside consultant to look at it -- no.

23 MR. LAZARUS: One of the things that came up as a
24 possibility why you have your existing system, when you go
25 to the backup ENN and take a look at the order in which

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1 people are notified, you may want to consider providing
2 guidance for the communicators to notify Burke County first,
3 for example, provide some priority on that notification, if
4 they have to be done one at a time especially.

5 THE WITNESS: Yeah, the original concept was we had
6 two communicators and they split the responsibility, so that
7 you might be in parallel. In this incident we went series
8 and that was in retrospect a mistake, should have tried to
9 go in parallel so that you had somebody calling Georgia and
10 Burke County at the same time you were talking to South
11 Carolina. That's where I'm saying that --

12 MR. LAZARUS: Well that's really a training issue.
13 They didn't realize that they weren't talking GEMA until
14 they did the roll call and they didn't answer up because at
15 that point --

16 THE WITNESS: I think it's a supervisory management
17 issue. You've got a communicator, you tell her to do
18 something, if you want somebody else to do something, you've
19 got to tell them to do something also. So you've got to
20 really watch the situation, that's why I'm saying under a
21 very stressful and fast breaking situation like this one
22 was, we need to have a system that doesn't require a lot of
23 supervision to make it work. And when the primary failed in
24 this case, then it requires some decisions to be made on
25 using the backup methods because you don't --

1 MR. LAZARUS: But looking at that, even with the
2 systems you had, some better training and knowledge of those
3 systems would have solved the problems for you without new
4 hardware or new systems. If they had known, for example,
5 that the TSC ENN was a different power source, it's only 50
6 feet away, they could have immediately checked that one if
7 the control room didn't work but nobody was really aware of
8 that until after the fact so that it didn't even enter their
9 minds as a possibility.

10 THE WITNESS: Well they went to their first backup
11 system and it worked so I don't think I'd second-guess them
12 and say they should have gone to the TSC.

13 MR. LAZARUS: Right, but the clerks were not aware
14 t Georgia wasn't supposed to be on that backup system
15 because they kept calling Georgia for Georgia and Burke
16 County to acknowledge and they wouldn't answer, so then it
17 became obvious that they weren't being notified.

18 THE WITNESS: Under the stress of the situation,
19 they forget.

20 MR. LAZARUS: Yeah.

21 THE WITNESS: Subsequently we interviewed them -- my
22 assistant interviewed them and they said oh, yeah, we knew
23 that Georgia and Burke County weren't on there but their
24 statement also says they tried to give Georgia and Burke
25 County -- they were under a lot of stress.

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1 MR. LAZARUS: Oh, I understand that. On the phone
2 it says South Carolina backup ENN too. There were a lot of
3 little clues there, you know, they probably could have
4 realized sooner that they were not getting to Georgia and
5 Burke County and alert the people. I think that was another
6 thing, it was not clear I think to Hopkins and Bockhold that
7 Georgia and Burke County were not being alerted along with
8 everyone else until some time later. It didn't get back up
9 to management that there was a notification problem.

10 THE WITNESS: Yeah, my logs say that the Emergency
11 Director knew it about 10:13, that he was having trouble
12 getting to Burke County and Georgia.

13 MR. LAZARUS: I guess that's not too bad because the
14 message was going out sometime after 10:00. I believe they
15 started at 9:57, was the first.

16 THE WITNESS: Our best judgment is they started
17 transmitting the message on the backup ENN at 9:57.
18 Sometime before then, they must have tried the primary and
19 not been able to get through.

20 MR. LAZARUS: So it still looks like it took them
21 almost 15 minutes to tell the Emergency Director that they
22 were having problems with their primary notification system.

23 THE WITNESS: Correct.

24 MR. LAZARUS: Okay, anything else you can share with
25 us?

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1 THE WITNESS: I think those are the major factors,
2 you know. In summary, I mean we obviously have a problem in
3 notification. We had a hardware problem in that we lost
4 power, that was by design, we designed it to be on the 1-E
5 bus.

6 MR. LAZARUS: Reliable.

7 THE WITNESS: Supposed to be. In this particular
8 scenario, we're always going to lose power to the primary
9 ENN. The backup system, we have drilled on it, it takes
10 supervision to make it work properly and efficiently.

11 MR. LAZARUS: Well essentially what I was trying to
12 say is you're really lucky you've got a full backup ENN with
13 a different power supply, if people were aware of that.

14 THE WITNESS: Right.

15 MR. LAZARUS: So that's something that could be done
16 immediately training-wise to look at that. I think
17 everybody is aware of it now, so --

18 THE WITNESS: Oh, yeah, and on the short term we'll
19 need to add the two Georgia stations on it. So we'll do
20 that.

21 MR. LAZARUS: I mean not the formal South Carolina
22 backup ENN. You in a sense had a backup ENN with a
23 different power supply because it's in the TSC office
24 security computer.

25 THE WITNESS: Correct.

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1 MR. LAZARUS: That would have served the function of
2 a full backup ENN if the people had been aware of that.

3 THE WITNESS: Absolutely. And the accountability
4 problem when they chose not to do accountability and then
5 tried to do it subsequent to that, you know, that was a
6 losing proposition frankly.

7 MR. LAZARUS: Anything, Gene?

8 MR. TRAGER: No, no.

9 MR. LAZARUS: I think that's it. Thank you very
10 much. We're off the record.

11 (Whereupon, the interview was concluded at
12 5:41 p.m.)

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

Name: Interview of JAMES N. ROBERTS

Docket Number:

Place: Vogtle Nuclear Generating Plant, Waynesboro, GA

Date: March 27, 1990

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