

NUCLEAR REGULATORY COMMISSION

ORIGINAL



In the Matter of:

SOUTH CAROLINA ELECTRIC & GAS COMPANY )

Summer Nuclear Station, Unit 1 )

DOCKET NO. 50-395-OL )

DATE: July 1, 1981

PAGES: 1967 thru 2303

AT: Columbia, South Carolina

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REPORTING

400 Virginia Ave., S.W. Washington, D. C. 20024

Telephone: (202) 554-2345

UNITED STATES OF AMERICA

BEFORE THE  
NUCLEAR REGULATORY COMMISSION

In the Matter of: )  
SOUTH CAROLINA ELECTRIC & GAS ) Docket No. 50-395-OL  
COMPANY )  
Summer Nuclear Station, Unit 1 )

Assembly Room II  
Carolina Inn  
Columbia, South Carolina

Wednesday, July 1, 1981

PURSUANT TO ADJOURNMENT, the above-entitled matter  
came on for further hearing, at 9:00 a.m.

APPEARANCES:

Board Members:

HERBERT GROSSMAN, Esq., Chairman  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

GUSTAVE A. LINENBERGER  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

FRANK HOOPER  
Administrative Judge  
Atomic Safety and Licensing Board Panel  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

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1 APPEARANCES (continued):

2 For the NRC Staff:

3 STEVEN GOLDBERG, Esq.  
4 U. S. Nuclear Regulatory Commission  
5 Washington, D. C. 20555

6 and

7 MITZI A. YOUNG, Esq.  
8 U. S. Nuclear Regulatory Commission  
9 Washington, D. C. 20555

10 For the Applicant - South Carolina Electric & Gas Company:

11 JOSEPH B. KNOTTS, JR., Esq.  
12 DONALD K. DANKNER, Esq.  
13 Debevoise & Liberman  
14 1200 Seventeenth Street  
15 Washington, D. C. 20036

16 and

17 RANDOLPH R. MAHAN, Esq.  
18 South Carolina Electric & Gas Company  
19 P. O. Box 764  
20 Columbia, South Carolina 29218

21 For the State of South Carolina:

22 RICHARD P. WILSON, Esq.  
23 Assistant Attorney General  
24 State of South Carolina  
25 P. O. Box 11549  
Columbia, South Carolina

and

DR. SAMUEL L. FINKLEA, III, Ph.D.  
South Carolina Department of Health  
and Environmental Control  
2600 Bull Street  
Columbia, South Carolina 29201

For the Intervenors:

BRETT ALLEN BURSEY  
Route 1  
Little Mountain, South Carolina

I N D E X

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WITNESSES:

DIRECT    CROSS    REDIRECT    RE-CROSS

Capt. Leo Floyd McSwain	1971	1976	-	1998
Richard S. Campbell	1991	1996		
Thomas E. Longshore, Jr.	2001	2023	2041	2044
Col. James DeLoach )				
)	2048	2089		
Col. Hugh Boyd )				
James R. Andonaegui	2119	2141	2154	
George Douglass	2159	2192		
T. Eston Marchant )				
)				
Joseph F. Hipp, Jr. )	2199	2220	2228	
)				
George R. Wise )				
Heyward Shealy )	2231	2296		
)				
George R. Wise )				
)				
Paul Lunsford )				
)				
Pamela Neal )	2281	2296		
)				
Tom Beckham )				
)				
Heyward Shealy )				

EXHIBITS:

FOR IDENTIFICATION    IN EVIDENCE

None

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P R O C E E D I N G S

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JUDGE GROSSMAN: The seventh day of hearing is now in session.

Mr. Knotts?

MR. KNOTTS: Yes, sir?

JUDGE GROSSMAN: I just want to remind you that you still owe us a witness on seismology, the person in the Company who has knowledge of the costs and problems associated with loading or unloading a reservoir and we do want to have such a witness at the next available time, which I would assume would be around July 14th, or the 13th if there is time.

Mr. Bursey, would you call your next witness please?

MR. BURSEY: Yes, sir.

I'd like to call the gentleman from the Highway Patrol as the next witness. If you'll come up here, Captain, and have a seat right in the middle.

Whereupon,

CAPTAIN LEO FLOYD MCSWAIN

was called as a witness by and on behalf of the Intervenor, and having been first duly sworn, was examined and testified as follows:

JUDGE GROSSMAN: Please be seated, sir. Could you state your full name and spell it for the court reporter please?

THE WITNESS: Captain Leo, L-e-o, Floyd, F-l-o-y-d, McSwain, M-c-S-w-a-i-n.

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DIRECT EXAMINATION

2 BY MR. BURSEY:

3 Q Captain McSwain, can you tell us what you do at the  
4 Highway Patrol, sir?

5 A I'm Administrative Training and Planning, sir. And  
6 kind of a jack of all trades within the headquarters.

7 Q Have you been involved in the Highway Patrol's involve-  
8 ment in the emergency plans that an accident at the V. C. Summer  
9 Plant might necessitate implementing?

10 A Yes, sir.

11 Q Can you tell us what your role has been in those?

12 A Well I started attending the meetings first held by the  
13 Emergency Preparedness Division in the Governor's Office, Major  
14 Spell and myself, and were in on the discussions and development  
15 of the plan all the way from the beginning, our part as the  
16 Highway Patrol.

17 Q Yesterday, Colonel Meek went over as what he saw  
18 your department's role in the emergency plans and in summary I  
19 believe that he said it was mostly traffic control.

20 A That's right, yes, sir.

21 Q And there was some question about evacuation routes and  
22 the Colonel was not sure exactly how many different sets of routes  
23 there were. Can you speak to the existence of one, two, three  
24 evacuation routes?

25 A I'm familiar with one that was developed by Major Spell

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1 and Lieutenant Poor and Lieutenant Stevens of District 4. They  
 2 went to the nuclear facility and had county maps of the surrounding  
 3 counties and developed a plan where we could block off at least  
 4 a two-mile radius from the plant within a matter of a very short  
 5 time and they assigned personnel from surrounding counties to  
 6 move into this area and set up these roadblocks and block off the  
 7 area in case that was necessary.

8 Q Now, are you familiar with the route that the SCE&G  
 9 has published and distributed to the residents?

10 A No, I'm not. I'm sure Major Spell would be, but he's  
 11 retired.

12 (Mr. Bursey hands a document to the witness.)

13 Q Are you familiar with the map that I just handed you,  
 14 that is the South Carolina Electric & Gas's public brochure on  
 15 evacuation routes?

16 A Yes, uh-huh.

17 JUDGE GROSSMAN: Let the record show that that has been  
 18 marked for identification as Intervenor's Exhibit 4.

19 Excuse me, Mr. Knotts?

20 MR. KNOTTS: Would the Board like copies to look at  
 21 to follow along?

22 JUDGE GROSSMAN: Yes, please.

23 (Mr. Bursey distributes copies to the Panel.)

24 BY MR. BURSEY:

25 Q Sir, this evacuation map with the routes that it details,

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1 is this the same as the routes that you have developed?

2 A I'd have to study the thing first to really know. If  
3 it was marked off on the map I could tell more about it, but  
4 having to read each line separately, I can't familiarize myself  
5 with it exactly, that quick.

6 (Brief pause.)

7 I believe the folder that Major Lanier has, who  
8 accompanied me here, has a larger map.

9 JUDGE GROSSMAN: Let the record show that the witness  
10 is referring to his own map, a larger one, and comparing that  
11 with Intervenor's Exhibit 4.

12 A They don't appear to be the same to me. Like I say,  
13 it would take some time to study this folder and really --

14 BY MR. BURSEY:

15 Q Could we take a for instance example? Does your map  
16 cover the entire ten-mile zone?

17 A Yes.

18 Q So you would then have a route for my family living over  
19 by Peak on your map? What would the Highway Patrol, how would  
20 they route me if I'm in Peak in the event of an evacuation?

21 A Well I'm sure the evacuation route as we would see it  
22 would be determined by which way the plume was going from the  
23 plant itself, which sector would be affected by the plume, by the  
24 wind direction and all and our people on the scene would select  
25 then, regardless of what's on a map, they would select the safest

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A5pw

1 and best open route to get people out of the area.

2 Q Did South Carolina Electric & Gas confer with you or  
3 your department in making their routes that are reflected in this  
4 map?

5 A If they did, it was with Major Spell because he  
6 handled the on-site part of it.

7 Q Do you know whether they did or not?

8 A No, sir, I don't.

9 JUDGE GROSSMAN: Is Major Spell in the audience?

10 THE WITNESS: Major Spell is retired and has had a  
11 heart operation and is recuperating from the heart operation.

12 JUDGE GROSSMAN: I see. Thank you, sir.

13 BY MR. BURSEY:

14 Q Then Captain, do you think that if your plan is based  
15 on wind direction, you're able to, you have a number of different  
16 scenarios for roadblocks that you can implement, determined by  
17 wind direction?

18 A Yes, we could mark off any sector that was necessary.

19 Q Those various contingencies are already designed?

20 A Yes.

21 Q How many different plans are there?

22 A We only have this one plan showing the sectors, but  
23 every person that we have that would be working in that area is  
24 familiar with the area, knows where the sectors are, each person  
25 assigned to the thing has a map of the sectors designated and of

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A6pw

1 course they would be directed to the area that they were needed.

2 Q Do you think that it makes good sense to pass out,  
3 beforehand, a map that lists a specific direction that an evacuee  
4 is supposed to travel in, irregardless of the wind direction?

5 A No, not as a definite standing way that a person would  
6 go, I don't. This is a personal opinion.

7 Q Yes, sir. You're the training officer, is that right?

8 A That's correct.

9 Q Do you supervise the training of the patrolmen for  
10 radiological emergencies?

11 A That's right.

12 Q Can you tell us what that training entails?

13 A It entails their self-protection, how to read the  
14 dosimeter and be sure that they are safe at all times. This is  
15 the training we gave our people. We have a dosimeter for each  
16 person that we'll have on the scene and they are taught to read  
17 this dosimeter and know the levels that would be safe for them.

18 Q Did the training entail what would happen to them or  
19 to the public if they were exposed above certain levels?

20 A Yes.

21 Q They understand the level at where fatalities can be  
22 expected?

23 A Yes, sir, this has been explained to them by the  
24 training officer.

25 Q And do you recall what level that was, that they were --

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A7pw

1 A I didn't give the actual training. Lieutenant Collins,  
2 of our staff, gave the actual training and Emory Williams of  
3 DHEC.

4 Q And have all of your men that would be expected to be  
5 stationed in this area in the event of a nuclear emergency been  
6 trained in this respect?

7 A All of the officers in the state have been trained in  
8 this respect, all over the state except four or five that may  
9 have been on leave or sick at the time and will be trained at a  
10 later date on a makeup schedule. It consisted of four hours of  
11 training.

12 Q Four hours of classroom training and the information  
13 that's used in the training, the literature that's read and  
14 statistics that are used, where does that come from, do you know?

15 A It came from DHEC, from Mr. Emory Williams. He taught  
16 the first class and trained our, some of our people to do the  
17 training.

18 Q Did you participate in the drill on May 1 at the V. C.  
19 Summer facility?

20 A Yes, but I was at the State DOC.

21 MR. BURSEY: I don't have any more questions for you  
22 right now. If you would answer the questions of the other parties,  
23 I'd appreciate it. Thank you, Captain.

24 JUDGE GROSSMAN: Mr. Knotts?

25 CROSS EXAMINATION

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1 BY MR. KNOTTS:

2 Q Captain, you made reference to sealing off a two-mile  
3 area. Could you elaborate a little bit on what you meant by  
4 that, sir?

5 A We would block all intersections leading into that  
6 plant at least two miles away to keep anyone from going in that's  
7 unauthorized to go in there and in order to assist, if there is  
8 an evacuation of that two mile area, to assist the people and  
9 the traffic getting out of there.

10 Q So you would be controlling both ingress, you would be  
11 both controlling ingress and trying to facilitate egress?

12 A Correct.

13 Q In your discussions with the company or with the county  
14 officials or indeed anyone involved in emergency planning, do you  
15 focus on evacuation routes at any particular distance from the  
16 plant?

17 A We focus on the two mile area first, the main emergency  
18 area.

19 Q Yes, sir, and then do you focus on any other area outside  
20 the two mile area?

21 A No, we didn't. We did at the Robinson plant when we had  
22 that exercise, we evacuated a larger area and moved our personnel  
23 to outlying areas.

24 Q I see, you're speaking now of the exercise on May 1?

25 A That's correct.

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Q Now in terms of your preparation or looking toward the future, have you considered a larger area?

A Yes.

Q And how large an area have you been looking at?

A Up to a ten-mile area.

MR. KNOTTS: Thank you very much.

JUDGE GROSSMAN: Mr. Goldberg?

MR. GOLDBERG: May I have a moment please?

(Brief pause.)

BY MR. GOLDBERG:

Q Captain McSwain, I wonder if you can tell me, within the ten-mile emergency planning zone, who has established the evacuation routes? Has it been your department?

A It's been my department in cooperation with the local government's force and of course under the entire supervision of the State Law Enforcement Division, who is in charge of all police services during an emergency.

Q By local governments, do you mean local sheriff's departments in the affected counties?

A And the civil defense officers in the counties.

MR. GOLDBERG: Thank you.

JUDGE GROSSMAN: Mr. Wilson?

MR. R. WILSON: No questions, Mr. Chairman.

JUDGE LINENBERGER: Captain McSwain, you indicated that the four hours of formal training that your personnel received

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1 concentrated primarily on self-protection with respect to radio-  
2 active exposure, and that is certainly logical because you have  
3 your job to do and you can't be pulling people out who have  
4 unnecessarily exposed themselves if you can avoid that. What,  
5 to what extent did this training program also provide information  
6 about actual contamination of your personnel or their vehicles.  
7 Was that involved in the training?

8 THE WITNESS: I can't answer that. I'd have to have  
9 my Lieutenant Collins here or Mr. Emory Williams here to answer  
10 that. They conducted the training.

11 JUDGE LINENBERGER: All right, sir. You mentioned  
12 involvements in both the Robinson and a Summer Plant exercise.  
13 Were these two separate drills?

14 THE WITNESS: Yes, sir.

15 JUDGE LINENBERGER: I gather that Robinson occurred  
16 first in time?

17 THE WITNESS: That's correct.

18 JUDGE LINENBERGER: And were people actually physically  
19 evacuated from some area around the Robinson plant?

20 THE WITNESS: Yes, sir.

21 JUDGE LINENBERGER: Likewise Summer? Did you actually  
22 move some people out?

23 THE WITNESS: No, sir.

24 JUDGE LINENBERGER: With respect to the Robinson drill,  
25 did you -- well let me ask, was this the first time there was such

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1 a drill that you and your people participated in?

2 THE WITNESS: The Robinson drill was, yes, sir.

3 JUDGE LINENBERGER: Right.

4 THE WITNESS: Well now we sent some observers up to  
5 Charlotte, North Carolina to observe a drill that was held up in  
6 Charlotte. We didn't participate in it but we sent several  
7 supervisors to observe.

8 JUDGE LINENBERGER: Did you have any experiences as a  
9 result of the Robinson drill that surprised you in any way or  
10 caused you to refine or modify your plans and procedures?

11 THE WITNESS: No, sir, I don't believe so, it kind of  
12 went according to plan.

13 JUDGE LINENBERGER: That's reassuring.

14 THE WITNESS: They enlarged it more than we thought it  
15 would be and we were able to take care of it. The Robinson drill  
16 was extended further than we had anticipated it would be, but  
17 we were able to cope with it.

18 JUDGE LINENBERGER: Well that was probably a good test  
19 to have it go that way.

20 Well now with respect to Summer, if people were not  
21 moved, then what did the involvement of, the participation of your  
22 people involve, if you weren't really actually directing traffic?

23 THE WITNESS: If it's permissible I have -- that  
24 morning I wrote down the sequence of events as they happened and  
25 I can give you those events. It won't take but a minute.

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JUDGE LINENBERGER: All right, you can summarize it, we'd appreciate that.

THE WITNESS: At 8:34 our radio station notified me and Captain Timmerman and Colonel Meek that there was an alert at the Summer Plant. Captain Timmerman and myself arrived at the State Emergency Center at 8:45 and we immediately notified the District 4 Commander of the alert and Major Spell of the alert, so that they could start proceeding to the plant site to, in case there was an emergency declared at a later date.

We set up our radio communications to be sure that we had communications and even changed our communications to a direct communication instead of a relay type communication which we had thought we would use.

At 10:24 they had a briefing at the State Emergency Center and confirmed that there was a site emergency with on-site release only and they notified other states of this and instructed us to activate the Forward Emergency Center, which needed to start doing our part in establishing the two-mile roadblocks. That was at 10:24.

At 10:29, I got ahold of Major Spell and told him to activate our Forward Emergency Center and also to establish the roadblocks.

At 10:43, Major Spell called me back and told me the personnel was established and had been notified to establish the roadblocks and at 11:08 he called me back and stated the two-mile



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1 roadblocks had been established at 1100 hours, which was 11:00.

2 Then on, they took over at the Forward Station instead  
3 of the State Station and Major Spell took over command then  
4 because he was at the Forward Station and he was directing our  
5 people at that point through State Law Enforcement Division, who  
6 was in charge of all this.

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1 JUDGE LINENBERGER: When you speak of a forward station,  
2 I presume this means a control station closer to the actual  
3 site then?

4 THE WITNESS: That is correct.

5 JUDGE LINENBERGER: Are these--is the location of these  
6 forward stations provisionally established ahead of an  
7 emergency or do you have to decide where to put one?

8 THE WITNESS: These are established by the Emergency  
9 Preparedness Division, and we are given a place in that center  
10 to operate from.

11 JUDGE LINENBERGER: Now you have consistently talked about  
12 the two-mile--is this radius or diameter?

13 THE WITNESS: This is a radius.

14 JUDGE LINENBERGER: Radius, at which these roadblocks  
15 would be established. There is a Nuclear Regulatory Commission  
16 requirement that provides for the possibility of evacuating  
17 people out to approximately a 10-mile radius if an event should  
18 become sufficiently serious to warrant this.

19 Now, do you know whether your people are familiar with  
20 this 10-mile requirement?

21 THE WITNESS: Yes.

22 JUDGE LINENBERGER: All right, sir, and even if there were  
23 a requirement to evacuate within a 10-mile radius, would you  
24 still set your roadblocks at two miles or are you prepared to  
25 move that two miles out to ten miles?

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THE WITNESS: We would extend that two miles out to the ten miles in whatever direction would be necessary or if it was in all directions, we would extend it in all directions.

JUDGE LINENBERGER: Do you happen to know what is the most likely wind direction that you would have to cope with or in other words, which sector is most likely to be vulnerable under normal weather conditions?

THE WITNESS: I believe--I would have to refresh myself but I believe the predominant wind direction there is from the southwest according to what I have read in the past. I would have to refresh myself but these are things that they brief you at the forward station continuously. They monitor the weather and brief you continuously on the weather, the direction.

JUDGE LINENBERGER: Now you indicated you were first alerted to this summer drill situation at 8:30 in the morning.

THE WITNESS: 8:34, yes, sir.

JUDGE LENENBERG: What agency notified you?

THE WITNESS: The Emergency Preparedness Division.

JUDGE LENENBERGER: I see, and is it, are they the only ones you are supposed to accept this word from or can you accept it from anybody else?

JUDGE LENENBERGER: I am sure we can accept it from anyone. That has never been discussed but we just assume it would come from them each time but I am sure we would accept it from DHEC as DHEC is the--we call DHEC regularly to the traffic

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accidents that involve hazardous materials and work closely with them all the time.

JUDGE LINENBERGER: I was just interested what the possibility might be for a false alarm or for some misinformation to get through to you and alert you unnecessarily and so I was wondering if you had the need to confirm that you were getting this from an authoritative source?

THE WITNESS: I am sure we do have a need to confirm this.

JUDGE LINENBERGER: All right, sir, thank you very much.

THE WITNESS: (Continuing) We have plans to do this.

JUDGE GROSSMAN: Captain McSwain, did you take the training course that was given?

THE WITNESS: No, sir.

JUDGE HOOPER: I have one clarifying question. You mentioned that in your plan as opposed to the one that you were distributed from the applicant, that the evacuation routes were divided into sectors.

How many of such sectors were there in your plan?

THE WITNESS: The same sectors that are listed in this here (indicating), they are the same sectors but each sector had to be evacuated. Of course, the people at the forward station would decide which highways are open and which roads would be--

1 JUDGE HOOPER: The sectors were drawn up exactly on  
2 the same way as the applicant's sectors then, is that correct?

3 THE WITNESS: Yes, and I don't know which were drawn  
4 up first or who drew them up. We didn't draw the sectors. We  
5 only drew up where we would have to station our people to  
6 block off the area.

7 JUDGE HOOPER: All right, now, integrating the  
8 sector map with various wind directions, how is this brought  
9 together in your plant?

10 For example, if you had a southwest wind, which you  
11 said was the most likely, from the town of Jenkinsville, which  
12 would have been--how would you have evacuated with the southwest  
13 wind?

14 THE WITNESS: That would be sectors, if the map is  
15 straight up north, then B-1 and B-2. Of course, this would be  
16 monitored by DHEC and we would be instructed by DHEC or the  
17 State Emergency Center as to which sector. We don't choose  
18 the sector to select, we evacuate it when they choose it and  
19 determine.

20 JUDGE HOOPER: I am not so much concerned about which  
21 sectors are evacuated, but which directions various sectors  
22 are evacuated with various wind directions. This is the point  
23 that has--do you have a plan that takes these two separate  
24 factors into consideration?

25 THE WITNESS: Well, of course, we would evacuate to

1 the right and left.

2 JUDGE HOOPER: But what I am getting at, does your  
3 plan take into consideration starting with the direction of  
4 the prevailing wind and starting with a plume, leaving from  
5 a given, from the plant; does it take into consideration such  
6 a plume in deciding which roads will be used?

7 THE WITNESS: Yes.

8 JUDGE HOOPER: All right.

9 JUDGE GROSSMAN: If I understand it, the intervenor's  
10 exhibit 4 only has a two-mile radius and your map has a 10-mile  
11 radius; are those outlying sectors in the two-mile radius  
12 maps, Intervenor's Exhibit 4, merely extended out for your  
13 map or are there other areas indicated?

14 MR. BURSEY: Excuse me, Judge Grossman, this map is  
15 a 10-mile zone map.

16 JUDGE GROSSMAN: I am sorry, I misunderstood your  
17 testimony.

18 THE WITNESS: The same sectors are set forth in both  
19 maps.

20 JUDGE HOOPER: One other clarifying question. The  
21 way the two-mile limit got into the discussion this morning was,  
22 it is my understanding, was that it was because you declared an  
23 emergency on site and that determined the size of the zone  
24 that you were protecting, is that correct, sir?

25 THE WITNESS: That is correct.



1 JUDGE HOOPER: All right. Thank you.

2 JUDGE GROSSMAN: Mr. Bursey, any redirect?

3 MR. BURSEY: No, sir, that is all I have.

4 JUDGE GROSSMAN: Any recross in light of the Board's  
5 questioning?

6 MR. KNOTTS: No further questions.

7 MR. GOLDBERG: No questions.

8 MR. WILSON: Just briefly, Mr. Chairman.

9 RECROSS EXAMINATION

10 BY MR. WILSON:

11 Q Captain McSwain, as to the roads on which your  
12 barricades would be located, do you know whether or not those  
13 are restricted to state highways, county roads or all of them  
14 or what?

15 A Every road that can get into that two-mile sector  
16 will be blocked off. The Summer plant, I believe that only  
17 requires five different roadblocks.

18 MR. WILSON: Thank you, sir.

19 JUDGE GROSSMAN: Thank you very much, Captain  
20 McSwain.

21 MR. KNOTTS: Judge Grossman, before Captain McSwain  
22 leaves the stand, I wonder if we should dispose of, in some  
23 way, the statement which Colonel Meeks left with us on yesterday.

24 JUDGE GROSSMAN: Which?

25 MR. KNOTTS: Which was the statement from which the



1 Colone l read and the attachments there to.

2 The concern I--not concern, but problems to the  
3 reader of the record that I noted yesterday was that the Colonel  
4 made reference in his statement to several attachments and  
5 unless the documents from which he was reading with the  
6 attachments are made a part of the record, somehow, for the  
7 limited purpose of context or whatever, it will be hard to  
8 follow what the Colonel was referring to.

9 JUDGE GROSSMAN: Well, Mr. Knotts, could you refresh  
10 my recollection as to what he said about those attachments to  
11 your recollection?

12 MR. KNOTTS: Yes, the reporter was taking down what  
13 Colonel Meeks said and at several points in his remarks he  
14 made reference to attachments.

15 For example, he said "all highway patrol officers  
16 in the state have received radiological monitoring training.  
17 Attached is a list of the officers", and in another place  
18 he said something else, attached is something else.

19 It is not a big point.

20 JUDGE GROSSMAN: Well, did you want to have that  
21 included in the record, Mr. Knotts?

22 MR. KNOTTS: I thought it would be useful if it were  
23 at least marked, and then it would be there if anybody--

24 JUDGE GROSSMAN: If it is marked, I don't think the  
25 reporter is going to retain it anyway and it won't be part of

1 the official record. If you want to offer it in the record,  
2 please make your offer.

3 Mr. Bursey, do you intend to offer?

4 MR. BURSEY: Judge, I think the oral testimony is  
5 sufficient.

6 JUDGE GROSSMAN: If there is no offer, I don't see  
7 any purpose to it. I think the testimony will stand for  
8 itself.

9 MR. KNOTTS: All right. How about the pre-filed  
10 affidavit of Colonel Meek, Captain McSwain and Captain  
11 Emmerman.

12 JUDGE GROSSMAN: It was my understanding that  
13 Mr. Bursey didn't intend to offer that and in view of the  
14 fact that there are three persons interviewed and no  
15 attribution, it would probably create more problems than  
16 it is worth.

17 MR. KNOTTS: Very well. I just didn't want there to  
18 be any uncertainty. Thank you.

19 JUDGE GROSSMAN: Thank you very much, Captain.

20 (Witness excused.)

21 JUDGE GROSSMAN: Mr. Bursey, please call your next  
22 witness.

23 MR. BURSEY: Is there someone from the State Fire  
24 Marshal's office here?

25 Could you take the stand, please, sir?

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Whereupon,

RICHARD S. CAMPBELL

was called as a witness by and on behalf of the Intervenor and, having been first July sworn, was examined and testified as follows:

JUDGE GROSSMAN: Please be seated, sir. Would you state your full name and spell it for the reporter?

THE WITNESS: My name is Richard S. Campbell, (Spelling) C-a-m-p-b-e-l-l, State Fire Marshal.

DIRECT EXAMINATION

BY MR. BURSEY:

Q Mr. Campbell, does your office have a role in radiological emergencies?

A It is my understanding we do.

Q Are you familiar with this role?

A No, sir.

Q Is there someone in your office that is versed in the role that your office is supposed to play?

A No, sir. I might shed a little light on that, if I may?

Q Yes, sir.

A The State Fire Marshal's office recently has been revamped. It has been taken out of another agency of the state. It was made a separate agency. It is my understanding that General Services, the agency General Services helped develop

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this plan and I have been unable to get a lot of information on it since I have been subpoenaed to come here.

I believe my assistant was here yesterday to testify and this is the information we have on the plan (indicating). But, I really believe that it is due to the change in our office. I can say this, since January 1 on taking office, I have reviewed the responsibilities of our office many, many times and this plan hasn't arisen in any of those reviews, so I can only say that apparently our office knows nothing of it.

JUDGE GROSSMAN: Who is your assistant by the way?

THE WITNESS: No, Scurry.

JUDGE GROSSMAN: I am sorry. I misheard you.

BY MR. BURSEY:

Q Mr. Campbell, radiological emergencies notwithstanding what is your relationship to volunteer fire departments?

A The actual tie of our office to volunteer fire departments would be through the State Fire Commission itself. It has representatives on it from the volunteer fire departments and we are an agency that has been mandated to have responsibilities statewide in fire prevention. Not so much in suppression, fire prevention and inspections thereof, code enforcement, this type of a program, preventing fires.

I can certainly see us playing a part in this. As I understand it the parts we are to pay I have no problems with.

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1 It is just simply getting the information and participating.

2 Q Well, can you tell us right now what your understanding  
3 of that part that you are supposed to play is?

4 A Well, I believe number one here it says, "Assist in  
5 decontamination along with DHEC". I would say that would not  
6 be a normal procedure for a Fire Marshal's office but with  
7 proper training and the proper funding, I am sure that we could  
8 participate. "Anticipate in drills", I think there we could add  
9 to that. "Train our agents in BETA reading", I am sure of  
10 course training would be made available and we could participate  
11 in that. So far, that is the three things that I, you know,  
12 have heard of.

13 JUDGE GROSSMAN: Let the record show that the witness  
14 is referring to a paper which apparently contains a listing of  
15 those three things.

16 Could you tell us what that is, sir, that you are  
17 reading from?

18 THE WITNESS: Only a list of three items which my  
19 assistant was given yesterday.

20 JUDGE GROSSMAN: By whom?

21 THE WITNESS: By someone, I have no idea.

22 It has Mr. Beckham's name on top and Mr. Jack Wilson,  
23 I don't know if this was supplied by Mr. Beckham or Mr. Wilson  
24 or not.

25 JUDGE GROSSMAN: Did you have any knowledge of those

1 three items before that paper was handed to you?

2 THE WITNESS: No, sir. I talked to Mr. Beckham  
3 last week trying to determine what our responsibilities would  
4 be, but so far, I just got back in town late last night and I  
5 really haven't had a chance to confer with Mr. Beckham this  
6 week about it.

7 BY MR. BURSEY:

8 Q Who is Mr. Beckham?

9 A I believe he is with the Disaster Preparedness.

10 JUDGE GROSSMAN: How is that spelled on that?

11 THE WITNESS: (Spelling) B-e-c-k-h-a-m, Tom.

12 BY MR. BURSEY:

13 Q Well, Mr. Campbell, assuming that this is your role  
14 and you receive training in it, how many men would you have  
15 to commit to service in the event of an emergency?

16 A This date, we have thirty in our agency, and most all  
17 except four would be mobile, in the field type.

18 Q All but four are in the field?

19 A Uh-huh.

20 JUDGE GROSSMAN: The witness nodded yes.

21 BY MR. BURSEY:

22 Q I am sure that you are concerned about safety of your  
23 men and you would want to see them well-trained before entering  
24 into any type of radiological situation, is that correct?

25 A Absolutely.



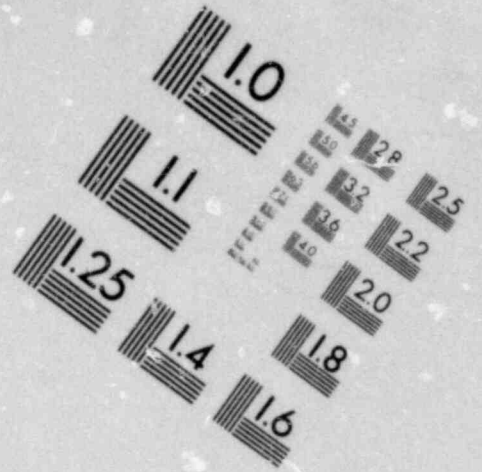
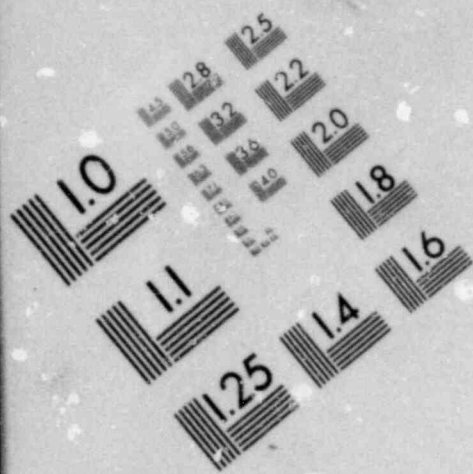
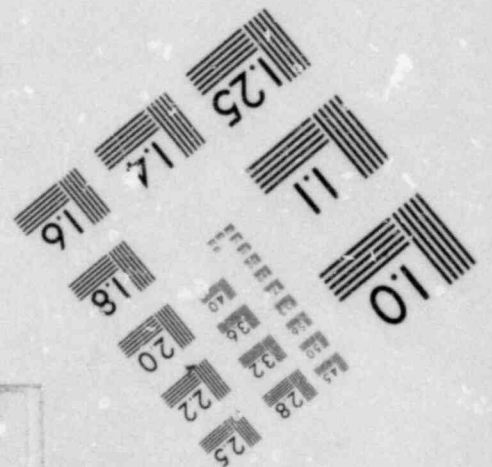
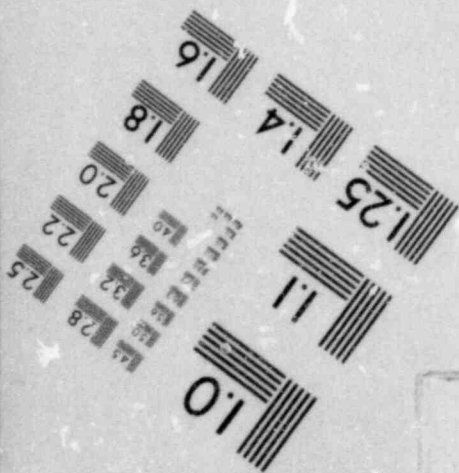
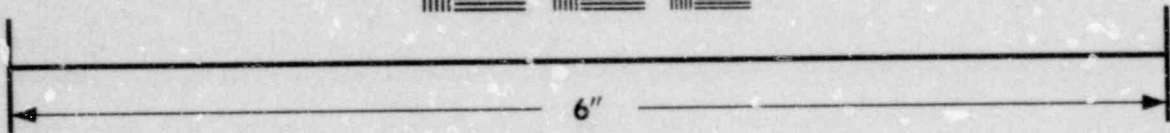
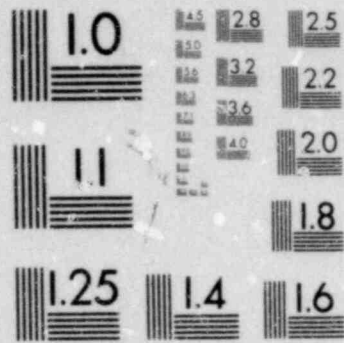


IMAGE EVALUATION  
TEST TARGET (MT-3)





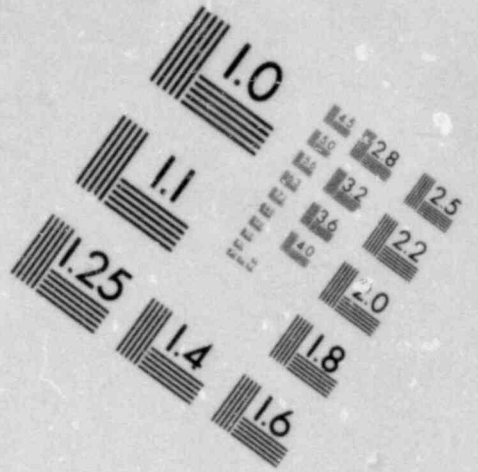
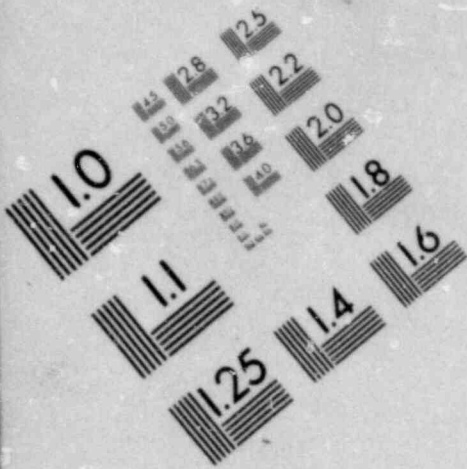
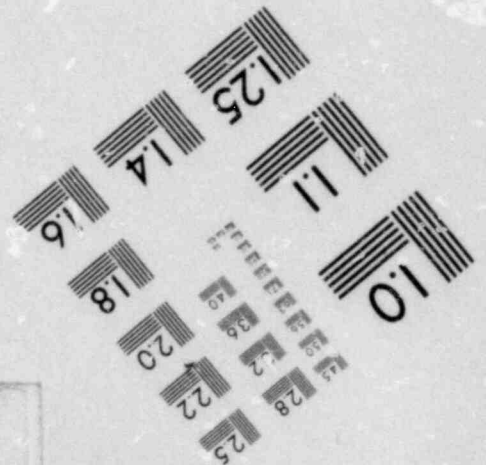
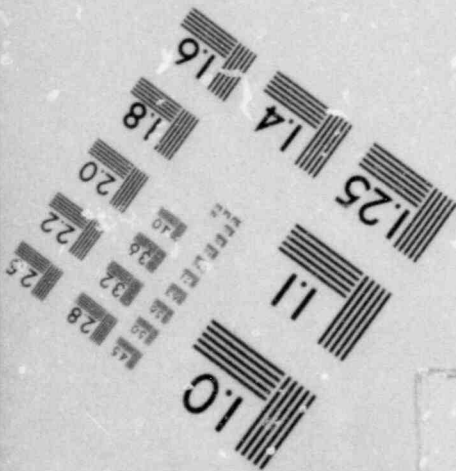
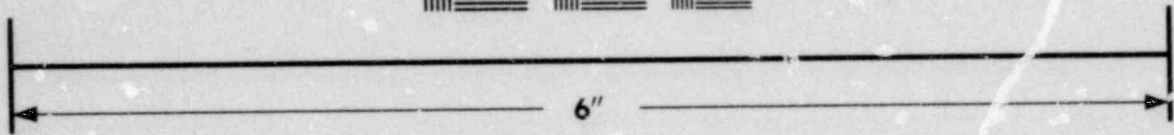
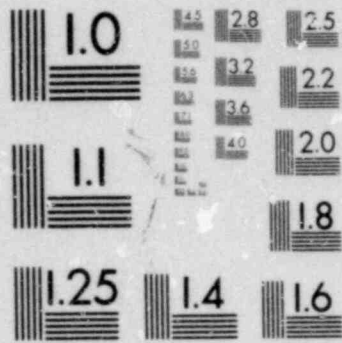


IMAGE EVALUATION  
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Q. Would you want that training to include a clear understanding of what these men could expect in the worst event of an accident?

A. Absolutely, I think I would like to carry that on to the Fire Service as well. Our Fire Service needs to be trained desperately in this area.

Q. I am sorry, I couldn't quite hear that last part.

A. I said I would like to carry that on to the fire service as well, because our fire service in the state needs adequate training in this area desperately, particularly with what we have down in Aiken.

Q. And who is responsible, what state agency would be responsible for offering that training to fire departments?

A. I think the nearest we would have to that with the new Fire Commission being seated last year, the Fire Commission by statute is the focal point of all training for fire service. Of course, the training itself, most of it would I would think be directed through the Fire Academy, Mr. Joe McDonald.

Q. Through the fire captain?

A. Academy.

Q. Academy. Are you aware of the level of training for say volunteer fire departments in the evacuation areas of the nuclear facilities then?

A. No, sir, I am not.

Q. Are you aware if there is any training at all?

1 A I have got to say no because I am not really that  
2 aware of training in the state at the moment.

3 MR. BURSEY: That is all the questions I have for you,  
4 Mr. Campbell, if you would answer any questions that any of the  
5 other parties might have for you.

6 JUDGE GROSSMAN: Mr. Knotts?

7 MR. KNOTTS: No questions, Judge Grossman.

8 JUDGE GROSSMAN: Mr. Goldberg?

9 MR. GOLDBERG: No questions.

10 JUDGE GROSSMAN: Mr. Wilson?

11 MR. WILSON: Thank you, Mr. Chairman.

12 CROSS EXAMINATION

13 BY MR. WILSON:

14 Q Just briefly, Mr. Campbell, are your 30 some odd  
15 people in your agency, are those all firemen?

16 A No, sir, we have I believe 12 LP gas inspectors and  
17 basically 12 deputy state fire marshals and the rest of them  
18 are administrative type.

19 Q Do those people in the field, are they involved in  
20 conducting inspections of fire stations and assisting other  
21 fire officials in administrative tasks primarily, is that  
22 principally what they do?

23 A That's right.

24 Q So they don't really have any line responsibilities  
25 for training, do they?

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A. I am sorry, I didn't understand the question.

Q Do they have any line responsibilities, in other words, when there is a fire are they the ones out there with the pumpers and the ladders?

A. No, sir.

Q Within your department, I believe Mr. Scurry testified yesterday you have some tankers, is that correct? Have some equipment that might be available in an emergency situation?

Okay, that may have been another witness, I am sorry. Okay, but other than the personnel that you have available to assist administratively, is there any other responsibility that your people have under the plan that you are aware of, other than what you have already outlined, those three things on your list there?

A. No, sir.

MR. WILSON: All right, sir, that's all. Thank you, Mr. Campbell.

EXAMINATION

BY JUDGE LINENBERGER:

Q Mr. Campbell, I gather that your current organization is a relatively new creation of the state and relatively new responsibilities for you, you indicated that there has not been much communication between you and people involved with setting up this emergency plan for the state, and you also indicated that it would certainly be desirable for there to be some

1 formal training of personnel in your office. Now, do you have  
2 a mechanism for bringing about this communication such as  
3 you can get familiar with this evacuation plan and familiarize  
4 your people, do you have a way of going about this on your  
5 own initiative or is this something you have to wait for  
6 somebody else in the state to come to you with?

7 A. I don't think there is any question as to the state  
8 has developed a plan which our office is involved in and I  
9 would have authority to go after it and to run it and participate  
10 which I certainly intend to do.

11 Q. So it is your intent to familiarize your office as  
12 soon as possible with this plan, I guess?

13 A. Yes, sir.

14 Q. With respect to training, frequently training involves  
15 money and a budget item of some sort to support it. Now,  
16 will you personally have to or you or your staff have to take  
17 any initiative to get any budget, special budget authorization  
18 so that you can get your people trained? Is this something  
19 that you have to fight for at the state legislature level to  
20 get funds or **is there** some other part of the state government  
21 that looks after you and takes care of your budget?

22 A. No, sir, I spent last week on the floor so that is  
23 part of my responsibility, but, at the same time, we do have  
24 administrative help.

25 If there is a funding problem, of course, if the

1 funds are not available, we would certainly have to go through  
2 the normal procedures to obtain them.

3 Q Is it a practical way for you to proceed to say  
4 start taking one or two of your thirty people at a time and  
5 sending them to the Fire Academy and say I want them trained  
6 or does that take something from the state legislature to  
7 authorize you to do that?

8 A No, that would be within my responsibilities. I  
9 must inform you though that our Fire Academy is also in a  
10 state of flux. We are trying to get it off and running.  
11 Exactly what our capabilities in radiation are at the moment,  
12 I really can't testify to that.

13 JUDGE LINENBERGER: All right, sir. Thank you  
14 very much.

15 JUDGE GROSSMAN: Mr. Bursey, any redirect?

16 MR. BURSEY: No, sir, that is all I have for the  
17 witness. Thank you, sir.

18 JUDGE GROSSMAN: Any further cross examination?

19 MR. KNOTTS: No, sir.

20 MR. GOLDBERG: None.

21 JUDGE GROSSMAN: Thank you very much, Mr. Campbell.

22 (Witness excused.)

23 MR. BURSEY: Judge Grossman, I would like to have about  
24 a 10-minute recess before we call the county office of Emergency  
25 Preparedness people. I need to check to see who is in the



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room and get prepared for it.

JUDGE GROSSMAN: We will take a 10-minute recess.

(Short recess.)

End Take B

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1 JUDGE GROSSMAN: Mr. Bursey, would you call your next  
2 witness, please?

3 MR. BURSEY: Yes, sir. Is Mr. Longshore of Newberry  
4 here?

5 Whereupon,

6 THOMAS E. LONGSHORE, JR.,  
7 was called as a witness on behalf of the intervenor and, having  
8 been first duly sworn, was examined and testified as follows:

9 DIRECT EXAMINATION

10 JUDGE GROSSMAN. Please be seated, sir. Would you  
11 state your full name and spell it for the court reporter?

12 MR. LONGSHORE. Thomas E. Longshore, Jr., L-o-n-g-s-h-o-r-e  
13 BY MR. BURSEY:

14 Q Mr. Longshore, what's your job description?

15 A My title sir, is Director of the Department of Public  
16 Safety of the County of Newberry.

17 Q And in that capacity have you been involved in the  
18 development of an Emergency Rspnse Plan for nuclear accidents  
19 at the V. C. Summer plant?

20 A Yes, sir.

21 Q Can you tell me what involvement you had in the develop-  
22 ment of the Plan?

23 A My involvement with the development of the Plan was  
24 to serve as the coordinator for all of the involved annex agencies  
25 of Newberry County government in the formulation of that Plan.

1 Q As coordinator, you did you serve as a link between  
2 some agencies on one level, the agencies you mentioned as annex  
3 agencies? Can you describe those agencies and the nature of  
4 that link?

5 A My role as coordinator is one in which I serve to  
6 coordinate the efforts of all the involved emergency services  
7 in subsequent other annex agencies within the county in the  
8 formulation of the overall emergency operations plan.

9 Q And what agency is your immediate superior in terms  
10 of the chain of command?

11 A I'm sorry. I didn't understand.

12 Q The agency that is your immediate superior in terms  
13 of the chain of command?

14 A In our county government chain of command, I am respon-  
15 sible directly to the county administrator.

16 Q And would you be receiving any kinds of directive  
17 outside the county government?

18 A Do you have reference, sir, to emergency operations  
19 of the plan formulation itself?

20 Q The emergency operations.

21 A In emergency operations my office would also serve  
22 as the coordinating link between Newberry County service resources  
23 and the State of South Carolina service resources through  
24 the Emergency Preparedness Office here in Columbia.

25 Q And do you have an emergency command center outline

1 for Newberry County?

2 A. Sir, we have permanently operated twenty-four hours a  
3 day an emergency operations center.

4 Q. And where is that?

5 A. The location?

6 Q. Yes.

7 A. 3239 Louis Rich Road.

8 Q. On Newberry?

9 A. Yes, sir.

10 Q. And how far is Newberry from the V. C. Summer plant?

11 A. The Town of Newberry itself, sir?

12 Q. Yes.

13 A. Approximately eighteen and a half miles, approximately  
14 twenty miles, I suppose, in road miles, eighteen and a half  
15 miles.

16 Q. How much of Newberry County is in the ten-mile zone?

17 A. Sir, I'm unable to answer in land miles, square mile,  
18 sbut a sector extending the ten-mile zone into Newberry County  
19 comes approximately some eight to eight and a half miles from  
20 the county border with Fairfield County.

21 Q. And how many residents are there in that area?

22 A. There are approximately forty-five hundred residents  
23 inthe sector. Is that your question, sir?

24 Q. Yes. Now, is your office--have they been involved  
25 in making sure that those forty-five hundred residents have

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1 adequate transportation in the event of an accident?

2 A. Newberry County Emergency Operations Plan has a trans-  
3 portation annex, which is also addressed in the annex for fixed  
4 nuclear facility emergencies, and in that annex to our plan,  
5 we have addressed the availability of transportation facilities  
6 to evacuate those areas.

7 Q. Have you been able to take that plan a step further  
8 and be able to key the available transportation to the needs  
9 of the public?

10 A. I'm not sure I understand your question.

11 Q. Well, my understanding of the plan lists available  
12 vehicles or places that transportation resources could be drawn  
13 from. Do you at this point know how to allocate those resources?

14 A. The primary resource for transportation based on the  
15 Newberry County Plan is utilization of the school buses housed  
16 inside Newberry County. The inventories of the exact vehicles,  
17 their locations and their availability are maintained in a  
18 constant state by the transportation annex officer who also  
19 is the school bus maintenance supervisor.

20 Q. Do you have a list of residents in the area that  
21 are either handicapped or without their own means of transporta-  
22 tion?

23 A. That information is on file with the Department of  
24 Social Services and coordinated with that local agency, also  
25 with the Newberry County Council on Aging and, to the best

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1 knowledge, sir, we have identified those persons.

2 Q You say that's on file with the Department of Social  
3 Services?

4 A Department of Social Service locally as coordinating  
5 and lead agency for the Emergency Welfare Annex to the Newberry  
6 County Plan. This is information that would be updated as  
7 necessary as soon as they avail us of that information.

8 Q And it's your understanding that the Department of  
9 Social Services has a list, a current list of the residents  
10 in the ten-mile zone that don't own their own cars?

11 A Those who would need transportation due to the fact  
12 that they were unable, physically unable to be moved or for  
13 whatever other reason would not have their own transportation,  
14 to the best of our knowledge.

15 Q How has that been gathered, do you know?

16 A My personal involvement with the gathering of that  
17 information would be to contact the head of the DSS and the  
18 head of the Council on Aging of Newberry County and ask them  
19 to try to provide that information from their caseworkers and  
20 their files.

21 Q So if there were individuals that were not actually  
22 on the roles of the Department of Social Service, they would  
23 not be on this list?

24 A That is possible, sir.

25 Q Do you have any institutions, schools or nursing



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1 homes or any facilities of that sort in the Newberry County  
2 portion of the emergency zone?

3 A. There are only schools of the group of institutions  
4 that you mentioned located inside that zone.

5 Q. I'm sorry. I didn't understand that, sir.

6 A. I believe the question was were there facilities  
7 and institutions such as schools, hospitals, nursing homes.  
8 There are no nursing homes; there are no hospitals, but there  
9 are schools inside the ten-mile zone.

10 Q. Can you tell me how many schools, what type of schools?,  
11 how many students?

12 A. The schools are middle and elementary levels. There  
13 is an elementary school in Little Mountain. There's Garmony  
14 Middle School which is near Pomaria, and Pomaria Middle School.

15 Q. Now, are the school buses at these schools during  
16 the day?

17 A. School buses are located at the Garmony School during  
18 the day's activities on a regular school day due to the fact  
19 that elementary students of course are not qualified to operate  
20 machinery. Therefore they are left at the schools and picked  
21 up there again.

22 Q. Has your office been involved with the allocation  
23 of transportation resources to insure that there's available  
24 transportation for all students?

25 A. My office was the coordinating agency for the transportation

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1 annex as it was with all others, yes, sir.

2 Q And who is in charge of the transportation annex in  
3 your plan?

4 A Mr. Donald Layton.

5 Q And what is his office?

6 A He is school bus transportation supervisor, or school  
7 bus maintenance supervisor, I believe his title is.

8 Q Yesterday we had a gentleman from the Department  
9 of Social Services tell us that the schools would lose their  
10 control over buses in the event of an emergency. Is that the  
11 situation in Newberry County?

12 A If it is, sir, I'm not aware of it.

13 Q Would you think that the school buses should be under  
14 the control of the schools that they immediately serve?

15 A I believe, sir, that the organizational system for  
16 the handling of school buses as it currently is is served suffi-  
17 ciently and we have planned for emergencies in that same regard.

18 Q Then you wouldn't know about a portion of the State  
19 Plan that would have the allocatin of those buses themselves  
20 taken out of the hands of the schools and put into the hands  
21 ultimately of the Public Service Commission?

22 A Direct knowledge to quote what you've just mentioned  
23 to me I have none.

24 Q Does your organization have arrangements for local  
25 and back-up hosp tal and medical services?

1 A. Yes, sir.

2 Q. What hospitals are you using?

3 A. Newberry County Memorial Hospital is our primary  
4 receiver of emergency cases within Newberry County.

5 Q. And they have the capability for evaluation of radia-  
6 tion exposure?

7 A. It is my understanding, having conferred with persons  
8 and hospital staff in the past that they have a limited ability  
9 to deal with radiation contamination emergencies due to the  
10 fact that we do have a Department of Nuclear Medicine located  
11 inside the hospital.

12 Q. And do you have a back-up facility?

13 A. The back-up emergency agreement that exists for hospital  
14 operations in Newberry County are the primary responsibility  
15 of the hospital and its administration. I do, however, have  
16 knowledge of the fact that Newberry Hospital often uses Richland  
17 Memorial Hospital as a secondary point of embarkation for  
18 either seriously injured individuals or specialized cases.

19 Also in some instances the Self Memorial Hospital  
20 in Greenwood, South Carolina, is utilized.

21 Q. Is it your understanding if there was a massive influx  
22 of contaminated individuals that you could rely on the services  
23 of Richland Memorial Hospital?

24 A. Sir, I would leave that decision to the hospital  
25 administrator to effect this emergency plan and mass casualty

1 plans as they accomplish them.

2 Q But Richland Memorial is your back-up hospital, right?

3 A Sir, I can't answer that primarily for you, because  
4 it's not my primary area of responsibility. However, my coordi-  
5 nation is with Newberry County Hospital. They have an emergency  
6 plan. Their emergency plan addresses such instances as you've  
7 discussed.

8 Q It was my understanding that Newberry--that your  
9 offices' plan called for your organization to arrange local  
10 and back-up hospital. And so you're saying that you're leaving  
11 the back-up aspect to the local hospitals?

12 A The local hospital's emergency plan addresses secondary  
13 utilization or additional care requirements in the hospital  
14 plan.

15 Q Do you know what the capacity in terms of individuals  
16 that the Newberry County Hospital can handle in a situation  
17 of radioactive contamination?

18 A A certain number, no, sir, I cannot say.

19 Q Is it your understanding that contaminated individuals  
20 should go where? If there is an accident and someone in your  
21 area is contaminated, what should they do?

22 A Sir, decontamination would be the first step provided  
23 there was no complicating injury or illness at that particular  
24 point in time, it is my personal estimation.

25 Q And where would that take place?

1 A. The decontamination would be accomplished at the Recep-  
2 tion Center provided for those persons being evacuated from  
3 the ten-mile zone of the subsequent section of that ten-mile  
4 zone, as deemed necessary by DHEC.

5 Q. And where is your Reception Center going to be located?

6 A. The Reception Center for Newberry County will be  
7 the new National Guard Armory new the intersection of Interstate  
8 26 and South Carolina Highway 34 West. That facility, along  
9 with an adjacent facility which is the Law Enforcement Association  
10 Building, will become the Reception Center.

11 Q. When will that facility be available?

12 A. That facility, based on the information I have received  
13 from the commander of the local National Guard unit should  
14 be available sometime by the 1st of August this year.

15 Q. Do you have contingency plans in the event that the  
16 radioactive plume happens to be blowing, due to prevailing  
17 weather conditions, in the direction of your relocation center?

18 A. By relocation center, sir, do you mean Reception  
19 Center?

20 Q. Yes, sir.

21 A. At this point in time since there was not a completed  
22 facility at the location of the new Armory site, Newberry County  
23 selected Newberry County High School and the adjacent Newberry  
24 County Vocational School on South Carolina Highway 219 East  
25 to serve as Reception Center. We would utilized this same

1 facility in the event that the facility I've just mentioned  
2 to you, the National Guard Armory, should for any reason be  
3 unadvisable or unavailable.

4 Q So as individuals were displaced due to evacuation,  
5 they would report to the Reception Center, and at that point,  
6 what would happen to the individuals that were supposed to  
7 be contaminated? Who would determine what would happen?

8 A A radiological monitoring team would review each person  
9 coming into the Center, determine through radiological monitoring  
10 whether or not that person had suffered contamination.

11 If the person had, then steps would be taken to provide  
12 decontamination and subsequent medical care as required.

13 Q And that radiological team, under whose direction  
14 is that?

15 A At this point in time, sir, it is my understanding  
16 that Newberry County will provide the manpower. However, Newberry  
17 County has not the equipment at this point to undertake such  
18 a task and, as in all cases, we would refer any situation that  
19 exceeded our ability to respond, we would refer our request  
20 for assistance to the State Emergency Preparedness agency.

21 Q What would be the command agency in charge of the  
22 radiation team during decontamination?

23 A The local personnel utilized would be operating directly  
24 from the Emergency Operations Center which would be in touch  
25 through our FEOC and EOC's with the Department of Health and



1 Environmental Control.

2 Q But DHEC would be the--

3 A DHEC obviously is the lead agency in making deter-  
4 minations on radiation as it affects population.

5 Q But on-site supervision of this decontamination team  
6 would be carried out by your office?

7 A The local radiological defense officer, one of the  
8 two.

9 Q And you have individuals that are trained in decontamina-  
10 tion?

11 A In whole-body monitoring and basic decontamination  
12 techniques as provided by the radiological defense officer's  
13 course.

14 Q And how many people do you have trained in that capacity?

15 A As radiological defense officers, two, plus myself.  
16 But I cannot count myself as my duties would be elsewhere.

17 Q And what is your understanding, through your training,  
18 of the level of severity of an accident in the worst situation  
19 at the V. C. Summer plant?

20 A Sir, my training was not geared toward any particular  
21 facility. It was toward any event in general, but primarily  
22 based upon the exchanges suffered in global warfare.

23 Q Have you been instructed into how many people that  
24 you need to be prepared to deal with in the event of a bad  
25 accident at the V. C. Summer plant?

1           A.     Our plans at this point, I feel personally, are adequate  
2 for us to deal with the needs of those persons who may be dis-  
3 placed to to evacuation requirements from an accident at the  
4 V. C. Summer plant.

5           Q.     Now, you left out decontamination. You said you  
6 felt the plans were adequate for displacement.

7           A.     For handling those persons who may be displaced due  
8 to evacuation because of an accident at the V. C. Summer plant.

9           Q.     Do you feel your plans are adequate in regards to  
10 decontamination of civilian population?

11          A.     The planning, I believe, if executed the way it's  
12 planned, would be adequate. Subsequent medical treatment for  
13 radiation sickness and so forth would be referred to the local  
14 medical officers for their decision in the treatment and subse-  
15 quent relocation of those persons.

16          Q.     It would be referred to whose medical officer?

17          A.     To the Newberry County Memorial Hospital, primarily.

18          Q.     Do you have a plan in Newberry County for the distribution  
19 of potassium iodide tablets?

20          A.     The distribution of potassium iodide would rest with  
21 the Department of Health and Environmental Control and upon  
22 the order, as I understand it, prescription of a physician and  
23 would be administered by the local health officials.

24          Q.     Does the county have its own supply of potassium  
25 iodide?

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A. No.

Q. What's your understanding of public notification in the event of a general emergency? What could the public expect, someone living in this ten-mile zone? How would they be notified?

A. When completely equipped the Newberry County warning system would allow for--will allow for outdoor warning sirens which will convey a message that a resident should tune to local broadcast media and acquire emergency information and instructions from those broadcasts.

Q. Does every one, all the residents in your zone, know that that's what they're supposed to do when they hear this siren?

A. I hope so, sir.

Q. How have you assured that they know?

A. We have had in Newberry County an intensified program of public information for the past seven years. There has been local radio announcements for at least the last five years with recorded sounds of warning sirens and what the different tones of those sirens indicate. The bottom line message throughout is the once hearing an alert tone on an outdoor warning siren, the resident is advised to tune to local AM radio stations and receive emergency information.

Since the planning began concerning the V. C. Summer nuclear plant, that emergency information program has been

1 complemented by the emergency brochures such as you have before  
2 you distributed to all the residents in that sector of Newberry  
3 County by the South Carolina Electric & Gas Company.

4 Q Do you have personal knowledge that each resident  
5 in the affected zones of your county have indeed received that?

6 A Not knowledge that every individual has received  
7 it.

8 Q Whose responsibility is that, to make sure that every  
9 individual in the affected zone comprehends, understands that  
10 plan?

11 A The Newberry County Department of Public Safety makes  
12 every effort, all within its power, to convey message which  
13 will enhance the public safety, no matter what the reasons,  
14 within Newberry County. That responsibility ultimately rests  
15 with the Public Safety Department, and we have exhausted every  
16 resource available to us to our knowledge at this point to  
17 see that that informatio is disseminated.

18 Q How have you done that?

19 A Through numerous AM radio talk shows, through a series  
20 of newspaper articles locally, also through the spot announcements  
21 that I mentioned earlier. And, in addition to that, Newberry  
22 County, having had installed warning systems for the last nineteen  
23 years, has both weekly and quarterly tests of all phases of  
24 that siren system.

25 Q Now, this siren system that you refer to that the

1 public has been educated about for the past seven year, is  
2 that in the event of any type of emergency that these sirens  
3 will be used?

4 A. Those are the all-effects emergency situation, not  
5 that siren system that would be associated just with the V.  
6 C. Summer facility. However, very similar and with the same  
7 bottom-line message.

8 Q. Would your siren system be activated in the event  
9 of an emergency at the V. C. Summer plant?

10 A. Depending upon the extent of the emergency situation  
11 would determine activation of that system, the system as it exists  
12 now, sir.

13 Q. You would make an assessment at the time of the emergency  
14 whether to use the siren system?

15 A. The siren system that is in place at this time, which  
16 is not the siren system that has been discussed previously relative  
17 only to the V. C. Summer Nuclear Station. The system as it  
18 is in place now has a tone which is also an alert tone. However,  
19 we can only activate that system countywide from border to  
20 border. Only as necessary and as required by particular situation  
21 do we activate that particular system.

22 Q. Does your office have any responsibility for educating  
23 the public about what to do in the event of a nuclear accident?

24 A. We have striven to accomplish that through the infor-  
25 mational broadcast. Also the company, South Carolina Electric

1 & Gas Company has complemented our efforts to do that by the  
2 distribution of that brochure, as I mentioned earlier.

3 Also there has been--well, there have been several  
4 local newspaper articles regarding emergency planning and the  
5 emergency situations as the exercise concerning V. C. Summer  
6 facility.

7 Q Does your public information include the potential  
8 impact on the public to educate them as to what would happen  
9 to them if they don't respond in the event of an emergency?

10 A Our emphasis as the local level has been placed on  
11 expedient action to be taken by those persons affected by the  
12 emergency situation in order to preserve life and safety.  
13 at that point.

14 Q So it is essentially what to do and not why to do  
15 it?

16 A Yes, sir.

17 Q Do you think the plan would be more effective if the  
18 population was educated as to why they should take protective  
19 measures?

20 A Sir, I feel that our interest in the preservation  
21 of life and property in and about the County of Newberry is  
22 best served by winning the trust and confidence of the popula-  
23 tion and asking them to work with us following the instructions  
24 that they are given because those instructions are given in their  
25 best interest.



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Q Do you have any responsibility for agricultural or dairy production that might be contaminated?

A We have identified through the Clemson Extension Office in Newberry County the location of the major poultry, dairy and so forth, those agricultural industries that may be affected by any sort of release.

Q And has your office had any local contact with any of these agricultural producers about the necessity for their taking preliminary measures?

A Those points are addressed in the Newberry County Pain for Emergency Operations. Newberry County is also very fortunate in that one of the radiological defense officers is also a Clemson Extension employee and therefore we have a very good working relationship in that that individual is thoroughly familiar with his responsibilities and has the knowledge, both radiological officer concept and also Clemson Extension day to day operations and contact already established with those area businessmen.

Q Is there a delegated role in your Emergency Plan to one of your annexes in regards to agricultural concerns?

A The primary responsibility for the monitoring of production from those installations that you've mentioned lies with DHEC.

Q And can I infer that there is no one in your Plan that has a responsibility for agricultural concerns in regards

1 to a radiological emergency?

2 A. The monitoring responsibility for those types of activi-  
3 ties rests with the State.

4 Q. And would the responsibility for advance notice, letting  
5 the farmers know that they're supposed to have stored grain  
6 or be able to shelter their livestock, whose responsibility  
7 is that?

8 A. At this point I will again have to say that the local  
9 responsibility is that of emergency public information. Those  
10 types of activities, should the advance warning be sufficient,  
11 could also be included. However, the primary responsibility  
12 for measure to be taken other than human life safety, would probably  
13 come on the recommendation of DHEC again through the procedures  
14 established by FEOC and SEOC operations, and down line to the  
15 local EOC.

16 Q. But it appears as though at this point no one in your  
17 office or immediately involved in your county plan is informing  
18 the farmers in Newberry County about potential hazards posed  
19 to them by an accident at V. C. Summer?

20 A. No, sir, that's not what I said.

21 Q. Well, I'm not sure what you said. Let me try and  
22 just simply ask you again in the affirmative sense, is there  
23 someone in your office that's doing educational work, specifically  
24 prepared to agricultural producers?

25 A. Sir, again, at this point I will have to make mention

1 to you I can't quote you a procedural step-by-step that is being  
2 accomplished in that particular area, although we address proce-  
3 dures relative to that in our Q Annex, Emergency Public Information  
4 Releases. You'll find that in Section Q of the Newberry County  
5 Plan.

6           However, we enjoy an additional benefit in that one  
7 of the persons who has been very closely related to the emergency  
8 planning effort for the V. C. Summer facility is also a Clemson  
9 Extension employee, and has considerably more working knowledge  
10 of agricultural practices and the people who perform them than  
11 would the average layman. We feel very fortunate in that respect.

12           Q     I believe what's called for in Annex Q is notice that  
13 would go out in the event of an emergency, is that right?

14           A     Yes, sir.

15           Q     Now, what I'm talking about now is that there's a  
16 fifty-mile ingestion zone that covers most if not all of Newberry  
17 County where there's a great deal of agricultural production  
18 that people that are going to be impacted by an accident, according  
19 to my reading of your Plan, may not know of it until the accident?

20           A     Yes, sir.

21           Q     So I--

22           A     If I may state, as I tried to earlier, fifty-mile  
23 ingestion pathway zone monitoring and so forth is the responsi-  
24 bility of the State as I understand it at this time.

25           Q     On page Q-16 of your Plan--

1 A I don't have the document in front of me.

2 Q Well, I do. I'll read to you Section D. "Each school--"  
3 it's mentioned in a previous sentence that there are three public  
4 schools in the ten-mile zone and it says: "Each school has  
5 immediate access to the school buses that are parked on the  
6 school grounds." Would you care to amend that?

7 A The school grounds, case in point there is Garmony  
8 School grounds, sir, the elementary school sir, and also Little  
9 Mountain. However, Pomaria Elementary School having no students  
10 nearly of age to be legally license to drive obviously has no  
11 bus drivers on the school grounds.

12 Garmony School is physically located approximately  
13 a mile and a half from Pomaria Elementary School.

14 Q Do you have any concerns about the fact that the buses  
15 would be driven by teen-agers?

16 A Yes, sir, we have.

17 Q What line of thoughts have those concerns taken you  
18 down?

19 A At this point the consideration of an alternative  
20 manpower force to operate the school buses should the need raise,  
21 and that plan has not been amended because we have not completed  
22 the consideration of that particular point. As soon as we arrive  
23 at a more viable solution, we would make the subsequent amend-  
24 ment to the plan as it stands now.

25 Q Would you recommend that SCE&G do a house to house

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1 survey in the ten-mile zone to insure conclusively that all  
2 of the residents of the affected area fully comprehend the nature  
3 of a nuclear accident and what to do in the event of one?

4 A Sir, I obviously don't feel it's my professional capa-  
5 city to recommend to that company what they do. However, from  
6 a personal standpoint, I'm a firm believer that the more informed  
7 our citizenry is and the more educated the citizenry is, the  
8 more likely it is to survive when the need arises.

9 Q So you think that it would be productive for people  
10 in affected areas to understand the nature of a nuclear accident  
11 and how it affects them?

12 A I'll have to stand on my previous statement, yes,  
13 sir.

14 Q Sir, do you feel that you office is adequately funded  
15 to be able to respond in the event of any contingency at the  
16 V. C. Summer plant?

17 A The funding which is allocated to the Newberry County  
18 Public Safety Department is perhaps the minimum with which we  
19 can operate and effectively accomplish our mission objectives.  
20 The increase of budgetary allotment would obviously enable us  
21 to escalate our efforts in some areas considerably. However,  
22 I feel confident at this point that Newberry County has responded  
23 and responded adequately to the planning requirement for Newberry  
24 County emergency operation of the government relative to V.  
25 C. Summer Nuclear Station.

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1 MR. BURSEY: Sir, that's all the questions I have  
2 for you right now. If you'd answer the questions that any other  
3 party might have for you.

4 JUDGE GROSSMAN: Mr. Knotts?

5 CROSS-EXAMINATION

6 BY MR. KNOTTS:

7 Q Mr. Longshore, has Newberry County entered into any  
8 arrangements with South Carolina Electric & Gas Company with  
9 regards to emergency planning?

10 A I'm not sure what you mean by arrangements.

11 Q Is Newberry County aware of the functions that it  
12 might be called upon to carry out in the event of a radiological  
13 emergency involving the V. C. Summer Nuclear Station?

14 A Yes, sir.

15 Q And in becoming aware of those functions, did you yourself  
16 have contact with South Carolina Electric & Gas Company?

17 A Yes, sir.

18 Q What in general has been the nature of your contacts  
19 with South Carolina Electric & Gas Company and by that I mean,  
20 have these contacts been reduced to written form or written agree-  
21 ments in any fashion?

22 A Mr. Knotts, I think you've asked me a two-part question  
23 and I may be not fully aware of what you are asking. We have  
24 had considerable contact with the representatives of the nuclear  
25 facility during the emergency planning phase. We were supplied



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1 considerable information that was needed in order for us to  
2 complete the emergency plan, information about the facility  
3 and what was there and what could be expected from it and so  
4 forth.

5 The cooperation that was offered by the facility repre-  
6 sentatives was always very good. We have not requested help  
7 that we did not receive in the formulation of that plan.

8 Q And you have in fact formulated a plan?

9 A Yes, sir, the basic Emergency Operations Plan for  
10 Newberry County government has been amended, revised and now  
11 is inclusive of an Annex Q which is fixed nuclear facility.  
12 The fixed nuclear facility that made that necessary was the  
13 V. C. Summer Nuclear Station.

14 Q And has that plan been submitted to any other govern-  
15 mental agency for review or approval?

16 A Yes, sir, we submitted it to the State Emergency Prepared-  
17 ness Division.

18 Q All right. And do you know whether South Carolina  
19 Electric & Gas Company resubmitted it to anyone for review and  
20 approval?

21 A The Gas Comapny?

22 Q The Electric & Gas Company, did they submit it to  
23 the NRC, for example, do you know?

24 A Our plan was turned over--the contact we had was turned  
25 over to the State Emergency Preparedness Division.

1 Q All right. Have you had any feedback from the State  
2 Emergency Preparedness Division or from--well, let me ask you  
3 that. Have you had any comments back?

4 A From the Emergency Preparedness Division relative  
5 to the formulation of the Plan?

6 Q Yes, sir.

7 A Yes, sir.

8 Q And have you made any changes to the Plan as a result  
9 of ththose comments?

10 A In the draft form, yes, sir.

11 Q All right. And there is now a final plan?

12 A Sir, I don't consider it a final plan as such. I  
13 thnik that there is probably a few small areas that we need  
14 to make some changes in and therefore I would still consider  
15 it as a draft plan at this point.

16 Q When will you consider it a final plan?

17 A At such point as I am fully convinced through confer-  
18 ences with the State Emergency Preparedness Division that we  
19 have accomplished everything there that we need to do.

20 Q Sir, if I were to show you a copy of the plan would  
21 you be able to tell us whether it's the latest version to the  
22 plan on a quick look through or would you need some time to  
23 study it?

24 A I would need some time to study it.

25 Q Let me ask Mr. Mahan to give you a copy of the plan

1 but I would like an opportunity to interrogate the witness further  
2 with regard to the plan after he's had a chance to look at the  
3 document. I will proceed with another line very briefly, if  
4 I may.

5 JUDGE LINENBERGER: Mr. Knotts, while the witness  
6 is taking a look, orient us where by compass direction the Newberry  
7 County lies relative to the plant site?

8 MR. KNOTTS: Very well, sir, if we refer to Mr. Burse's  
9 Exhibit 4?

10 MR. BURSEY: Exhibit 4, it would be straight up this  
11 green zone here, that's Newberry County, is that right?

12 MR. LONGSHORE: No, sir. Newberry itself lies more  
13 in a due westerly direction.

14 BY MR. KNOTTS:

15 Q Mr. Longshore, do you have a copy of this map in  
16 front of you?

17 A No, sir.

18 Q Are you familiar with the sector numbers of the map?

19 A D-1, D-2, F-1 and F-2, yes, sir.

20 Q Thank you, sir.

21 A Mr. Knotts, this is obviously a rather lengthy document,  
22 what portion was it that you wanted me to review?

23 Q Mr. Longshore, I just wanted you to be able to authen-  
24 ticate that that was in fact a copy of the plan you prepared  
25 and, if you could, tell me whether it is the most current version

c27da

1 of the plan. I know that's going to take you a bit of time.

2 JUDGE GROSSMAN: My understanding is that Mr. Knotts  
3 intended for you to review that while the next witness was on  
4 the stand and that as soon as he is off we could bring you back  
5 and have you answer some more questions which would be before  
6 noon so that if you could review that while you're sitting in  
7 the audience during the questioning of the next witness. Would  
8 that be sufficient time, sir, for you to review the plan and  
9 determine whether that is the latest plan that you have referred  
10 to?

11 MR. LONGSHORE: I think so.

12 JUDGE GROSSMAN: All right.

13 BY MR. KNOTTS:

14 Q Mr. Longshore, did you participate in a May 1st drill  
15 or exercise involving the Virgil C. Summer Nuclear Station?

16 A Yes, sir.

17 Q And what was the nature of your participation?

18 A I served those functions as outlined for the coord-  
19 dinator/director of the public safety department in this plan  
20 as required by the exercise scenario.

21 Q Could you summarize for us what the principal purpose,  
22 as you saw it, your participation was in the plan? What things  
23 were you trying to establish or illustrate through the exercise?

24 A In Newberry County the exercise, if I can be allowed  
25 to diverge just a little bit, this provides us an opportunity

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1 to reestablish some already reather closely-knit ties between  
2 the emergency services agencies within Newberry County. We  
3 went into the exercise confident that we would be able to respond  
4 adequately to provide the services that would be required for  
5 an accident or an event such as this.

6 During the course of the exercise, we encountered  
7 problems, but tried to make opportunities out of them, which  
8 we did. I think we entered the exercise, as I said, with the  
9 confidence that we could do the things that were called for  
10 in the plan and we came away from the exercise assured of it.

11 Q Did you make any changes in your plan as a result of  
12 the exercise?

13 A Not in the plan as such and not because of the exercise  
14 as such. And changes, at this point I don't know if this has  
15 a bearing on these proceedings or not, but the changes that  
16 I have mentioned and the reason that I chose the word draft  
17 rather than final is because I feel like we can make fine tuning  
18 and adjustments, fine-tuning type adjustments to anything. As  
19 the situation changes on a day by day basis, so wil the require-  
20 ments. As the requirements change, then obviously so does the  
21 plan if they remain adequate.

22 Q So would you say that the plan is a living document  
23 and that you would expect to be modifying it as required over  
24 the years to come?

25 A Yes, sir. In fact I am mandated through some federal

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1 and state agencies with whom we are associated through EPD that  
2 we regularly update the plan.

3 Q All right, sir. You made reference to changes in  
4 the plans that as such did not arise out of the exercise. Were  
5 any of those changes in principal features of the plan as you  
6 understand principal features?

7 A Primarily the nuclues of most of the annexes was retained,  
8 refined, some replaced. We had some changes in personnel that  
9 were done in anticipation and, if I may add at this point, Newberry  
10 County plan for emergency operations is not just the plan for  
11 fixed nuclear facility. It is the entire plan for any type  
12 of emergency situation that may be brought to bear on Newberry  
13 County. This is our notebook for response procedures.

14 One portion of this plan, the Q Annex, as I mentioned  
15 earlier, identifies those procedures that would be brought about  
16 due to a particular type of accident, a fixed nuclear facility  
17 accident, which is one among many of the things that we try  
18 to plan for, and that this documents evidences our planning  
19 for.

20 Q Could you give us one or two illustrations of the  
21 other types of eventualities that the county plans for?

22 A Yes, sir. We plan in advance for severe and inclement  
23 weather, such as tornadoes, flooding, earthquake to a certain  
24 extent, transportation accidents. All of the things that are  
25 mentioned in a section of this plan called vulnerability analysis



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identifies those things that either historically or for some other reason could be reasonably expected to befall the residents of Newberry county, we have attempted to plan for or provide the nucleus planning in here that would enable our emergency services to respond.

Q Have you ever had a real world instance as opposed to an exercise or a drill, a real world instance where you have been able to test the effectiveness of the plan?

A We have never in my tenure in Newberry County activated the entire plan at one time. However, subsections of this plan, for example, those events that require several, and by that I mean more than one emergency service response, we encounter on a--if emergencies can be called regular--we encounter on a repeated basis.

Q Could you give us an example of that? Would that include a transportation accident, for example?

A Transportation accidents have occurred in Newberry County, LP gas emergencies, large tank lines, gasoline petroleum tank lines on I-26 have been involved in accidents, cargo releases, military aircraft crashes within the county, things of that nature.

Q Have any of these instances involved evacuation of any size segment of the public?

A Yes, sir, I recall one very small scale and it was an advisory evacuation, had to do with LP gas. It was because

1 of the critical situation and the relatively short distance to  
2 nearby homes. We advised residents to leave the area until the  
3 area was secure which they subsequently did with no complication.

4 Q Now, have you been told that the Federal Emergency  
5 Management Agency has made any comments on the county plan,  
6 sir?

7 A I heard the Federal Emergency Management representative  
8 comment on the V. C. Summer exercise. Also contact has been  
9 established with Newberry County by the Emergency Preparedness  
10 Division advising us of some requirements that would be a result  
11 of comments made by the FEMA representative.

12 Q Would you characterize any of these--well, let me  
13 ask you first, are you in the process of making any revisions  
14 in your planning or--

15 A To my knowledge, sir, at this particular point the  
16 changes that have been made or the refinements that have been  
17 made in Newberry County's plan based on the advice of the State  
18 Emergency Preparedness Division have been accomplished. The  
19 document that you've given me here, I don't know if it contains  
20 those or not because we have had to reproduce some things several  
21 times. I don't know which group this came out of.

22 Q All right.

23 A But we do have the latest form inclusive of everything  
24 that I'm aware of at this point we've been advised to do.

25 Q All right. And when you answered Mr. Burse's questions

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1 earlier today, were you referring in your own mind to the latest  
2 version of the county plan?

3 A. Obviously, sir. In my estimation once we make a change  
4 or something like that, it has to be.

5 Q Thank you, sir.

6 MR. KNOTTS: No further questions at this time although  
7 I'd like to call the witness back for the purpose of identifying  
8 the current version of the plan if that's what in fact I have  
9 given him.

10 JUDGE GROSSMAN: Fine. Mr. Goldberg?

11 MR. GOLDBERG: Just one question.

12 BY MR. GOLDBERG:

13 Q Mr. Longshore, Mr. Bursey asked you about the possible  
14 need to perform decontamination activities at one of the Newberry  
15 County Reception Centers. Do you recall that question?

16 A. Yes, sir.

17 Q Is it your understanding that you could rely on the  
18 assistance of personnel from the Department of Health and Environ-  
19 mental Control to assist in whatever decontamination measures  
20 were necessary?

21 A. Sir, I'm speculative at this point that Newberry County  
22 is going to have to provide the manpower to do what has to be  
23 done at that Reception Center, augmented by equipment from some  
24 other source other than county resrouces because we don't have  
25 it.

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Secondly, the instructions as to what these people are to do, I'm depending upon state agencies--well, I'm depending on the Emergency Preparedness Division who will get that information secured for me and pass it down line as to exactly what we should do. That may happen before, well in advance of or during a situation.

end take  
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Dlpw 1 Q On the basis of your relationship with the Emergency  
2 Preparedness Division, is it your expectation that you will get  
3 whatever state assistance and cooperation is necessary?

4 A I believe that once I exceed Newberry County's capability  
5 to respond and call for additional support from the State Emergency  
6 Preparedness Division, then I believe that they will exhaust  
7 every available resource to them to supply my needs.

8 MR. GOLDBERG: Thank you.

9 JUDGE GROSSMAN: Mr. Wilson?

10 BY MR. WILSON:

11 Q Mr. Longshore, when you were mentioning a moment ago  
12 the use of county personnel for decontamination at the reception  
13 centers, do you know whether or not those county personnel  
14 include individuals from the county health department as well?

15 A Sir, the county health department personnel was not  
16 in my mind when I made mention of the team that would be working  
17 there at the site.

18 Q All right. Who was?

19 A Personnel who would be drawn from our other emergency  
20 services agencies. Newberry County is unique, I think, in this  
21 situation here in that we have approximately some 400 volunteer  
22 emergency services personnel, both fire and rescue services. We  
23 have had a rather extensive and intensified training program in  
24 radiological monitoring conducted in Newberry within the past  
25 two years, and we feel that there are adequate personnel that we

D2pw

1 can draw that will have at least the basic knowledge that can be  
2 rather easily trained to help us with these other measures.

3 Q All right, Mr. Longshore, generally in an emergency,  
4 who is the individual in Newberry County who can order the use  
5 of county facilities? Is that you, or someone else?

6 A If you will define county facilities, I can answer you  
7 better.

8 Q Such as schools and any public hospitals or other  
9 facilities that may be within the public's ownership, county  
10 ownership.

11 A The plan specifically identifies the use of schools as  
12 shelter facilities within Newberry County.

13 Q Right.

14 A That is done through the coordination between the  
15 Emergency Welfare Annex agencies, one of which is DSS, one of  
16 which is the local school board and so forth. The line of notifi-  
17 cation would originate at the local level within the Emergency  
18 Operations Center and be subsequently transmitted to wherever the  
19 personnel were required by the situation, whether to utilize those  
20 facilities as specified in the plan or just to utilize them as  
21 necessary.

22 Q All right. Now who is the coordinator though at the  
23 Emergency Operations Center in Newberry? Is that you?

24 A That's me.

25 Q Would it be under your order? I mean based on the



D3pw

1 recommendations of the local DSS or welfare individuals, is that  
2 right?

3 A. In a fully operation EOC, my recommendation would be  
4 made to the heads of the local government there, the Chairman of  
5 the County Council and then usually those recommendations are  
6 sent immediately to the point that they need to be.

7 Q Okay, during an emergency, do you take your lead from  
8 the County Council or from the Emergency Preparedness Division?

9 A. I'm sorry, sir, take my what?

10 Q Your lead.

11 A. Our initial notification and information comes into our  
12 Emergency Operations Center usually from the State Emergency  
13 Preparedness Division.

14 Q All right, but, so you act on their recommendations, is  
15 that right?

16 A. Right.

17 Q Can you clarify a little bit the relationship between  
18 the county administrator, the county officers that may be available  
19 and the state emergency agencies a little bit more? I think you've  
20 touched on it a couple of times. Can you sort of give us an  
21 overview of how this operates in Newberry County? It's different  
22 for each county, isn't it, basically?

23 A. Well I can't speak for any other county but Newberry.  
24 Let me make sure I understand what you're asking, you want to  
25 know about the relationships between Newberry County local government

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1 and the state Emergency Preparedness Division?

2 Q Yes, basically that's right.

3 A Basically, the avenue of communication is through  
4 the Department of Public Safety. I act as liaison and technical  
5 advisor to the County Administrator in matters relating to public  
6 safety in and about the County of Newberry. I relate, as does  
7 every other Emergency Preparedness Coordinator in the state with  
8 the Emergency Preparedness Division.

9 Q Well let's take just for a minute, I'm just trying to  
10 get this square in my mind too, let's take an example of say  
11 the Fire Department. If you had need of their assistance, how  
12 would that be obtained in emergency situations?

13 A And you're talking about here as far as an administrative  
14 process, right?

15 Q Getting the Fire Department after a call.

16 A Newberry County again is very unique in that the fire  
17 service in Newberry County is governed by the Newberry County  
18 Board of Rural Fire Control. The Newberry County Board of Rural  
19 Fire Control is appointed by the Governor of the State of South  
20 Carolina. It has powers which are not dependent upon the local  
21 elected officials, such as the county council, they are empowered  
22 to act and even to obligate funds of the county without prior  
23 approval. The ultimate authority in Newberry County Fire Service  
24 in the Board of Rural Fire Control. I also serve as technical  
25 advisor and liaison to the Board of Rural Fire Control and enjoy

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D5pw

1 tremendous cooperation from them in securing the help of these  
2 people, although they have been perfectly willing without needing  
3 that.

4 Q Then in an emergency situation you would expect them  
5 to respond to a request from your office for assistance?

6 A Most definitely. I would say that probably those two  
7 emergency services, fire and rescue, are very heavily figured in  
8 our ability to respond.

9 MR. WILSON: I believe that's all, Mr. Chairman, thank  
10 you.

11 JUDGE GROSSMAN: Mr. Longshore, when the siren system  
12 devoted to V. C. Summer emergency problems is installed, what would  
13 be the procedure for activating that siren system?

14 THE WITNESS: The activation of that siren system, based  
15 on the last discussion that I can recall having had in meetings  
16 where that was the topic was that there would be two control  
17 functions, two control points for that particular siren system,  
18 one located at the facility, one located in the county emergency  
19 operations center. I would think that the ultimate authority to  
20 operate or not to operate that system would rest with local  
21 government within the boundaries of that particular governmental  
22 subdivision.

23 JUDGE LINENBERGER: Mr. Longshore, your comments this  
24 morning tend to inspire confidence that Newberry County knows what  
25 it's doing, I must say. Let me just inquire about a few points here.

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1 You mentioned the cooperation you have with the fire and rescue  
2 people in the county in comments to Mr. Wilson. Can you make a  
3 comparison here as to how your organization works with the  
4 police people in the county in serving in an emergency situation?

5 THE WITNESS: Yes, sir. The relationships between the  
6 Department of Public Safety are very good, good to excellent as  
7 to matters of law enforcement. I personally am a member of the  
8 Law Enforcement Association in Newberry County, serve currently  
9 on its Board of Directors. I have always enjoyed the ultimate  
10 cooperation out of both the county sheriff and all local  
11 municipalities as well as the state agencies which are based in  
12 Newberry County. I don't know what I can tell you other than  
13 we're good friends and we're neighbors too as well as everything  
14 else.

15 JUDGE LINENBERGER: What about ambulance service, is that  
16 handled by the fire people or the police or is it independent?

17 THE WITNESS: The primary ambulance service is provided  
18 in Newberry County through the County Memorial Hospital. All  
19 right, in addition to that, we have three volunteer rescue  
20 squads which also provide emergency ambulance service. Now they  
21 don't do this on a first response basis unless requested to do  
22 so by Newberry County Memorial Hospital. The rescue squad is in  
23 the ambulance business to support the ambulance function at the  
24 hospital. They are the primary purveyor in that sense.

25 JUDGE LINENBERGER: So you don't have a lot of extra

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1 ambulances showing up at the same accident.

2 THE WITNESS: No, sir, gas is too high for that now.

3 JUDGE LINENBERGER: I can imagine that -- I mean, I  
4 can believe that.

5 Well, it would seem to me that the fire, police and  
6 ambulance services are a very important adjunct to the implementa-  
7 tion of this plan and so I would inquire, are their -- is their  
8 assistance and support written into the plan in a way so that  
9 when some feature of the plan goes into effect because of a  
10 certain type of emergency, the fire and police parts of it know  
11 exactly what is expected of them?

12 THE WITNESS: Yes, sir, I believe they do. The officer  
13 who has been designated to work most closely with my office in the  
14 planning process is the Chief Deputy. Of course, Newberry County,  
15 like any other, the sheriff of the county is the highest ranking  
16 law enforcement official there. His authority supersedes that  
17 of the state official within that county. We have enjoyed a  
18 tremendous amount of cooperation from the Chief Deputy in the  
19 formulation of the plans. He and I spent a long time developing  
20 our own evacuation routes and traffic control points as part of  
21 the Q annex to this plan. He was also very heavily involved in  
22 the warning and communication annexes because the Sheriff's  
23 Department has the ultimate responsibility and control over those  
24 particular functions within the county.

25 JUDGE LINENBERGER: Warning and communication?

D8pw

1 THE WITNESS: Yes, sir. The personnel who operate that  
2 equipment, although it's in the EOC, are carried on the payroll  
3 of the Sheriff's Department.

4 JUDGE LINENBERGER: All right, sir, thank you. That's  
5 all.

6 JUDGE GROSSMAN: Sir, I had understood in response to  
7 a question from Mr. Bursey that you didn't have any hospitals  
8 or nursing homes located in the county.

9 THE WITNESS: Within the ten-mile zone, sir, is what I  
10 understood Mr. Bursey's question to be. If it was in the county,  
11 then I'm wrong, we have two nursing homes and one hospital in the  
12 county.

13 Didn't you ask me if it was in the ten-mile zone?

14 MR. BURSEY: (Nodding head affirmatively.)

15 JUDGE GROSSMAN: That was just my misunderstanding and  
16 I just wanted to clarify that. Thank you.

17 Mr. Bursey, do you have any redirect?

18 MR. BURSEY: Yes, sir.

19 REDIRECT EXAMINATION

20 BY MR. BURSEY:

21 Q Sir, are there any nursing homes or hospitals or  
22 facilities that are close to the edge of the ten-mile zone? Any  
23 additional towns or any facilities that you would think would  
24 warrant their inclusion in that zone?

25 A All of the nursing homes, well the two nursing homes

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1 and the hospital in Newberry County are all located within the  
2 city limits of the City of Newberry.

3 Q So there's no additional facilities or population densities  
4 say at 11 miles or 10.5 miles that you think should be included  
5 in that zone?

6 A Sir, I'm acting and basing my planning on the provision  
7 that they're still talking about a ten-mile zone.

8 Q Is it your understanding that that ten-mile zone is  
9 a line that's drawn as if by a compass and doesn't take into  
10 account let's say a dairy farm or a hospital or a population  
11 zone?

12 A I don't see scribed here anything but the unbroken  
13 circles and the maps that we've utilized for planning also are  
14 unbroken circles.

15 Q So you're not familiar with the Nuclear Regulations  
16 that refer to the ten-mile zone as a more or less ten miles and  
17 that you should use common sense in taking in something that  
18 might be at the edge of that ten miles?

19 A Are you asking me if I knew of anything that I thought  
20 should be included outside of this ten-mile zone. To my  
21 knowledge, there is, I don't see any factor in any particular  
22 area immediately outside the ten-mile zone here that would  
23 warrant its inclusion over another area, in my county.

24 Q Yes, sir. My second question, was your understanding  
25 of the rule which I believe you said was a line that is -- a

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1 smooth line.

2 A. Unbroken.

3 Q. Unbroken line.

4 A. For planning purposes in this plan, we have utilized a  
5 ten -- I think you said scribed arc, a ten-mile zone, that's what  
6 we have used in planning, yes, sir.

7 MR. BURSEY: Thank you, sir, that's all the questions  
8 I have.

9 JUDGE GROSSMAN: Mr. Knotts?

10 (Brief pause.)

11 MR. KNOTTS: I don't have any further questions at  
12 this time. I still would like to hold the witness for later.

13 JUDGE GROSSMAN: Mr. Goldberg?

14 MR. GOLDBERG: No questions.

15 JUDGE GROSSMAN: Mr. Wilson?

16 MR. WILSON: No questions.

17 JUDGE GROSSMAN: At this point I would like to take a  
18 ten-minute recess and if Mr. Goldberg or Mr. Knotts could start  
19 some wheels in motion with regard to Mr. Douglas, during the  
20 break, I think that would be advantageous.

21 MR. KNOTTS: We have been advised, Judge Grossman, I  
22 was waiting for a suitable opportunity to mention it, that Mr.  
23 Douglas can be here and intends to be here in about an hour and  
24 a half from 15 minutes ago, so in about an hour and 15 minutes,  
25 and the, I obviously don't have any firsthand knowledge to report

Dllpw

1 to the Board about the circumstances but I have the impression  
2 that the circumstances may be somewhat different than what we've  
3 heard so far.

4 JUDGE GROSSMAN: I still would like to take that ten-  
5 minute recess and permit Mr. Longshore to look at the plan and  
6 see if he can identify that plan after the ten minute break, we  
7 can then excuse him. If not, we will call on him after the next  
8 witness.

9 MR. BURSEY: Judge Grossman, then is it the Board's  
10 intention that I call my next witness, which would be Richland  
11 County, just to give them notice that they're on next?

12 MR. KNOTTS: If Mr. Longshore isn't ready --

13 JUDGE GROSSMAN: If he isn't ready, you can call your  
14 next witness. If he is ready, we'll have Mr. Longshore on for  
15 a minute or two and then you'll call your next witness.

16 MR. BURSEY: Thank you, sir.

17 JUDGE GROSSMAN: Okay, we'll take a ten-minute recess.

18 (A short recess was taken.)

19 JUDGE GROSSMAN: Mr. Longshore, have you familiarized  
20 yourself with the document over the recess?

21 THE WITNESS: Yes sir.

22 JUDGE GROSSMAN: Mr. Knotts, do you want to question him  
23 with regard to it?

24 RE-CROSS EXAMINATION

25 BY MR. KNOTTS:

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1 Q With respect to the plan for Virgil C. Summer that  
2 is incorporated in that document, is it uptodate, sir?

3 A Mr. Knotts, this is the master copy of the plan here  
4 in looseleaf form. There are some changes, even though they may  
5 be small changes, there are some changes between this document  
6 and this one.

7 MR. KNOTTS: Would it be agreeable with the parties if  
8 we made copies, arranged with Mr. Longshore to obtain a copy of  
9 the current version and offered it in evidence?

10 JUDGE GROSSMAN: Well, let me first clarify for the  
11 record that Mr. Longshore was pointing to a looseleaf version,  
12 which he indicated was the latest version of the plan that he  
13 is aware of and indicating that that differs from the version of  
14 the plan that Mr. Knotts had handed him sometime before the recess.  
15 And Mr. Knots is now asking whether it would be agreeable, provided  
16 the parties agree to it, to have the looseleaf version copied.

17 Does anyone have objections to that? Mr. Bursey?

18 MR. BURSEY: No, sir.

19 JUDGE GROSSMAN: Mr. Goldberg?

20 MR. GOLDBERG: No objection.

21 JUDGE GROSSMAN: Mr. Wilson?

22 MR. WILSON: No objection.

23 JUDGE GROSSMAN: That procedure would be fine as far as  
24 the Board's concerned.

25 MR. KNOTTS: Very well, Judge Grossman, I will try and

D13pw

1 make arrangements to borrow the book and get it copied at a  
 2 later time, perhaps tomorrow or the week of the 13th, we will  
 3 offer it and it will come up as I believe Applicant's 8, if I'm  
 4 not mistaken.

5 JUDGE GROSSMAN: I take it, Mr. Bursey and Mr. Goldberg  
 6 and Mr. Wilson, no one would have objection to having that copy  
 7 submitted without having Mr. Longshore back again to identify  
 8 that copy?

9 MR. BURSEY: That's correct.

10 MR. GOLDBERG: Correct.

11 MR. WILSON: That's correct, Mr. Chairman.

12 JUDGE GROSSMAN: Fine, and I would like to excuse the  
 13 witness. Thank you very much, sir, for your very responsive  
 14 testimony.

(Witness excused.)

16 JUDGE GROSSMAN: Mr. Bursey, you may call your next  
 17 witness.

18 MR. BURSEY: We would like to call Colonel DeLoach of  
 19 the Richland County Office of Emergency Preparedness.

20 COLONEL DELOACH: If it please the Court, and Mr.  
 21 Bursey's acceptance of this, as of midnight last night I am no  
 22 longer any representative of Richland County, I retired, and  
 23 although I'm quite willing to face a dissenter, I've never  
 24 passed the buck, I think it would be proper if you were to agree  
 25 to Colonel Boyd, my successor, sitting with us. Would the Board

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object to that?

JUDGE GROSSMAN: Not at all, we prefer that.

MR. BURSEY: That's fine with me. Mr. Boyd, can you come up, please, sir?

COLONEL DELOACH: Hugh, I wanted to keep you out of it, son, but this is what comes with the job.

(Laughter.)

Whereupon,

COLONEL JAMES DELOACH  
COLONEL HUGH K. BOYD

were called as witnesses by and on behalf of Intervenor Bursey, and having been first duly sworn, were examined and testified as follows:

JUDGE GROSSMAN: Please be seated, and could you each in turn give and spell your full names?

COLONEL DELOACH: James W. DeLoach, and that is spelled capital D-e capital L-o-a-c-h, no "e" on the end as you presently have it, former director Richland County-City of Columbia Civil Defense -- do you want me to continue, Mr. Bursey?

JUDGE GROSSMAN: That's fine. The other gentleman, sir, could you give us your name?

MR. BOYD: Hugh, H-u-g-h, K. Boyd, B-o-y-d, Jr., Coordinator, Richland County-City of Columbia Civil Defense.

JUDGE GROSSMAN: Under the rules we've adopted for panels, Mr. Bursey can direct a question to whomever he desires.



D15pw 1 If the other person on the panel has some disagreement or some  
2 clarification for the, with regard to the answer, he may then  
3 speak up and give that clarification.

4 MR. BURSEY: Thank you, sir.

5 DIRECT EXAMINATION

6 BY MR. BURSEY: (Witness DeLoach)

7 Q Colonel DeLoach, can you describe to me the role that  
8 your agency and that yourself in particular has had in developing  
9 emergency response plans for the V. C. Summer Plant?

10 A Our activities go back to 1978, were intensified in  
11 1979 in which we moved away from mass casualty activities and  
12 centered on accidents related to nuclear activities and chemical  
13 and then became more intensified in middle 1980 with me delegating  
14 authority to Hugh Boyd to act as my representative in carrying  
15 out the planning for the Richland County-City of Columbia Civil  
16 Defense, that portion pertaining to the sector involved.

17 Q Can you tell me what general areas of responsibility  
18 you dealt with in the planning stages?

19 A Every area as Director of the office, I was actively  
20 involved in every one of them. The pick and shovel work, if I  
21 may use that term, was done by Hugh and his assistants. Does that  
22 answer the question? I really don't get what you're after, Burs.

23 Q Well, sir, I was looking for an enumeration of let's  
24 say evacuation --

25 A All right, it follows everything, it follows from warning,

Dl6pw

1 advisories, evacuation, reception, registration, feeding, housing,  
2 security.

3 Q Was there a decontamination role?

4 A There is a definite decontamination role. Do you want  
5 me to enlarge upon that?

6 Q Well let's kind of deal with it chronologically as the  
7 plan developed.

8 A Go ahead.

9 Q As the plan developed, I mean it was brought to your  
10 attention the plant was being built and you needed to develop  
11 a plan. Was your plan developed with an understanding of the  
12 severity of potential accidents?

13 A I absolutely would tell you this as a bit of philosophy,  
14 it has to be dealt with in our job, a person involved in Civil  
15 Defense, be it Director, Coordinator, whatever it is, must believe  
16 that an accident will happen and that Murphy's law will be the  
17 order of the day. Consequently, you can leave nothing to  
18 second guessing, it has to be as if it's going to happen. Did  
19 I answer that?

20 Q Yes, sir, that's the beginning of an explanation. What  
21 I'm wondering is were you told by SCE&G or any agency of the state,  
22 were you and your office educated as to what to expect in this  
23 worst case event?

24 A From a variety of sources, not only the power company  
25 which we're all referring to right here, but different areas of

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D17pw 1 agencies, the Energy Department and others that we have worked  
2 with very closely. The severity of it, we certainly understand.

3 Q Could you explain to me your understanding of the  
4 severity?

5 A The severity of it is it could be something so far as  
6 misleading the public and getting them all upset, that would be  
7 one of the worst things I could be confronted with and to be  
8 confronted with. There could be an accident within the plant,  
9 it could be life endangering, requiring evacuation. The severity  
10 of it, I do not go along with some of the philosophy that is put  
11 out. And that's about all I can say without rambling all over the  
12 shop and I don't want to do that. I want to be as explicit as I  
13 can.

14 Q Well getting outside of philosophies, have you been  
15 appraised of any government assessments of the nature of the  
16 impacts that could happen in terms of fatalities and injuries and  
17 exposures?

18 A Yes, and that has come through two sources. I would  
19 think that Hugh ought to pick up on this right now because the  
20 latest working in Oak Ridge, he would be able to tell you what  
21 he passed on to me. What I'm saying is Hugh brought back these  
22 data and passed them on to me.

23 MR. BURSEY: Mr. Boyd, can you tell us then what your  
24 office's understanding has been of what the worst case event  
25 would be that you would need to be prepared for?

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1 MR. BOYD: Mr. Bursey, I attended the International  
 2 Conference on Radiation Accidents in Oak Ridge, Tennessee in  
 3 19, I believe it was '79 and all radiation accidents were covered  
 4 at that conference, which was attended by scientists from all over  
 5 the world. From the various sections of it, I have read the  
 6 Rasmussen Report, I have read the other reports, I have been to  
 7 the school as Las Vegas where they teach radioactive emergency  
 8 response. We have sent other people there, we have sent other  
 9 people to Oak Ridge to go over the medical aspects of radiation.

10 MR. BURSEY: Do you recall what the Rasmussen Report  
 11 projected could be a maximum of fatalities?

12 MR. BOYD: It was a very wide variance, as I recall,  
 13 from a very small number to a very large number, depending on  
 14 what happened.

15 MR. BURSEY: Would the maximum of 3,400 sound in the  
 16 ballpark of the maximum?

17 MR. GOLDBERG: Objection. Judge Grossman, I object  
 18 to this line of questioning. These individuals I do not believe  
 19 are being offered as expertise, nor has there been any indication  
 20 that they have expertise in accident analyses, nor has any foundation  
 21 been laid as necessary for them to give that expert testimony, so  
 22 I really think we ought to try to get back to the issues and the  
 23 responsibilities of these people.

24 JUDGE GROSSMAN: I think these people are responsible  
 25 for emergency reaction to an emergency at the plant, so the

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1 objection isn't well taken on those grounds; however, I think it's  
2 inappropriate, Mr. Bursey, to use those figures of fatalities that  
3 have no relevance to this particular area. I think it would be  
4 a little more profitable for you to talk in terms of what might  
5 occur during a major accident rather than talk in terms of  
6 fatalities that couldn't possibly exist because of the density  
7 in the area. So if you could frame your questions with regard to  
8 a postulated happening, I think it would be more proper.

9 Mr. Goldberg?

10 MR. GOLDBERG: Yes, Judge, you quite well point out that  
11 that is an alternative ground for objection. You know, the staff  
12 did in its final environmental statement, do site specific  
13 analyses of a variety of accidents including severe accidents.  
14 The kind of hypotheses that are involved in some portions of the  
15 reactor safety study do not assume, so far as I know, any  
16 protective action. You're quite right that they would have no  
17 immediate application to the local conditions here.

18 JUDGE GROSSMAN: Mr. Bursey, you may proceed.

19 COLONEL DELOACH: May I inject one thing. I came here  
20 to talk about something that happens beyond the safety walls, the  
21 safety enclosures of the V. C. Summer Plant, which I feel I'm  
22 quite qualified. When you move into the technical area, I will  
23 tell the Court right now, I just don't feel I'm qualified and  
24 would feel very uncomfortable.

25 MR. BURSEY: Colonel DeLoach, would you agree with me

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1 that as a planner in order to develop an adequate plan, you need  
2 some notion of what you're facing?

3 COLONEL DELOACH: In broad general terms, but I wouldn't  
4 know how many casualties I would expect in combat, I know I would  
5 expect some, but not the extent that I would have to know  
6 specifically and I think that's another question which I don't  
7 feel qualified to answer. I know there's a danger there because  
8 I've been told there's a danger there. Beyond that, I --

9 MR. BURSEY: Well sir, let me ask you who told you  
10 there was a danger there?

11 COLONEL DELOACH: That came through sources that go  
12 back to 1939.

13 MR. BURSEY: Well I'm just trying to lay some groundwork  
14 for your understanding of what you made this plan to the  
15 expectation of and we'll just leave it like that and --

16 COLONEL DELOACH: Well frame it like you want to do it  
17 like that, don't move me into the technical end of it, Brett.

18 MR. BURSEY: You have understood along that there could  
19 be a high number of fatalities?

20 COLONEL DELOACH: Not necessarily. I understand there  
21 could be a situation which I was told was life endangering  
22 requiring an evacuation, consequently I prepared my plan to remove  
23 people from the endangered zone and some area beyond.

24 MR. BURSEY: But you were not informed that, I believe  
25 you have about 900 people in your responsibility area, that a

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1 large percentage of those people could die in the event of  
2 a nuclear accident.

3 MR. GOLDBERG: Judge Grossman, I object, it assumes  
4 facts not in the record. I think it's more profitable to ask  
5 these people if they were given the instructions to effectuate  
6 their evacuation plans, what they would do. There's no basis in  
7 the record to assume fatalities. I think what we ought to do is  
8 establish a record to assume what kind of effective action is  
9 going to be taken in a situation that necessitates it.

10 JUDGE GROSSMAN: Mr. Goldberg, I hesitate to prescribe  
11 to Mr. Bursey the exact course of his examination. He is now  
12 inquiring as to the information that was conveyed with regard to  
13 emergency situations and I think that's properly within the area.  
14 There is no foundation for there being no estimation of the  
15 percentage of fatalities, then the testimony will not be worthwhile  
16 for him, but I don't want to unduly interfere with this line of  
17 questioning, so I will overrule the objection and allow Mr. Bursey  
18 to proceed on that.

19 MR. BURSEY: Thank you, sir. I'll try and be --

20 COLONEL DELOACH: Stay with the plan, Brett.

21 MR. BURSEY: Well I'm sure the plan had to at least  
22 address the fact that there could be fatalities in an accident.

23 COLONEL DELOACH: That's correct.

24 MR. BURSEY: And contaminated individuals. There was  
25 no discussion about how many or what level of severity you could

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1 anticipate?

2 COLONEL DELOACH: No, the discussions have been going  
3 on so many years, it'd be hard to pinpoint in one of them the  
4 fact that something could happen. I have to expect it to happen.  
5 As to what degree, the severity of it, no. I've got to move  
6 people out of there with a minimum --

7 JUDGE GROSSMAN: Excuse me. Mr. Boyd, I want to  
8 repeat again that if you do have information or are aware of  
9 information that was imparted to you that Colonel DeLoach is not  
10 familiar with, that you have the opportunity any time to speak  
11 up. So I just want to remind you about that.

12 Mr. Bursey?

13 MR. BURSEY: All right. Colonel DeLoach, let's take  
14 a hypothetical accident, and say that your office has been  
15 notified. Who would notify them and what would your response be  
16 if you were told there was a general emergency necessitating  
17 evacuation in your area of responsibility?

18 COLONEL DELOACH: The notification would come from at  
19 least two methods; one, the ring down phone interconnecting my  
20 office with the V. C. Summer Plant. In addition to that, there  
21 is a ring down phone connecting with the City level of the  
22 operation. The activation of the warning, and I would prefer to  
23 call it advisory or alert, but I'll go along with the context of  
24 the plan, is activation of the warning system would be two-fold.  
25 First, utilizing what is a tone controlled metro net that

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1 interconnects all of the public safety divisions, weather  
 2 bureau, certain key individuals and every AM-FM radio and TV  
 3 station within the Richland County area. I would do two things,  
 4 and I have done this before in actuality. Go in this case to WIS,  
 5 tone in on WIS and say I will be sounding sirens, I will be  
 6 giving authority for sirens to be sounded in 60 seconds. The  
 7 reason I am doing this is because -- and then be sure they understand  
 8 what those sirens mean. Then tell the power company to activate.  
 9 The reason being there that I don't want sirens to go sounding  
 10 and people to go to their radios and not hear instantly what  
 11 the situation.

12 Hugh, do you want to enlarge on that?

13 MR. BOYD: No, I think that covers it. The activation  
 14 could be either as Mr. Longshore pointed out in our office where  
 15 we would have an activator or at the plant itself. At any  
 16 rate, we would be the ones that would say the sirens would be  
 17 activated.

18 COLONEL DELOACH: We work on an around-the-clock basis.

19 MR. BURSEY: The sierns that you're referring to now  
 20 are Richland -- these are your sirens?

21 MR. BOYD: No, we have no sirens, Brett. The sirens  
 22 would have to be put in, would be the sirens for the area D-1 to  
 23 alert people of any danger at V. C. Summer Plant.

24  
 25

1 MR. BURSEY: So the decision to activate SCE&G  
2 sirens in Zone D-1 partially lies with your office?

3 MR. DELOACH: Lies with our office.

4 MR. BURSEY: Lies completely with your office?

5 MR. DELOACH: There are certain things we are not  
6 going to delegate.

7 MR. BURSEY: So after the sirens have been sounded,  
8 the general emergency is in effect and you have been instructed  
9 by the Governor to initiate evacuation of zone D-1, what  
10 happens?

11 MR. DELOACH: I want to question one part, you say  
12 instructed by the Governor, I don't know necessarily that I  
13 would depend on the governor to tell me to evacuate.

14 We have, and once again this is not philosophy, this  
15 is fact. In fact, I have tried to make Richland County as  
16 self-sufficient as possible and I use the word "possible" very  
17 carefully, not practical but possible, and I am not certain  
18 that I would wait on the governor if I thought the situation was  
19 such that I wanted to move 'em on out and I might move on my  
20 own, so you can lay off the reference there to the state in  
21 that respect.

22 Now that is as it was as of mid-night last night.

23 MR. BOYD: It will remain that way. It is our  
24 responsibility to take care of the people of Richland County  
25 and we intend to do that. If there are in danger, we are going

1 to move them.

2 MR. BURSEY: I admire that and as a Richland County  
3 resident support your forthrightness but along that line,  
4 before we go into what you do to evacuate people, Colonel  
5 DeLoach, you had said earlier in a letter you sent me, the  
6 plan itself is presently in the hands of--that's not a quote,  
7 just a minute.

8 (Brief pause.)

9 MR. DELOACH: That is the last paragraph.

10 MR. BURSEY: Yes. The part where it says "I would  
11 be less than candid if I did not admit that this is a problem  
12 for me, that the NRC and FEMA format is so strict since I am  
13 accustomed to more flexible arrangements, providing the  
14 equivalent commander's option".

15 MR. DELOACH: I think you will find evidence of that  
16 in my former statement when I said we would take care of ourselves  
17 without interfering, or without any attempts to rule, but the  
18 art of planning of which I hope I have been experienced, we  
19 can become too rigid and I expressed, I tell people right there  
20 at the moment, I think NRC and FEMA were too rig'ed in their  
21 requirements for us to go right down the line, not leaving certain  
22 morays and habits of the community.

23 These are strict old German stock up in there that  
24 will take care of themselves, which you are not a native, and  
25 I don't like to be--I like what I call--did I not use "Commander's

1 options" in there?

2 MR. BURSEY: Yes, sir.

3 MR. DELOACH: That is what I am talking to if it please  
4 the court, there are certain commander's options that will lead  
5 you at the moment that you must face and you can come around.  
6 I think it has been too inflexible but I think this thing will  
7 work out as time goes on and the plant becomes more operationable,  
8 the proposed date of operations. I think we will, some of the  
9 rigidity at present that is brought out in there will be laid  
10 aside.

11 JUDGE GROSSMAN: Mr. Bursey, let me suggest that  
12 the proper way to use a prior statement is to ask the question  
13 now and have the answer and if there is any discrepancy then  
14 to read the prior question and answer. I don't intend to be  
15 strict about it but if you are going to do it in some other  
16 way, at least have it fully explained on the record. In other  
17 words, just repeating a question that has references, repeating  
18 an answer that has references to the question without mentioning  
19 the question just leaves a big gap in the record, so please try  
20 and--

21 MR. BURSEY: Let me ask then if in asking the question  
22 like this if I could ask the Colonel have you said or did you  
23 say without reference to a letter, would that be better?

24 JUDGE GROSSMAN: Well, fine, but first why don't you  
25 ask him the same question now and if he gives you the same



1 answer, you don't have to bother with that. It is only if the  
2 answer is different that you would then usually resort to the  
3 prior question and answer.

4 MR. BURSEY: Thank you, sir.

5 Colonel DeLoach, can you give us some examples of the  
6 NRC and FEMA format and guidelines that you feel restrict  
7 your best responses?

8 MR. DELOACH: It all stems from a common problem,  
9 lack of knowledge of how local government is organized, financed  
10 and operated and if those certain things in there such as  
11 all ambulances in the event of an emergency, all ambulance  
12 units will revert to--this is not realistic, they have no  
13 authority over us short of marshal law, and it is little  
14 things of that nature which we didn't like. At the same time  
15 to say that I would have to send people who must go back in  
16 to take care of their livestock, that they must go way up in  
17 to Winnsboro County to pick up a permit to come back through;  
18 which is really harassing, further harassment of the area  
19 residents; those are two examples right there of what I was  
20 after and I certainly think that if I am not--am I correct,  
21 Hugh, that the ones would have to report all the way up to  
22 Winnsboro has been rectified, they don't have to do that  
23 anymore?

24 MR. BOYD: Yes, that has been rectified.

25 MR. DELOACH: These are the things--we were  
knitpickers, and if it please the court, I am still a knitpicker.

1 MR. BURSEY: Well, Colonel DeLoach, if you could  
2 take us through the--your office's scenario of responsibilities  
3 and you have sounded the sirens and you have determined that  
4 evacuation is necessary, what do you do now?

5 MR. DELOACH: There are two things that would happen  
6 simultaneously. Number one, I have never been--I hate to use  
7 a vertical pronoun, but in this case here, I just--I am taking  
8 full responsibility for what I am saying, consequently I will  
9 have to say I. We have never believed in boundaries, like  
10 it would work as much in Kershaw County, and Fairfield County  
11 as the rest of them, what it would do is augment the sirens  
12 with the sheriff department, be a airplane and a certain  
13 number of his vehicles which would move beyond those boundaries  
14 but the average citizen would not know where that boundary is  
15 on the ground and I am talking right now of Cedar Creek.

16 If you will remember in my testimony, I stated that  
17 we would consider beyond that 10-mile boundary because I  
18 thought that was a little too rigid.

19 Simultaneously with that, I would have to assume  
20 that someone from BURAD or DHEC had been in to the plant and  
21 that there was a life endangering situation, that could  
22 develop into a life endangering situation. Then I would move,  
23 which has been our philosophy, I would notify all residents  
24 parents; all parents residing within that 10-mile or 15-mile  
25 zone. We have never run a perimeter around it. That their

1 children and Chafin High School, of which there are about 1,000,  
2 would be brought out. Now this is a part of our plan you may  
3 not find it in the document and we would certainly do this  
4 because the most precious commodity I have to work with is our,  
5 would be our youth, so they come out, this has already been  
6 firmed up ... come up with all that new administration which is  
7 going into school district 5, and from there it is a problem of  
8 having available some 59 power company busses which could move  
9 at least 1500, a minimum of 1500 people per hour, moving them  
10 up into that area and all of this scenario is intermixing as  
11 we go along, you understand? Am I making myself clear? Is  
12 this all right with the court?

13 JUDGE GROSSMAN: Yes.

14 MR. DELOACH: Then when we started bringing out,  
15 right at the present, we have two memoranda of agreement, one  
16 is from the Innkeepers' Association which guarantees us some  
17 300 rooms, some 300 units. We have a memoranda of agreement  
18 from the Columbia Bible College which at present is our reception  
19 station, and I will enlarge upon this in a minute, the people  
20 would be advised by WIS radio to move toward the Columbia  
21 Bible College to their Student Union Building, there is where  
22 the reception, the registration, and there they would be assigned  
23 a room. Then they would move directly to that room and the third  
24 memoranda of agreement or memorandum of agreement is with the  
25 power company which agreed to stand the costs for housing and

1 feeding and other amenities that would be coming along with  
2 that.

3 Insofar as any dairy cattle, we have no dairy farms.  
4 I am anticipating your questions, Brett, and do you have any  
5 objections to that?

6 JUDGE GROSSMAN: We would prefer you just to answer  
7 the question and that would save time.

8 MR. DELOACH: I don't want to waste time. I want  
9 to go. Do you want to pick up from there, Brett?

10 MR. BURSEY: Yes, thank you.

11 Let's get a couple of things that you just mentioned  
12 nailed down here. You said you had in hand a signed agreement  
13 from SCE&G which agreed to transport, feed and house evacuees  
14 and they are going to pay for that?

15 MR. DELOACH: That is right.

16 MR. BURSEY: We have got a contract assuring us that  
17 they are going to pay if I have to go.

18 MR. DELOACH: That is right,...

19 MR. BOYD: That is right, you will go to a motel  
20 and it is taken care of by insurance.

21 MR. BURSEY: Does any other counties have that  
22 arrangement?

23 MR. BOYD: I don't know about the others.

24 MR. BURSEY: You work that out independently?

25 MR. BOYD: That is right.

1 MR. BURSEY: Now the best way for me to keep my  
2 thoughts straight isto go back to the scenario, moving in the  
3 area, you have got the busses, you are using SCE&G busses  
4 to evacuate people I assume that don't have their own  
5 transportation.

6 MR. DELOACH: Correct.

7 MR. BURSEY: Have you identified all of the people  
8 in the potentially impacted area again?

9 MR. DELOACH: That's done on a daily basis.

10 Our resident deputy's and as of yesterday we checked  
11 to see and there was one individual up in there who was  
12 incapacitated but his wife can take care of him. There are  
13 how many cars up in there that we would need, that don't have  
14 cars?

15 At certain times of the day, there would be some  
16 families without cars. The only bread winner has it in Columbia  
17 on the job and those would be taken care of with busses or  
18 things of this nature.

19 MR. BURSEY: I believe in past conversations, Colonel  
20 DeLoach, we have discussed door to door surveys by SCE&G, to  
21 determine specific needs of these households, has that been  
22 done to your knowledge?

23 MR. DELOACH: No, and I don't really agree with that  
24 concept. I feel that the contact I have with the citizens up  
25 in that area there, that we can through the churches and through--

1 we have already had two meetings with community leaders...I have  
2 their names if anybody would be interested in them, which we  
3 sat down at dinner with them and went over the problems and  
4 would expect them to help me out and there is a constant plea  
5 on our part and I am certain people carry on with it when we  
6 talk to them, "if you know of anyone incapacitated, please let  
7 us know". In other words, we are making a community effort  
8 up there.

9 MR. BURSEY: What has the response been to that  
10 effort?

11 MR. BOYD: Let me answer this by this. The response  
12 is we have several people that have indicated that they would  
13 be interested. Of course, as you know, the Valentine Fire  
14 Station has just recently been organized and we want to work  
15 through the Valentine Fire Station. I talked to the heads of  
16 the Valentine Fire Station, we will have a meeting with them  
17 this July, to talk about these people in the area of the fire  
18 station and what they can do in that area, and we intend to  
19 expand from that to the other names we have and develop units  
20 in that area as we have in other parts of the county. In  
21 other words, the STOP units, the VMI units; also, we would  
22 like to have a radio unit in that area if we can find people  
23 in that area that are interested.

24 We feel if we start with the community, the community  
25 itself, the teamwork itself will take care of itself and we feel



1 that we can develop that because we have developed it elsewhere  
2 and we want to develop it up there.

3 We have not gone as yet because we were developing the  
4 fire department. We felt need to get organized first the  
5 fire department. They requested the meeting to be in July  
6 and we will meet with them in July and then expand from there  
7 into the rest of the community to see if we can develop just  
8 what we are talking about. We feel this is very necessary.

9 We have some very good units elsewhere and we want  
10 to have one up there. We would like to do the same with the  
11 churches. We feel that the church has full responsibility for  
12 their congregation to take care of them and this is one place  
13 in one area they can do that.

14 MR. BURSEY: So, notice has been given through the  
15 sounding of sirens. Are there any other means of notification,  
16 public notification?

17 MR. DELOACH: The Sheriff's airplane has a loud  
18 speaker. Use deputy cars.

19 Now sometime back, we developed this and have had  
20 reasonable success with it by sounding these sirens running up  
21 and down secondary roads, you are certainly not in a high speed  
22 chase and we would expect the people to go to their radios and  
23 I think with the exception of a few people who simply do not  
24 want to come around to that way of thinking that we will have  
25 no problem, by advising these people to go to their radios.

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MR. BOYD: First, we have the volunteer fire department and the other people in there that we are talking about, community organizations, STOP type organizations and they too will be on the phone calling their neighbors.

I reckon you, if you are up there, you have a phone and you would be in with a group that would be working together to take care and help get everybody out.

MR. BURSEY: Has there been any effort other than what you have mentioned on the part of your office, state offices, or the South Carolina Electric & Gas to educate the public about what to do when they hear the sirens?

MR. BOYD: All right now, when we get the sirens in, we are going on to a very much of an education program but up to this point, SCE&G has a pamphlet out. Once the sirens come in, I want the sirens to get in there first before we start a real good educational program, because I want to hear them blow. I want to know what they can do before I start educating somebody else.

Right now, SCE&G and us are working on an educational program to bring into the area, which is about a 30-minute TV film. They have supposedly ordered it. It should be in. We will review it. If it is a good one, we will put it on ETC, WIS and the other TV shows so people can get a better education. Now if it is not a good TV set, if it is not good, we won't show it but they should have it and I want to preview

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it when it comes in and if they don't get it, I will get it.

2

MR. BURSEY: Do you know who produced this film?

3

MR. BOYD: It is produced by a company in Maryland.

4

I don't have the name of it with me but I have a name at the office, the address at the office and the telephone number.

5

6

MR. BURSEY: And who is ordering it?

7

8

MR. BOYD: We have requested that SCE&G order it and bring it in because it covers, according to the information on there what people should do and what they should expect on a nuclear accident. We want to see it first before we go with them. They said they would send it to us free of charge. If we don't like it, we can send it back.

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MR. BURSEY: But you would agree that at this point the general public in that area is not well enough aware of protective measures?

MR. DELOACH: No, I wouldn't say that.

MR. BURSEY: (Continuing) Respiratory?

MR. DELOACH: No, I take issue with that. I don't know to what degree they are but certainly--in other words, I wouldn't say there is a total lack of it. I have been working with these people for fifteen years, on other elements.

MR. BOYD: I think what you area asking is if there will be a continuing educational program. There must be, always, and we intend to see to that.

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MR. DELOACH: One of the weaknesses of this whole thing is the lack of a proper education on a nation-wide level.

MR. BURSEY: So then, can I infer then Colonel Boyd, that in your discharge of your responsibilities as Director that you will insure that there is a continuing public education program in this area?

MR. BOYD: We certainly will. I think that is a part of our responsibility, which we are proceeding to do now, and this will be part of the building of the community response teams, such as STOP and REACT.

MR. BURSEY: Do you feel that the company has some responsibility in this direction?

MR. BOYD: Well, they are working with us on it so I feel that they feel that they do. In other words, they are assisting on getting the material from Maryland and they have assisted in everything else. I don't see why they won't cooperate with us. I think they will. I feel they have been most helpful.

MR. BURSEY: Do you feel they have a responsibility?

MR. BOYD: I feel they have a responsibility, yes.

MR. BURSEY: Colonel DeLoach, are you familiar with this brochure that is marked Bursey Exhibit 4, the V. C. Summer Evac Emergency Information?

MR. DELOACH: I have that. Do you have a specific

1 question?

2 MR. BURSEY: Well, I was just going to ask you  
3 generally first, do you have any observations about any  
4 revisions that need to be made to this?

5 MR. DELOACH: My revisions would not be to that,  
6 my revisions would be that I would not adhere to that insofar  
7 as not notifying beyond that circle. In other words, those  
8 areas I spill over, definitely spill over.

9 MR. BURSEY: Now about about this--

10 MR. DELOACH: Infact, I would alert the whole  
11 cotton picking county.

12 MR. BURSEY: What about the evacuation route that  
13 this tells me to follow?

14 MR. DELOACH: There are six--Hugh, you know  
15 exactly the routes. There are six check points.

16 MR. BOYD: Out of our area, you come down 76,  
17 126, 120, 215 and up. There is a possibility that some  
18 people may be coming down 215 so we have a check point at  
19 215 to cut them into the Columbia Bible College, whatever  
20 direction they come in.

21 Now we do have six check points that we have in our  
22 plan that you have probably read that would cause people to  
23 funnel in that direction, so they wouldn't get out of that  
24 direction, and keep in that direction, or if they came out  
25 they would be told to go in that direction.

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MR. BURSEY: Now would you advise me to follow the evacuation route that you just outlined, that is outlined in this brochure?

MR. BOYD: Yes, I would advise you to follow the one that would be the easiest one to follow.

MR. BURSEY: Could that route change according to prevailing wind conditions?

MR. BOYD: According to prevailing wind conditions, it would be pretty hard for the route to change because where the route is located takes people out of any danger area.

In other words, it is going directly away from the area itself and it is beyond any--in other words, no 10-mile limit goes down below it so you are coming straight out.

You might have to go further.

MR. DELOACH: You might have to go further.

MR. BOYD: But you would have to come out that way because if you go any other way you are going to run into a greater problem. You are not coming out of the area.

MR. BURSEY: My directions here tell me to drop back towards the plant on highway 215.

MR. BOYD: Yes, and you come up 215 that should be with no problem. Now if there is a problem there, you would not be allowed to turn on 215. We would have a check point there and send you directly up the road, Two Notch Road out to Fort Jackson, and your reception point alternate



1 would be Fort Jackson.

2 MR. BURSEY: Now the present reception point listed  
3 on here is the Columbia Bible College.

4 Colonel DeLoach, do you like that aspect of the  
5 plan? Do you want everyone to go to the Columbia Bible  
6 College?

7 MR. DELOACH: I won't use the term "do I like it",  
8 I think you are referring to the fact whether if this plan is  
9 developed and refined, we could refine the system with the  
10 Inkeepers' Association where they people could stay assigned  
11 by moving to a directly, directly to a pre-assigned unit in  
12 a motel, meaning that we could obviate the necessity for going  
13 to the Columbia Bible College except for those people who would  
14 need additional instructions. In other words, they would move  
15 directly from their homes to the motel. That would come in  
16 time I am certain.

17 MR. BOYL: It depends on whether or not you have  
18 contamination and if you don't have contamination, you move  
19 them before then hopefully, but they could move directly to the  
20 motel without any problem.

21 MR. DELOACH: This is the kind of option, this is the  
22 rigidity which I didn't particularly like. I want some flexi-  
23 bility in it.

24 MR. BURSEY: So the exercise of that particular  
25 option would depend on the presence of potential contamination?

MR. DELOACH: In my case it would.

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MR. BOYD: Depending on the radiation that we were  
picking up at each one of our check points, six check points  
we would be monitoring for radiation, and we have set what the  
radiation decontamination point is on the CDB 700 monitor,  
that would be .05 millirems per hour.

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MR. BURSEY: And then at that point, .05?

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MR. BOYD: Above that point, then you would start  
worrying about contamination, the people would be contaminated  
and we would have to decontaminate them.

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MR. BURSEY: And who staffs these check points?

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MR. BOYD: We have our own monitors, staff check  
points. The Sheriff's Department staffs the check points  
along with any assistance from your police department, from  
the fire department, medical associations, emergency medical  
people, from the county health department.

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MR. DELOACH: We have teams made up from many places.

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MR. BURSEY: Have these teams been trained?

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MR. DELOACH: Yes.

MR. BURSEY: (Continuing) In radiation protection?

MR. DELOACH: Yes, most--all of the Public Safety  
Departments have people that have been trained as radiological  
instructors, who instruct within their own department. We make  
sure of that and we have sent more people out, for free, and  
we continue to send them.

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MR. BURSEY: What is the procedure if someone under your command would institute were they to find someone in the area after notice of evacuation has been issued that they determined was contaminated?

MR. BOYD: Well, they would send them to the decontamination point which we will establish, have established as the Valentine Fire Station and there they would be decontaminated.

MR. BURSEY: Where was that?

MR. BOYD: Valentine Fire Station which we will use as a decontamination point, initially. We can also use the Columbia Bible College as a decontamination point too. It depends on the amount of contamination, whether we want to move them down the road contaminated or whether we want to get them decontaminated immediately, that is what it depends on. We want to decontaminate immediately, they go to Valentine Fire Station.

MR. BURSEY: How do you judge if someone is contaminated to the point where you don't want to move them down the road?

MR. BOYD: This would be, in other words, it would go a great deal over our contamination plan...about two-eighths more, then we would move them directly to the fire station.

MR. BURSEY: And what is the procedure for decontamination of large numbers of civilians and who oversees that?

MR. BOYD: We have teams, monitoring teams that oversees

1 that. Monitoring teams of course have to be made up in that  
2 case of females and also males. The females are handled by  
3 the female monitors and males the male monitors and they would  
4 go in and take showers. We have two showers at the Valentine  
5 Fire Station where we can decontaminate people, they can take  
6 off their clothes there. We also instruct them to bring  
7 fresh clothes in a bag which we will make sure there is no  
8 contamination in. They will change clothes, take their clothes  
9 by the decontaminator, put them in a bag and go to Southern,  
10 and Southern Spaces will pick them up and decontaminate them.

11 Southern Spaces handles and has agreed to handle  
12 this for us.

13 The waste water will be handled too. We have no  
14 problem with that. We will pipe that off and move that the  
15 same way.

16 MR. BURSEY: What if there were scores or one hundred  
17 or two hundred people that needed to be decontaminated, would  
18 those two showers you think be adequate or do you have--

19 MR. BOYD: No, we have plans to move the fire trucks  
20 out of the fire stalls and put some make--some handmade showers  
21 in there, we also plan to wash their cars out back the same  
22 way and a sump point to catch the contamination that goes off  
23 there.

24 MR. BURSEY: What happens if the Valentine Fire  
25 Department happens to be in the plume zone and we have to fall

1 back?

2 MR. BOYD: We can fall back several different places.  
3 One of the places we can fall back to is State Park, we have  
4 talked to State Park and can fall back to State Park. We can  
5 take care of them at State Park and also take care of them at  
6 the Columbia Bible College if we have to.

7 MR. BURSEY: Which state park is that, sir?

8 MR. BOYD: That is the State Park Hospital.

9 MR. BURSEY: Oh.

10 Let's go back to Columbia Bible College. We have  
11 the reception center set up, you are bringing people in and  
12 we are determining that there is large numbers of civilians  
13 that have been exposed to radiation.

14 What do you do with them? Follow the steps as to  
15 what you do when someone walks in the door and you have hit  
16 them with your monitor and determine they are hot?

17 MR. BOYD: We would send them over to our pre-arranged  
18 place in the dormitory there to take a shower. We also have  
19 our own County Health Department staff who would take their  
20 names down. Once they are decontaminated and once they come  
21 out and go to the motel, their names are kept and doctors will  
22 visit them after they are in the motel, follow up.

23 MR. BURSEY: Where do these doctors come from?

24 MR. BOYD: The doctors would come probably from  
25 Richland Memorial Hospital and Columbia Medical Association.

1 We have a whole list from the medical association  
2 and the doctor's list is handled by the County Health  
3 Department. They have a list of all medical resources.

4 MR. BURSEY: Do you have pre-arranged agreements?

5 MR. BOYD: We don't have to have a pre-arranged  
6 agreement with Richland Memorial Hospital. That is our  
7 hospital.

8 MR. BURSEY: The plan calls for each organization  
9 to arrange local and backup hospitals and medical services  
10 having the capability for evaluation of radiation exposure  
11 and uptake, what is your local hospital?

12 MR. BOYD: Richland Memorial Hospital will handle  
13 those people that have a wound or damage and really exposed  
14 to radiation. Monitoring itself of just contamination does  
15 not require going to a hospital. If the man is wounded and  
16 required to go to a hospital, he will go to Richland Memorial  
17 Hospital if he has had an accident.

18 The secondary hospital backing up Richland Memorial  
19 Hospital is Oak Ridge, Tennessee and they will be flown to  
20 Oak Ridge.

21 MR. BURSEY: As your backup hospital?

22 MR. BOYD: Oak Ridge, Tennessee for radiation  
23 accidents.

24 MR. BURSEY: You would send someone to Oak Ridge?

25 MR. BOYD: We would fly them there. You are not



1 going to have many people that are going to have an accident  
2 like that.

3 A person having an accident like that would have to  
4 be inside of the reactor just about, because the radiation has  
5 to get into him. If it is an accident where a person is hurt.  
6 Now if a person just has contamination, you can decontaminate  
7 him.

8 MR. BURSEY: What level of accident are we talking  
9 about? What level of exposure would necessitate sending  
10 someone to Oak Ridge?

11 MR. BOYD: This would be a situation where a person  
12 had been really damaged and had been exposed to a lot of  
13 radiation.

14 If Richland Memorial Hospital determines that they  
15 could not sustain him over a long period of time, perhaps  
16 because of incoming people, then when they couldn't sustain  
17 him, we would send him to Oak Ridge to be sustained over a  
18 longer period of time.

19 MR. BURSEY: You say a lot of radiation, do you  
20 personally what--

21 MR. BOYD: That would have to be determined by the  
22 radiation medical department of the hospital itself. They  
23 would make that determination.

24 MR. BURSEY: But in your estimation if we are only  
25 talking about let's say a nuclear worker that could be exposed.

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MR. BOYD: I think we are only talking about two or three people, or less.

MR. BURSEY: What is your understanding of how many people Richland Memorial Hospital can handle?

MR. BOYD: ON a radiation accident?

MR. BURSEY: Yes, sir.

MR. BOYD: They have two places to handle them and I assume they can handle any up to between ten and fifty is what they normally handle in an emergency.

Because those, you see the two damaged, they would have to leave.

MR. BURSEY: Now if we have more than fifty, can you--will Richland Memorial continuing expanding or is there a--

MR. BOYD: They would probably continue to move them out. They would probably also request Moncrief Army to handle them because Moncreif Army can.

MR. BURSEY: They can?

MR. BOYD: Yes.

MR. BURSEY: (Continuing) Handle how many more?

MR. BOYD: I doj't know exactly how many more but they can handle a number of people more because they have a radiation plan. Their radiation plan is identical to that of Richland Memorial Hospital.

MR. BURSEY: Well, at certain times of the year,

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it is more likely than other times of the year that the wind would be blowing towards Columbia. It is reasonable to assume that the plume zone in an accident, a sustained accident releasing large quantities of radiation due to a core melt, that radiation could in significant quantities come towards Columbia; has your office had any discussions as to what would happen in the unlikely event of having to call for an evacuation of Columbia?

MR. BOYD: We have considered that in the same light as any evacuation plan for a nuclear attack.

MR. BURSEY: Can you tell me what that is, sir?

MR. BOYD: That is we move a considerable number of our people to the Orangeburg area and also to the Kershaw area. Now we could not make use of the plan, on many evacuation plan that calls going to Newberry and Fairfield but we could make use of that that calls for going to Orangeburg and calls going to Kershaw.

MR. BURSEY: Have you identified all of the agricultural producers in Richland County?

MR. BOYD: Our Clemson Extension man, Mr. Risor has, yes, sir.

MR. BURSEY: Do you have any knowledge of the education of the agricultural producers as to the potential impacts resulting from an accident?

MR. BOYD: I imagine Mr. Risor is taking care of that.

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I'd have to ask him. I had rather him comment on that.

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MR. DELOACH: What you have got to keep in mind, this plant has not become operational yet and when you get to the day of loading up, this is going to intensify and I get a little irritated people saying what if here right now when that is ahead of the game, do you understand?

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Mr. Risor is quite qualified in this field and I have been in close contact with him as to how daily cattle are handled. In fact in our last exercise, we drafted a scenario in which we picked up 150 head of prime beefstock, transported them to the St. Louis stockyards for their later disposal and we simulated for the dairy farm, which we have none in this area, down to Bamberg, so I was quite pleased and at one time the Department of Agriculture, next to Civil Defense, was probably the most active in this field of nuclear radiation. They are not as active today, but on a local level they are.

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MR. BURSEY: Colonel DeLoach, is it your understanding that there needs to be an adequate and effective plan in place before the license is granted?

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MR. DELOACH: I don't feel that I want to answer that because that is in the hands of NRC. NRC is going to make that decision and I don't want to sit here and speculate about it.

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1 MR. BURSEY: Well, you just suggested that it has  
2 been your attitude that we don't need a p. until they load  
3 the fuel.

4 MR. DELOACH: No, I said that the plan would be  
5 more refined. There are certain points in it that I may not  
6 like right now but as we reach them, they are going to be  
7 defined. I am talking about bringing in the Westinghouse  
8 plant to assist us in the monitoring. We have several  
9 contingencies and several prerogatives that we can draw on.  
10 A plan is always required and I shouldn't have to tell anybody  
11 that, it is constantly updated.

12 MR. BURSEY: Does your office have any direct  
13 responsibilities for educating the farmers as to the possibility  
14 that they need to store feed stock and they have to be able  
15 to shelter their animals?

16 MR. DELOACH: That will come in time. In other  
17 words, Bill Risor--

18 MR. BOYD: That will be Bill Risor's job and  
19 Clemson Extension Service.

20 MR. BURSEY: Is he under your direction?

21 MR. BOYD: No, he is one of the people we coordinate  
22 with just like everyone else and when we make suggestion on  
23 things and when he wrote his particular part of the plan, he  
24 did a real fine job of it. He came over here during the  
25 exercise and did a fine job there, so he is very competent

1 and he is fully capable, and will do this.

2 MR. DELOACH: It doesn't seem to be his understanding  
3 that I can't direct the dairy part, we are strictly coordinated  
4 with absolutely no authority and keep that in mind.

5 A high level of coordination and cooperation.

6 MR. BURSEY: Do you, Colonel Boyd, understand  
7 the procedure that your office would follow dispensing  
8 potassium iodide?

9 MR. BOYD: That would be the County Health Office's  
10 job. He has that under his control. We would not. It would  
11 be his authority to say what to do on that. That is Dr.  
12 Ballew.

13 MR. BURSEY: Dr. Ballew?

14 MR. BOYD: Right, County Health Office.

15 MR. BURSEY: Do you have any role in stock piling  
16 or distributing or insuring that potassium iodide is available  
17 in the D-1 zone?

18 MR. BOYD: That is Dr. Ballew's problem again.

19 (Brief pause.)

20 MR. BURSEY: Colonel DeLoach, has it been the  
21 policy of your office during your directorship that pre-  
22 education prior to a problem of the nature that we have been  
23 discussion here, educating the public about potential  
24 impacts of a nuclear accident is a good idea?

25 MR. DELOACH: I still say that that is one of the



1 problems with this whole, if you want to call it, deal has  
2 been the lack of proper education nationwide. I don't want  
3 to settle in on anybody, but I have done the best I could within  
4 the resources available and I expect that these resources  
5 now that Hugh has come on with the pressure--and of course,  
6 I am jaded, don't get me wrong, bumping my head against the  
7 wall with such as you, and I have had--I think he will pick  
8 up and we will carry it on through.

9 To answer your question, I think the lack of  
10 education has been our problem and I hope somebody is going  
11 to wake up to that fact and start educating the public.

12 MR. BURSEY: Colonel Boyd, do you think that you  
13 are going to have a more effective plan if the citizens of  
14 Richland County understand what could happen to them if they  
15 don't follow your orders?

16 MR. BOYD: It won't be my orders but I think that  
17 the citizens of Richland County, the more they know, the better  
18 off they are, and I think it behoves all of the citizens, as  
19 I have said, to have their own community groups that can act  
20 in an emergency and this is what we are going to strive for.

21 MR. BURSEY: How is your phone listed in the phone  
22 book? Colonel Boyd?

23 MR. BOYD: Richland County, City of Columbia, Civil  
24 Defense. It is listed both under county and city, and we have  
25 asked the telephone company for several years to put it under

emergency listing and we will ask them again this year.

1 MR. DELOACH: It is under Richland, County of  
2 and Columbia, City of.

3 MR. BURSEY: Every county has their office of  
4 Emergency Preparedness listed in a different fashion, do you  
5 have any suggestion as to how this could be simplified so we  
6 can, these people can find who they are supposed to call in  
7 the event of an emergency?

8 MR. DELOACH: I would like to put it on the 911  
9 system.

10 MR. BOYD: We are trying to do it right now on the  
11 911 system.

12 MR. DELOACH: Within twenty months, I think we will  
13 have the 911 into effect.

14 What is being held up right now is the telephone  
15 company themselves doing the realignment of circuits and so  
16 on like that such as the pay telephones and I may have been  
17 a little ambitious. I know there would be a lot of prodding  
18 to step it up.

19 MR. BURSEY: Colonel DeLoach, at one point in the  
20 past during one of our conversations you suggested, correct  
21 me if I am wrong and I am sure you will, that it would be a  
22 bad idea for citizens in the zone to have their own black  
23 box as you referred to it, the radio, one-way radio device;  
24 can you--I am not going to hold you to that, but could you--

25 MR. DELOACH: I don't mind at all. It is a system

1 Hugh and I adopted, a little black box. We hunted for it for  
2 years. This was a box that could be radio tone controlled.  
3 It lies dormant with only a little red light and when the  
4 activating station touches it, that will activate that box  
5 and tell you that there is an emergency at hand.

6 I don't know whether the average citizen would be as  
7 responsive to that as I am because I have been in this business  
8 for forty years one way or the other, in the Army or in here,  
9 in the emergency end of it and it is a beautiful system. The  
10 only problem is it costs too damn much. We wanted  
11 to get it down to ten dollars and we finally found one in  
12 Taiwan and we brought it in and one is still operating in my  
13 house.

14 This day and time when everything that man faces  
15 poses a danger one way or the other, I think that we will never  
16 be complete until such time as every citizen has one of those  
17 things in his house. That may be a little--carrying it too  
18 far, of course, but that is what I would want.

19 MR. BURSEY: What did you get the price down to for  
20 the black box?

21 MR. BOYD: It is up to. It started out as twenty-  
22 five and it is now up to about forty-five. It depends on the  
23 type you buy. We would recommend that everybody have them, not  
24 only for this but for weather and any other kind of an emergency.  
25 We have come out with this every year and recommended it,

1 particularly in the tornado season that everybody buy one  
2 and if they buy one, it has a battery in it because it hooks  
3 right in to the weather warning, our office hooks into the  
4 weather station and we can put out anything you want in an  
5 emergency.

6 MR. DELOACH: We were ahead of the National Weather  
7 Bureau on this. We put the first one in and didn't realize  
8 we were breaking the law and now it has been accepted.

9 MR. BURSEY: So what this box will do if people  
10 have it that live in this area is that your office could  
11 key that and you could tell them, it is a one-way transmission,  
12 is that right?

13 MR. BOYD: It would not only key for that but  
14 also it would key off the weather service's box right now.  
15 In other words, when the weather bureau punches a button, it  
16 goes out and announces bad weather, that would come in to your  
17 house if you had one just as well as the other or if there  
18 was a hazardous accident with a train, chlorine gas spill,  
19 any kind of problem comes over that box from the weather  
20 station.

21 MR. BURSEY: Thank you, gentlemen. That concludes  
22 my questions. I would just ask if you have any observations  
23 that you would care to share with the Board as to things that  
24 you think would improve the general response capability in an  
25 emergency.

1 MR. DELOACH: I would like to make one last statement  
2 if I be allowed, this has been the major objective I have run  
3 into, problem I have run into for the past 15 years has been  
4 the dismal lack of understanding on the part of upper echelon  
5 in the government and industry as to how local government is  
6 organized, financed and operated, and if we could all take  
7 a course in tenth grade civics, I think it would help all of  
8 us. I don't mean to be facetious in saying this. I am dead  
9 serious.

10 MR. BURSEY: Thank you, gentlemen, if you would  
11 answer questions of the parties, I would appreciate it.

12 JUDGE GROSSMAN: Mr. Knotts?

13 MR. KNOTTS: May I inquire of the schedule that the  
14 Board has in mind. What I would propose to do if the other  
15 parties have questions for these gentlemen is ask them, if the  
16 Board is planning a noon recess, to look at the County Plan  
17 and be sure that the plan I am showing them is the updated  
18 plan or else maybe I can make the kind of arrangement I had  
19 with Mr. Longshore.

20 I have one question which I can either ask now or  
21 after lunch.

22 JUDGE GROSSMAN: If you have on question, I think  
23 maybe we ought to proceed and then perhaps they can give us a  
24 quick answer on that other question.

25 MR. KNOTTS: Very well.

CROSS EXAMINATION

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2 MR. KNOTTS: Colonel DeLoach, I am not sure that

3 I completely heard your response to Mr. Bursey's question

4 regarding the situation in which you have already received the

5 recommendation from the governor, or advisory from the

6 governor to order evacuation. I believe as I heard your

7 response, you dealt with a situation where you might tend to

8 anticipate the governor's response but I didn't hear your

9 response, sir, to that?

10 MR. DELOACH: I wouldn't necessarily wait on a

11 directive from any state level.

12 MR. KNOTTS: But let us assume that you had received

13 a directive from the state level and you had not acted prior

14 to that time, would you act on that direction?

15 MR. DELOACH: Absolutely.

16 MR. KNOTTS: May I ask--

17 MR. BOYD: It won't take long to look at that. I can

18 tell you whether that is the updated plan or not in just about

19 two seconds.

20 MR. KNOTTS: Very well, sir.

21 MR. DELOACH: He ought to, it is etched on his eyeballs.

22 I could reduce that down to a page and a half.

23 MR. BURSEY: I would very much like that summary,

24 Colonel DeLoach.

25 MR. DELOACH: You can get it any time you want to. I

will give you the summary.

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(Brief pause.)

MR. KNOTTS: Colonel Boyd, is the copy which Mr. Mahan has shown you an updated document?

MR. BOYD: Yes, it 's an updated copy. It is not the entire plan. J. D. Bone has the entire plan which I just sent him another change on yesterday.

MR. KNOTTS: All right, now, I will be glad to give you an entire plan here if you want it.

JUDGE GROSSMAN: Well--

MR. KNOTTS: I do not want to burden the record, Judge Grossman, with things which are not related to the Summer station but if it is necessary in order to understand the portion which is related to the Summer station to have the rest of it, then I would like to have that portion which is easy to understand XE-1...

MR. BOYD: J. D. has a whole one of these and what I would ask him to do is to take this one and if he doesn't need two, give me one back and he needs two, keep two.

MR. KNOTTS: Very well, sir. We will make the necessary copies if we can have the agreement of the parties to supply that and offer it into evidence as an exhibit.

JUDGE GROSSMAN: Let me ask you, Mr. Knotts, is that the same plan that you showed Mr. Longshore?

MR. KNOTTS: No, sir, this is the Richland County plan. What I showed Mr. Longshore was the Newberry County plan.

1 JUDGE GROSSMAN: I see, there are separate ones for  
2 each county.

3 MR. KNOTTS: Yes, sir.

4 JUDGE GROSSMAN: Could we have that agreement, Mr.  
5 Bursey?

6 MR. BURSEY: Yes, sir, that is fine with me.

7 JUDGE GROSSMAN: Mr. Goldberg?

8 MR. GOLDBERG: No objection.

9 JUDGE GROSSMAN: Mr. Wilson?

10 MR. WILSON: No objection.

11 JUDGE GROSSMAN: That is fine then with the Board,  
12 does that conclude your questioning?

13 MR. KNOTTS: Yes, sir, it does, thank you very much.

14 JUDGE GROSSMAN: Mr. Goldberg?

15 MR. GOLDBERG: I have only one or two very brief  
16 questions.

17 Colonel DeLoach, are you familiar with the 10-mile  
18 emergency planning zone surrounding the plant?

19 MR. DELOACH: Relatively so, yes.

20 MR. GOLDBERG: I believe you indicated that  
21 there were approximately nine hundred residents that reside  
22 within that zone?

23 MR. DELOACH: 846 to be exact, but we can round it  
24 off to 900.

25 MR. GOLDBERG: Can you tell me the approximate area

1 of Richland County that fall within that 10-mile zone?

2 MR. DELOACH: It is the extreme northwest corner  
3 of the county.

4 MR. GOLDBERG: In terms of square miles?

5 MR. DELOACH: Ten to fifteen square miles. I  
6 haven't run a perimeter around it. I used 10 square miles  
7 for awhile and then I opted on the side of caution and I have  
8 extended it to 15. It is written in the plan that way now.

9 MR. GOLDBERG: Colonel DeLoach, at the time a  
10 decision was made either by you or by the Office of the Governor  
11 to initiate an evacuation, how long do you believe it would  
12 take for you to evacuate the residents within that part of your  
13 county that fall within the 10-mile emergency planning zone?

14 MR. DELOACH: I will let you answer that...

15 MR. BOYD: This would depend on the individuals  
16 in their themselves.

17 MR. DELOACH: Time of day.

18 MR. BOYD: The time of day and night and we would  
19 not insist the people come out. We feel they would come out  
20 by infiltration and we feel that some people could be out in  
21 fifteen minutes and some people 45 minutes and some people an  
22 hour, it all depends on what they are doing, where they are  
23 and their feeling that they have to come out. There is no  
24 problem on getting out, no problem on the time getting out  
25 because they have very fine roads to come out with, they come

1 out a lot of them every day. They are very familiar with them.  
 2 In fact, I have two brothers-in-law and two sisters-in-law  
 3 living in the area and I am very familiar with it. Also  
 4 Carl Shoals was named after his uncle. (Laughter.)

5 MR. GOLDBERG: So you believe that you can get the  
 6 residents out within the time range that you have just  
 7 indicated, Colonel Boyd?

8 MR. BOYD: Probably before.

9 MR. GOLDBERG: Thank you.

10 JUDGE GROSSMAN: Mr. Wilson?

11 MR. WILSON: Just briefly, gentlemen, earlier when  
 12 we were discussing the use of the Richland County Hospital and  
 13 any overflow that might be needed for additional medical  
 14 attention that an individual might require, is that phase,  
 15 once you have managed to get a contaminated or an injured  
 16 individual to the hospital, does your responsibility or  
 17 oversight extent on in to the actual patient care and what the  
 18 doctor's recommend for the individual?

19 MR. BOYD: No, the doctors take care of that themselves.  
 20 We have very fine doctors.

21 MR. DELOACH: Ask him to identify himself, you know,  
 22 I don't know that gentleman.

23 MR. WILSON: I am Richard Wilson with the Attorney  
 24 General's office.

25 MR. DELOACH: Fine, I know your counterpart, but I

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1 didn't know you.

2 MR. WILSON: All right, Mr. Boyd, so is it fair to  
 3 say then that your responsibility is basically to get the  
 4 people to the hospital and let the doctors, what the doctors  
 5 do with them after that is up to them?

6 MR. BOYD: Actually get them to the hospital is  
 7 the Richland County Emergency Medical Service's responsibility  
 8 and their getting to the Richland County Hospital and the  
 9 decisions are made there.

10 MR. WILSON: And as I understand you coordinate  
 11 the efforts of the ambulance and other emergency services in  
 12 the area?

13 MR. BOYD: We coordinate it. Actually the entire  
 14 medical part of the emergency is coordinated by the county  
 15 health department, sir.

16 MR. WILSON: I see. Colonel DeLoach, you earlier  
 17 mentioned the fact that this is a continuing education or there  
 18 was a need for a continuing educational process, is that  
 19 what you said?

20 MR. DELOACH: Right.

21 MR. WILSON: What kind of resources would you see  
 22 as being necessary to performing continued educational efforts  
 23 like that?

24 MR. DELOACH: I would see public relations on the part  
 25 of the industry itself. Part of it of course would be the ever

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present ETC and, the other, of course, the local and state which we could arrange, but for years now we have been starting at the eighth grade level of school and carrying it on to the senior classes.

We start at eight for two reasons. One, we don't think they retain it below that age and two, there is the money involved.

End take E

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1 MR. RICHARD WILSON: I believe that's all I have,  
2 Mr. Chairman, thank you.

3 JUDGE LINENBERGER: I'm interested in your very last  
4 comment, Colonel, the money involved. To what extent do you  
5 feel that the completeness and adequacy of your plans and opera-  
6 tions are in any way restricted because of budgetary con-  
7 straints?

8 COL. DELOACH: Sir, when you work down on the local  
9 level, it's very grubby work down here. You're always grubbing  
10 for a nickel. You ask any department head how much is enough,  
11 he says half again as much as you give him.

12 Insofar as I understand your question, we have been  
13 adequately budgeted ever since I've been in there. In fact  
14 we're probably way above the average county within the State.  
15 In fact we just recently--our budget was approved yesterday  
16 that gives him additional money to upgrade our communications  
17 system. In other words, I have no complaints; it's not an election  
18 year either.

19 JUDGE LINENBERGER: So I gather, Mr. Boyd, you're  
20 not inheriting a bottle of red ink here?

21 MR. BOYD: No.

22 JUDGE LINENBERGER: That's very good. There was the  
23 question of titles which maybe I misunderstood, but, Colonel,  
24 I thought I heard you introduce yourself as former director and  
25 you, Mr. Boyd, introduce yourself as coordinator. Did I hear

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1 correctly?

2 COL. DELOACH: You hear correctly.

3 JUDGE LINENBERGER: Has something changed so that  
4 there's no longer a position of director?

5 COL. DELOACH: I inherited the title from my prede-  
6 cessor, never had a chance to come around and change it because  
7 I was too busy. During this little interm right now while I'm  
8 working on our new budget, we worked him in as coordinator.  
9 It's really a coordinator. I don't direct anything except a  
10 staff of three people, four people.

11 JUDGE LINENBERGER: Okay. Now, let's talk about these  
12 things you don't direct. You do depend to some extent on coopera-  
13 tion in many areas, I would think, and more particularly police  
14 personnel, fire personnel and ambulance personnel. Now, when  
15 you say you don't direct anything, what assure you get the coopera-  
16 tion that's needed from these groups of people when an emergency  
17 arises?

18 COL. DELOACH: It would be directed by the county  
19 administrator or the city manager. I haven't had to go to that  
20 since 1968. I've done the Law Enforcement Assistance planning  
21 for the police department and the sheriff. We do the fire plan-  
22 ning. We write the countywide fire service. We build the stations.  
23 We actually just finished the one in Ballantine that I was project  
24 director on. And all of these things put together, I can't  
25 tell you other than I've just been a very fortunate man.

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1 JUDGE LINENBERGER: Well, all right, sir, but maybe  
 2 there will be somebody in your job that's not quite so fortunate.  
 3 Let's be a little more specific. The document that was just  
 4 handed to Mr. Knotts by you, Mr. Boyd, does that document have  
 5 built into it things that arrange for this coordination of various  
 6 agencies?

7 COL. DELOACH: Yes, very much so. Because the agencies  
 8 are all hired by the county administrator or city manager and  
 9 work directly for the county administrator or city manager.  
 10 In other words, I advise him. He is actually the man that calls  
 11 the shots, but we have a back-up on that. He has the right  
 12 to hire me and fire me. If he doesn't like the way I'm doing  
 13 it, he'll get rid of me. If they don't follow in and follow  
 14 the directions that he approves in the plan, he can fire them.

15 JUDGE LINENBERGER: Do the fire and police agencies  
 16 have in put into this--

17 COL. DELOACH: They wrote their part of the plan.  
 18 The process of planning is more important than the plan itself.  
 19 If they didn't write it, it wouldn't be worth the paper it's  
 20 written on.

21 JUDGE LINENBERGER: Well, I'm glad to hear you say  
 22 that. Now, you may or may not be aware that the Nuclear Regula-  
 23 tory Commission will require the existence of FEMA-approved Emer-  
 24 gency Response Plan, however it's termed, before the Summer  
 25 plant can go into operation. Okay. You indicated at the very

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1 outset, Colonel, that there was a certain--I'll use my own word--  
2 rigidity, a strict constructionist outlook on life, that you  
3 observed in NRC and FEMA circles that perhaps made it not as  
4 easy to cope with local situations as you would prefer to have  
5 it.

6 Now, the question to you is, sir, and I can see how  
7 bureaucracy from the top may not always fit too well bureaucracy  
8 at the bottom. The question to you, sir, is there anything  
9 about this situation that so affects the way you want to structure  
10 and implement your plan that would cause, so far as you know,  
11 FEMA to not approve the plan?

12 COL. DELOACH: I don't think so because we are going  
13 to follow it to the letter. I'm not going to in any way jeopardize  
14 the licensing of this plant by my own idiosyncrasies or my own  
15 thoughts. We're going to follow it right down to the line.  
16 I did state one time that we had--did that answer the question,  
17 Judge?

18 JUDGE LINENBERGER: So what you're saying is that  
19 the federal requirements are your guidelines. Your own prefer-  
20 ences, you work in when you can, but not in violation of the  
21 federal requirements?

22 COL. DELOACH: Not in violation, no, sir. I made  
23 a statement at the outset that we would adhere to their guidelines.  
24 I don't like it sometimes.

25 JUDGE LINENBERGER: One final thing that I can't

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1 resist asking. I don't understand what that little black box  
2 accomplishes. Does it just put out a tone that tells somebody  
3 to go to their radio station or does it--

4 COL. DELOACH: It puts out the actual information.

5 JUDGE LINENBERGER: That's all I needed to know. That's  
6 all the questions. Thank you.

7 JUDGE GROSSMAN: Any redirect, Mr. Burse?y?

8 MR. BURSEY: Well, I don't hold you up any longer,  
9 gentlemen. I thank you for coming.

10 JUDGE GROSSMAN: No recross?

11 MR. GOLDBERG: No questions.

12 JUDGE GROSSMAN: Thank you, gentlemen, for your coopera-  
13 tion. We'll recess until two o'clock. Mr. Goldberg?

14 MR. GOLDBERG: My recollection, Judge, is that before  
15 we concluded yesterday's session we had advised certain State  
16 officials to be prepared to testified on or about one-fifteen  
17 p.m. I don't know what accommodations we may want to make in  
18 terms of returning from lunch earlier.

19 JUDGE GROSSMAN: Mr. Goldberg, do you have sandwiches  
20 for us? Are there any of those witnesses here in the courtroom  
21 that are expected to testify immediately after lunch? [No response.]  
22 Well, what do you suggest we do, Mr. Goldberg?

23 MR. GOLDBERG: I was just suggesting that perhaps  
24 as a courtesy to those individuals we return a little earlier  
25 than two but I'm not the only one involved in the decision.

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JUDGE GROSSMAN: Mr. Knotts?

MR. KNOTTS: I frankly did not have in mind the hour. I agree it's a problem. I wonder if we could go for one-thirty and maybe someone could make a phone call to look people up?

MR. RICHARD WILSON: Everybody's looking at me. I guess it's appropriate for me to say something here. Unfortunately, as you can see, Mr. John Wilson is not here. Obviously his other commitment has tied him up for longer than he had anticipated. We have Mr. Shealy of course available at any point. He's available all day, but these other two individuals I have had no contact with,, but I can endeavor to make contact.

JUDGE GROSSMAN: Well, let's make that a quarter till two then, and hopefully, all our witnesses will be here waiting for us.

[Lunch recess.]

AFTERNOON SESSION

1:55 p.m.

JUDGE GROSSMAN: Mr. Bursey, could you call your next witness, please?

MR. BURSEY: Yes, sir, I have a--would like to bring a motion to reconsider before the Board at this time if I may.

JUDGE GROSSMAN: State your motion.

MR. BURSEY: I have a motion to reconsider the testimony of Dr. Kaku concerning emergency procedures and accident impacts. And I have--I'll pass these out.



1           What this is that I've passed out is an amended cover  
2 and one page of Dr. Kaku's prefiled testimony. And in it the  
3 testimony is addressed more directly to the impact, not taking  
4 issue with rulemaking. And we have--would be willing to strike  
5 from the record that portion of Dr. Kaku's testimony that appears  
6 to take issue with the ten-mile zone, and I would like to, if  
7 possible, put Dr. Kaku on the stand to testify to its credentials.

8           JUDGE GROSSMAN: Well, Mr. Bursey, what I propose  
9 to do is to permit you to make an offer of proof of the original  
10 testimony, have it bound in the transcript as we have done  
11 with the prefiled testimony that we have admitted, permit voir  
12 dire and cross-examination with regard to that testimony, but  
13 nevertheless, not admit it and have it considered as an offer  
14 of proof.

15           The advantage to doing that would be that in the event  
16 we were reversed on any portion of that testimony, it is unlikely  
17 that that reversal would necessitate any further hearing. Of  
18 course that would depend upon the position of staff and applicant  
19 and whether they wanted to avail themselves of the full oppor-  
20 tunity to voir dire and cross-examine. And of course they would  
21 ultimately have the choice of insisting on a further hearing  
22 if we were reversed.

23           On the other hand, you could revert to that excluded  
24 evidence on your behalf and of course if the Board itself does  
25 not reverse itself on that position, the evidence would be in

1 the record in the form of an offer of proof for which a higher  
2 tribunal might reverse us.

3 I don't see that the submittal that you have just  
4 given us really changes the substance of any testimony. It's  
5 merely some explanation of--

6 MR. BURSEY: Well, Judge, if my understanding that  
7 the Board is inclined to exclude Dr. Kaku's testimony because  
8 there were portions of his testimony that took issue with regula-  
9 tions, and not to his qualifications or to the substance of  
10 the other testimony, is that--

11 JUDGE GROSSMAN: That's basically correct but all  
12 you've given us now is the statement which is to the effect  
13 that to the extent the testimony conflicts with the rules or  
14 regulations, that there was no intention that it so conflict.  
15 And I don't see that that changes the substance of the testimony  
16 that we ruled on.

17 MR. BURSEY: Well, if I could just for the record,  
18 state that Dr. Kaku's testimony in regards to the potentiality  
19 of an accident and the inventory of fission products that would  
20 be released, the nature of those products and how they would  
21 impact the surrounding population and environment, I just con-  
22 sider to be critical to my entire contention and I don't have  
23 any other expert means of introducing this.

24 I myself am unable to present that evidence.

25 JUDGE GROSSMAN: Well, I propose that then you do

1 put Dr. Kaku on and in making your offer of proof, you ask some  
2 preliminary questions that would be to the effect of revising  
3 that testimony. And then we will rule further with regard to  
4 whether any part of that testimony should be admissible in light  
5 of the revisions. Let me hear from the other parties to find  
6 out if they have any objection to the procedure suggested?  
7 Mr. Knotts?

8 MR. KNOTTS: Judge Gorssman, I feel that it would  
9 probably be more likely a waste of time, which is fairly scarce  
10 at the moment, to proceed on the basis that you've described,  
11 but we will of course abide by the Board's ruling. If we are  
12 to voir dire Dr. Kaku, I would inquire whether that is to proceed  
13 now, in which case I would like a few minutes to go back to my  
14 room and get my paper on Dr. Kaku which, not anticipating the  
15 testimony, I left outside.

16 JUDGE GROSSMAN: No, it's not my intention to proceed  
17 with that at the moment. We're going to complete the emergency  
18 planning testimony by the state and county personnel according  
19 to my schedule, and I don't understand Mr. Bursey to ask for  
20 a change in that schedule. Are you?

21 MR. BURSEY: No, sir, withstanding the offer of proof  
22 which will allow Dr. Kaku to go on, we'll proceed with the schedule  
23 of putting on Dr. Kaku at the end of the State witnesses which  
24 I anticipate would be in the morning, and do his voir dire in  
25 the morning. And I have just received a message from Boston

1 that Dr. Caldicott is ill and can't be with us tomorrow and  
2 requested that the Board accept her apologies and offer to appear  
3 the week of the 13th, her health allowing that. So that will  
4 give us more time tomorrow.

5 JUDGE GROSSMAN: I don't want to take up the time  
6 now of the State and county people so I won't ask for Mr. Knotts'  
7 and Mr. Goldberg's and Mr. Wilson's response to that motion  
8 to postpone her testimony. Do you want to speak now--I do think  
9 we ought to have Mr. Knotts and Mr. Goldberg say their piece  
10 with regard to the suggested procedure regarding Dr. Kaku, unless  
11 Mr. Knotts has already stated his position, with regard to our  
12 procedure on the offer of proof, and I would like to hear from  
13 Mr. Goldberg also on that.

14 MR. GOLDBERG: Judge, could you briefly summarize  
15 what the procedure is with respect to the motion for reconsidera-  
16 tion and what you outline would be the course of business?

17 JUDGE GROSSMAN: What I intend to do in that respect is  
18 to allow Dr. Kaku to be put on the stand with regard to the  
19 testimony he filed, have him make the revisions to his testimony  
20 that he and Mr. Bursey intend to have done, and then rule again  
21 with regard to his testimony. And if we--let me point out that  
22 we had some discussion on the prefiled testimony but Dr. Kaku  
23 was not there and I don't see any objection to having him revise  
24 his testimony to eliminate objectionable matters.

25 Now, if we reverse our position in light of the

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1 revision in testimony, then we would proceed as we would or-  
 2 dinarily. I don't anticipate that that is going to be the case.  
 3 I anticipate rather that the testimony would continue to be  
 4 excluded, but that Mr. Bursey would be afforded the opportunity  
 5 that he has to make an offer of proof of that testimony.

6 The other parties would have the opportunity, if they  
 7 choose, to voir dire and cross-examine. If they choose not  
 8 to, or even if they choose to do so, if we are eventually resersed  
 9 on excluding the testimony, they would then of course have a  
 10 choice of foregoing any further voir dire or cross-examining,  
 11 and would be able to proceed on the record already established,  
 12 but they would have that opportunity, I would assume, of further  
 13 voir airing and cross-examining and insisting on further hearing  
 14 in light of the fact that the Board would be reversed.

15 Do you understand the full implications of that, Mr.  
 16 Goldberg?

17 MR. GOLDBERG: I'm not entirely certain, but I gather  
 18 that we would have the opportunity, should the testimony be  
 19 formally received in evidence, to re-examine Dr. Kaku at a later  
 20 date.

21 JUDGE GROSSMAN: Well, I don't see--of course that--  
 22 I don't see how you could be precluded from doing so. If we deny  
 23 the offer of proof, if we deny admission of the testimony, then  
 24 you can rest on that ruling and not voir dire or cross-examine  
 25 or not fully cross-examine and voir dire, and I don't see how

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1 any Board or any appellate body would deny you the right to ask  
2 for further hearing at some later time, when that reversal  
3 is made.

4 The advantage to you of proceeding with voir dire  
5 and cross-examining is that in the event of reversal you would  
6 not have to insist on further hearing and further delay the  
7 proceedings if you didn't desire to.

8 MR. GOLDBERG: Okay. We will proceed with as full  
9 an examination, both while here and otherwise, as we're able  
10 today. My understanding is that the offer of proof and the  
11 modification to the prefiled testimony which was rejected in  
12 its entirety yesterday has just been given to us, and that we  
13 should not expect subject matter other than that contained in  
14 the prefiled testimony which we had argued was objectionable  
15 on a variety of grounds, and I'm not sure that the Board's ruling  
16 excluding that testimony was on one or several grounds. But  
17 I would assume that we are not going to be presented here with  
18 what is in effect a new piece of testimony which may in and  
19 of itself introduce other matters which were not the subject  
20 of my motion and the extensive argument yesterday.

21 JUDGE GROSSMAN: My understanding is that that is  
22 not what is going to be offered and, if it is, it is something  
23 that the Board would reject. But one clarification to what  
24 you said, I don't believe any of this is going to happen today  
25 and I don't intend to let it happen. We will resume this discussion

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1 tomorrow morning. I do want to proceed with the county and  
2 state people now, and so I don't want any more of this to detract  
3 from their time. Mr. Bursey, I'll let you have one quick word  
4 on this, but I'm not going to consider any of this any further  
5 today except for the quick word you have on it.

6 MR. BURSEY: Judge, we'll deal with it in the morning  
7 and proceed with my next witness if the Board's ready?

8 JUDGE GROSSMAN: Yes. Mr. Wilson, I'm sorry.

9 MR. RICHARD WILSON: If I could just at this point,  
10 just prior to that luncheon break it was indicated that the  
11 people we had arranged to have here at one-fifteen today didn't  
12 need to be here till a quarter till two. They are here now.  
13 We have the Adjutant General available and also, I believe,  
14 General Wise is also here too.

15 From what I understand Mr. Shealy can be available  
16 whenever you choose to get to him, Mr. Bursey, but these other  
17 two individuals are here now as has been agreed before and  
18 I think it might be appropriate to ask if this is who you intend  
19 to call, and, hopefully, we can expedite that and move these  
20 people through quickly and get them back to their jobs.

21 MR. BURSEY: The schedule as I have it is the Lexington  
22 County Office of Emergency Preparedness, Fairfield County Office  
23 of Emergency Preparedness, the Adjutant General's office, the  
24 Office of Emergency Preparedness and then the Bureau of Radio  
25 logical Health, Mr. Shealy.

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1 MR. JOHN WILSON: Mr. Chairman, it sounds to me that  
2 we're having another delay getting to the state witnesses. Now,  
3 as of seven-thirty last evening it was my understanding clearly,  
4 and it was stated on the record, that at one-fifteen we would  
5 commence, and perhaps earlier, with the state representatives.

6 Now, relying on that and following up with information  
7 this morning that the luncheon was delayed until quarter of  
8 two, I notified the Adjutant General to be here at quarter of  
9 two, fully expecting on that reliance for him to be called to  
10 testify.

11 Similarly, Brigadier General Wise, Director of the  
12 Emergency Preparedness Division, was asked to be here at the  
13 same time and he is here as well. Now, I think Mr. Bursey is  
14 being inconsiderate at the least in not proceeding with the  
15 agreements, as I understood them to be, throughout yesterday  
16 and today.

17 JUDGE GROSSMAN: I don't thin that Mr. Bursey is the  
18 only one to assume the blame. Everybody was here in the hearing  
19 room and everyone understood that he was calling the county  
20 people. It's his fault as well as everyone else's that they  
21 scheduled a conflict with the state people.

22 Now, if Mr. Bursey is going to proceed with the county  
23 people, that's his choice. Is there any way you can vary that  
24 schedule?

25 MR. BURSEY: No, sir, I can't waive my--I mean Mr.

1 Wilson is retained to represent these people. I'm sure that  
2 the county people are just as anxious to go on as everyone else,  
3 and everyone's being inconvenienced. And Mr. Wilson's just  
4 here representing a few of the inconveniences parties. So I'd  
5 like to proceed with Lexington, Fairfield, the Adutant General's  
6 office and--

7 JUDGE GROSSMAN: Mr. Wilson, let me say on what happened  
8 this morning, it's going to be approximately two hours before  
9 we get to the state people. If you would like them, if they  
10 are located around this area, you have the Board's permission  
11 to tell them to be back at about four-fifteen.

12 Is there anyone cho can't be back later during the  
13 day?

14 MR. JOHN WILSON: I'll have to check with those repre-  
15 sentatives. Let me inquire, presuming that the schedule recon-  
16 venes at four-fifteen, how late does the Board desire to proceed  
17 this evening?

18 JUDGE GROSSMAN: We would like to quiteat five, but  
19 we're not going to. I think that probably we'll be going on  
20 until about seven. And that's the best prediction I have.  
21 Mr. Bursey, do you see anything differently? Before you go  
22 through with that, by the way, let's make sure that we have  
23 both counties here. Is Mr. Douglass here?

24 MR. DOUGLASS: Here.

25 JUDGE GROSSMAN: Yes, okay.

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MR. BURSEY: Mr. Andonaegui?

MR. ANDONAEGUI: Here, sir.

JUDGE GROSSMAN: Okay. And did you say there's someone afte them before you get to the state people? No, just the two of them. And do you anticipate that each examination will be of the same order as the others we've had?

MR. BURSEY: Yes, sir. Fairfield County is the county in which the facility is sited. These may be a little longer than Lexington. Lexington will be briefer.

JUDGE GROSSMAN: Okay. Mr. Wilson, could you take two or three minutes and check with the witnesses and see if they can be available then starting at four-fifteen.

MR. KNOTTS: Judge Grossman, while Mr. Wilson is doing that, may I inquire either on or off the record as to the likeli-hood that we will reach Dr. Hamilton tomorrow? I would like to notify him not to come if we're not going to get to him.

JUDGE GROSSMAN: Well, now, Dr. Caldicott will not be here.

MR. KNOTTS: That's correct, and Dr. Morgan was planning to come back. It all interacts.

MR. BURSEY: I anticipate--I see it as extremely likely that we will be able to conclude that tomorrow.

MR. KNOTTS: That we will be able to conclude that.

MR. BURSEY: It's my intention, in order to have Dr. Morgan and Dr. Hamilton in the room at the same time that we

1 have to do it tomorrow.

2 JUDGE GROSSMAN: I guess that's your answer.

3 MR. RICHARD WILSON: Could I ask a question? As I  
4 understand the schedule at this point, Mr. Bursey, we've got  
5 an offer of proof in the morning or a motion to be argued fully,  
6 an offer of proof if, you know, whatever the outcome of that  
7 motion on Dr. Kaku's testimony. Then, we go into these other  
8 two witnesses. I'm having a little difficulty seeing where  
9 everything's going to fit in one day's time frame. Am I missing  
10 something or is this going to be streamlined and hustled through?

11 MR. KNOTTS: Yes, we have at least scheduled our emer-  
12 gency planning and the staff's emergency planning direct case  
13 for tomorrow as well. It appear to me, just based on the way  
14 things have been going the last couple of days it appears to  
15 me we're being unduly optimistic. And if we are, I would like  
16 to advise the gentleman not to travel down here from Ohio. And  
17 if we're not, then he'll be here.

18 JUDGE GROSSMAN: Mr. Goldberg?

19 MR. GOLDBERG: It's hard to estimate without knowing--  
20 I think we'd like to accomplish what we can which was scheduled  
21 to be heard this week. If we can conclude the emergency planning  
22 and health effects matters the staff would be prepared to do  
23 so. I think much of it depends on the length of the examination  
24 of the direct cases by the other parties.

25 JUDGE GROSSMAN: Well, now, let me ask you what your

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1 priorities are? Are we going to go first with the staff and  
2 applicant's emergency planning or are we going to go with Dr.  
3 Kaku, Dr. Morgan and Dr. Hamilton? What do you suggest, Mr.  
4 Bursey?

5 MR. BURSEY: Is the applicant and staff case very  
6 lengthy on the emergency planning, your direct case?

7 JUDGE GROSSMAN: You have the direct case.

8 MR. KNOTTS: Yes, it's prefiled.

9 JUDGE GROSSMAN: It's a question of how lengthy your  
10 cross-examination's going to be.

11 MR. BURSEY: I'm at this point more concerned with  
12 the presentation of Dr. Kaku, Dr. Morgan's redirect, and getting  
13 to Dr. Hamilton if that looks good. We could determine to take  
14 up the staff and applicant's case on the emergency planning  
15 in the July 13th session.

16 JUDGE GROSSMAN: That's your preference. What is  
17 yours, Mr. Goldberg? I know Dr. Branagan's been flying back  
18 and forth.

19 MR. GOLDBERG: Can I confer with the staff members,  
20 please?

21 JUDGE GROSSMAN: Certainly.

22 MR. JOHN WILSON: If I may, while the other matters  
23 are being resolved, I have discussed with both the Adjutant  
24 General and the Direct of Emergency Preparedness Division and  
25 both will make themselves available at four-fifteen this



1 afternoon. And presumably, we will be through both of those  
2 today, without question.

3 JUDGE GROSSMAN: Hopefully. Are those the only two  
4 state officials?

5 MR. JOHN WILSON: Well, I think they wanted to put  
6 Mr. Shealy, Heyward Shealy, Health and Environmental Control  
7 back on the stand for further questioning.

8 JUDGE GROSSMAN: Okay. But you don't have any--

9 MR. JOHN WILSON: I believe Mr. Rich Wilson can handle  
10 that matter.

11 MR. RICHARD WILSON: He seems to be the last one and  
12 apparently he appears to be coming up at some point at the con-  
13 venience of the group, I've agreed to just keep an eye on Mr.  
14 Shealy for that matter.

15 JUDGE GROSSMAN: Well, chances are that we're not  
16 going to get to him until at least five-thirty or five o'clock,  
17 at least. Now, Mr. Wilson, so there's no misunderstanding,  
18 both those people aren't going to be on at the same time so,  
19 you know, it's going to be consecutive. So if they're both  
20 here at four-fifteen, they both won't be called.

21 MR. JOHN WILSON: Well, if I may, Mr. Chairman, with  
22 respect to that, the Adjutant General by statute has within  
23 his agency the South Carolina Emergency Preparedness Division  
24 which is under the directorship of General Wise, but that's  
25 within the agency of th Adjutant General.

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1 JUDGE GROSSMAN: I see. So you contemplate both of  
2 them being on at the same time?

3 MR. JOHN WILSON: I would propose that we have both  
4 of them as well as additional representatives of the agency  
5 all in a panel and dispose of them at one time.

6 JUDGE GROSSMAN: That's agreeable to me. I'm not  
7 sure that's agreeable to Mr Bursey.

8 MR. BURSEY: I'm sorry., Judge.

9 JUDGE GROSSMAN: Okay. The question is, the state  
10 people, the Adjutant General's office and the State Emergency  
11 Preparedness, would you be taking them as a panel or do you  
12 inteond to call them separately?

13 MR. BURSEY: I had not intended to take them as a  
14 panel.

15 JUDGE GROSSMAN: Well, it's been suggested. Do you  
16 prefer not to or would you give that consideration for a few  
17 seconds?

18 MR. BURSEY: Yes, sir, let me refer to my notes as  
19 to what the point were that I wanted to make.

20 JUDGE GROSSMAN: Fine. Mr. Goldberg?

21 MR. GOLDBERG: Judge Grossman, while he's referring  
22 to his notes, may I first ask as a preliminary matter what time  
23 the Board anticipates we will conclude tomorrow's session?

24 JUDGE GROSSMAN: Tomorrow we expect to conclude no  
25 later than five-fifteen.

1 MR. GOLDBERG: Okay. In that regard the staff would  
2 prefer to conclude its direct case on emergency planning tomorrow  
3 and if it's necessary defer its direct case on health effects  
4 intul some later date, given the choice.

5 JUDGE GROSSMAN: Mr. Knotts, are you amenable to either  
6 procedure?

7 MR. KNOTTS: As far as the staff witnesses are concerned  
8 I'm amenable to either procedure. I need to know for Dr. Hamilton  
9 to tell him whether to come down here.

10 JUDGE GROSSMAN: Well, that's what I mean. I certainly  
11 don't expect that you would be amenable to our scheduling some-  
12 thing and not having it come off. But Dr. Hamilton, I take  
13 it then is flexible to either?

14 MR. KNOTTS: I don't know about the week of the 13th,  
15 sir; I would need to call him. He presently is planning to get  
16 on an airplane later this afternoon, as I understand it and  
17 come down here and I just wanted to know whether I need to go  
18 to a telephone and tell him, dont' come, and find out what his  
19 availability is for some later time. Since Dr. Morgan, is firmly  
20 scheduled, as I understand it, to be here tomorrow and since  
21 Mr. Burseay and the Board have indicated a desire to have those  
22 two gentlemen here at the same time, I take it that there's  
23 no reason to think that Dr. Hamilton is off, but I wanted to  
24 be sure of that.

25 JUDGE GROSSMAN: Okay. It seems, Mr. Goldberg, that

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you're going to get the short end of the staff. I think that we'll just have to take our chances. The staff people are here. If we can put them on, we will on emergency planning. It's unfortunate but we have Dr. Hamilton coming from one place and Dr. Morgan from another and I think it would be better to go ahead with them and then take our chances on emergency planning.

MR. KNOTTS: We also have an outstanding subpoena from Mr. Bursey for several folks to testify about the brochure and we need to get straight as to when they're supposed to be here since they've been around for quite a while.

JUDGE GROSSMAN: I'm not aware of that. Mr. Bursey?

MR. KNOTTS: It's Mr. Baer and Ms. McSwain and Mr. Warner.

MR. BURSEY: Those are local employees of the applicants and I would propose we just continue that till the next session.

JUDGE GROSSMAN: That sounds the best procedure.

MR. BURSEY: I also have another subpoenaed who's been present and waiting, Dr. Ruoff, and I'd like to excuse him and continue his subpoena until the next session.

JUDGE GROSSMAN: I can't see how we would get to him now so that's going to have to be the week of the 13th. Excuse me, Mr. Bursey, have you decided whether you would take them as a panel?

MR. BURSEY: I would prefer to do them singularly and be brief.

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JUDGE GROSSMAN: Okay. And in which order?

MR. BURSEY: The Adjutant General, first, the Office of Emergency Preparedness second.

JUDGE GROSSMAN: Okay. And you would be brief so that we would need the Adjutant General at four-fifteen and the other witness at a quarter till five.

MR. JOHN LONG: Four-fifteen and a quarter till five?

JUDGE GROSSMAN: Yes.

MR. RICHARD WILSON: Mr. Chairman, before we move on I believe it was earlier indicated that Mr. Shealy could expect to come up sometime very late in the afternoon tomorrow. I believe it was somewhere around five o'clock?

JUDGE GROSSMAN: Tomorrow?

MR. RICHARD WILSON: That's what I thought I heard.

JUDGE GROSSMAN: Today.

MR. RICHARD WILSON: Today?

JUDGE GROSSMAN: Yes.

MR. RICHARD WILSON: All right.

JUDGE GROSSMAN: And we would expect at around five o'clock. Any problem with that?

MR. RICHARD WILSON: Well, Mr. Shealy's been available. I just didn't want to see him get the shaft again too. He'll be here.

JUDGE GROSSMAN: Okay. But he doesn't have to sit here for three hours if he doesn't care to. If he's available

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1 he can hear what we're saying. I think we ought to then proceed.  
2 Do we have any further business?

3 MR. JOHN WILSON: May I be excused then until quarter  
4 after four?

5 JUDGE GROSSMAN: Yes, sir, quarter after four. Thank  
6 you, Mr. Wilson. Okay. Mr. Bursey, you may call your next  
7 witness.

8 MR. BURSEY: Yes, I'd like to call the Director of  
9 the Lexington County Office of Emergency Preparedness to the  
10 stand.

11 Whereupon,

12 JAMES R. ANDONAEGUI,  
13 was called as a witness on behalf of the intervenor and, having  
14 ben first duly sworn, was examined and testified as follows:

15 DIRECT EXAMINATION

16 JUDGE GROSSMAN: Please be seated and state your full  
17 name and spell it for the court reporter?

18 MR. ANDONAEGUI: My name's James R. Andonaegui. I  
19 spell A-n-d-o-n-a-e-g-i-u, Andonaegui. I'm the coordinator  
20 for Emergency Preparedness, Lexington County.

21 BY MR. BURSEY?

22 Q Mr. Andonaegui, how long have you been the coordinator?

23 A I've been the coordinator for Lexington County since  
24 1974.

25 Q So you were involved in the development of the plan

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1 as it affects Lexington County?

2 A. That's correct.

3 Q And could you please briefly summarize what you see  
4 the role of your office in a radiological emergency?

5 A. As I see it the role of my office as Emergency Prepared-  
6 ness coordinator is similar to what it would be in any other  
7 emergency that might involve the county at whatever level,  
8 whether it be tornado, hurricane, flood, winter storm or whatever.

9 And that role is as a coordinator, trying to get all  
10 the county resources to respond as they should where they are  
11 needed.

12 Q And how do you have your county resources organized  
13 in the event of any emergency?

14 A. Well, as Col. DeLoach pointed out, they are not my  
15 resources and in response to your question, they are the resrouces  
16 of the county. I do not directly command any of the units of  
17 local government. I'm merely a coordinator.

18 In Lexington County we are organized somewhat differ-  
19 ently than some of the other counties involved in that we are  
20 organized as a Public Safety Department. Within the Public  
21 Safety Department is my office, one of the divisions, the ambu-  
22 lance service, the communications services and the fire service.

23 Now, those are under the head of my boss, the Public  
24 Safety Director. So most of the emergency resources for the  
25 county are under direct supervision of the Director of Public

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1 Safety. This places us in a, I think a good position to be  
 2 able to deploy the county emergency resources rather quickly  
 3 without having to go to outside sources since they are under  
 4 the direction of a department head, my boss, the Public Safety  
 5 Director.

6 Q And so in the event of a radiological emergency, the  
 7 Director of the PUBlic Safety Department would be the front  
 8 line county official?

9 A Yes, technically.

10 Q And if that's true technically, is there some other  
 11 fashion that it's not true?

12 A Only in the respect that he is the one thdt would  
 13 be responsible for being able to order deployment or employment  
 14 of most of these emegerncy resources in the county. It would  
 15 be done of course with my recommendation and with the rapport  
 16 that we have and the working relationships that we have, there  
 17 would be no difficulty in the recommendations being followed  
 18 almost without exception.

19 Q And what portions of Lexington County, how large an  
 20 area and how many people are included in the ten-mile zone?

21 A The area of Lexington County that's in the ten-mile  
 22 emergency planning zone, as you know, is relatively small. It's  
 23 approximately eleven square miles in area. It has population  
 24 of approximately seven hundred and twelve inhabitants. It's  
 25 located generally in what is known locally as the Chapin area.

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1           The Town of Chapin being within that ten-mile EPZ.  
2           However, the part of the ten-mile Emergency Planning Zone that  
3           comes into play as far as Lexington is concerned is only a very  
4           small portion and then only starts--is included in about a seven-  
5           mile range down to approximately the ten-mile range. On your  
6           map it's Delta 2, D-2. It's a very small portion.

7           Q     In the area that you refer to as D-2, are there any  
8           schools, institutions, hospitals?

9           A     There's one school, none of the others you mentioned.

10          Q     And how many students--and what school is that?

11          A     The school is Chapin High School. It was approximately  
12          six hundred and seventy students.

13          Q     And are there any other schools in that immediate  
14          area?

15          A     No, not within the ten-mile Emergency Planning Zone.

16          Q     Do you know how far the Chapin Elementary School is  
17          from the V. C. Summer plant?

18          A     Not from the V. C. Summer plant, but it's just outside,  
19          I would say about eleven, between eleven and twelve miles from  
20          the, yes, from the site. It's outside the ten-mile Emergency  
21          Planning Zone probably about a mile or two outside the ten miles

22          Q     And do you know how many children go to that school?

23          A     I believe it's right around nine hundred, maybe a  
24          thousand.

25          Q     It's a big school, right?

1 A. Yes, it is.

2 Q. And do they have school buses at that school?

3 A. No, I don't believe they're located there at the school.

4 Q. Were you involved in drawing the ten-mile line?

5 A. No, I was not.

6 Q. How was that determined, where that boundary would  
7 be in Lexington County?

8 A. Well, of course the guidelines came from Nureg 0654  
9 that said that we should plan for a tenmile EPZ, Emergency Plan-  
10 ning Zone. Now, naturally there's no magic line that bisects  
11 a school or a drugstore or anything else and puts part of the  
12 edifice on one side of ten-mile EPZ and one on the other. We  
13 used common sense, we thought, and certain terrain features,  
14 certain other boundaries we took into consideration that went  
15 beyond the tenmile Emergency Planning Zone.

16 Q. And do you recall there being discussions about the  
17 inclusion or exclusion of the Chapin Elementary School?

18 A. No, not to my knowledge. However, we are again locally  
19 considering, for at least as a contingency, including or planning  
20 for the possibility of having to include plans for evacuation  
21 of the Chapin Elementary School as well. They are not at this  
22 point in our plans. This is outside the ten-mile EPZ.

23 Q. Well, since you're planning to include them--

24 A. I didn't say we were planning to include them. We're  
25 considering doing that.

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1 Q Well, I think perhaps my reading of the Nureg on the  
2 ten-mile zone may be a little different than yours, especially  
3 since that's the school my daughter goes to and I think it's  
4 a little less than a mile outside the ten-mile zone.

5 Your plans to this point then have not involved the  
6 Chapin Elemenatary School?

7 A That's correct.

8 Q What agency coordinates the transportation in your  
9 Zone D-2, in your emergency plan?

10 A What particular agency? Well, it's coordinated through  
11 the Emergency Operations Center. We have a director of general  
12 services who is--has been given the responsibility for coordinating  
13 transportation organic to the county.

14 Q The director of general services?

15 A Yes. Who is within one of the count operating depart-  
16 ments.

17 Q Is that a county employee?

18 A Yes, it is.

19 Q We have heard in earlier testimony that the school  
20 system and the county, for that matter, more or less gives up  
21 authority over the school buses--

22 A Are you referring to the school bus transporation  
23 now or other transportation, or all transportation?

24 Q Well, I believe that all available transportation  
25 rests ultimately in the hands of the Public Service Commission,

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1 but if we're specifically speaking of school buses, I'm inter-  
2 ested that you say that the director of general services for  
3 the county directs the school buses.

4 A. No, he does not. No, I didn't mean to give you that  
5 impression. If we're speaking of school buses, in particular  
6 school buses as they pertain to the Chapin High School, there  
7 are, I believe, it's thirteen school buses that are located  
8 at Chapin High School at any one time.

9 The drivers of course for those buses are high school  
10 students. Those buses would be more than sufficient transporta-  
11 tion to evacuate if this became necessary all those students  
12 to the Reception Center located at Campus Irma Middle School.  
13 So the buses for evacuating Chapin High School are on location.

14 Q. Now, you say if it became necessary to evacuate. Do  
15 you anticipate a situation where evacuation would be called for  
16 of the Chapin High School and not of the Elementary School?

17 A. It's possible. Depends on a number of factors.

18 Q. Can you tell me what those factors are that would  
19 necessitate issue of a call for evacuation of the Chapin area?

20 A. What are the factors that would?

21 Q. Yes, sir.

22 A. If we received a notified either from the State Emergency  
23 Preparedness Division or directly from the site itself that  
24 a general emergency was taking place and that an evacuation  
25 had been ordered by the governor, for example, or we received



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this information directly from our state office, then we would  
 take steps to purour evacuation plan into effect.

end take

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1 Q We could anticipate that that evacuation is an extreme  
2 measure, is that right?

3 A Yes, I would certainly think so.

4 Q Generally brought about by an impending danger to life  
5 and limb?

6 A I would certainly think so, yes.

7 Q But yet you say that there are circumstances where we  
8 would see an evacuation of Chapin High School and not see an  
9 evacuation of Chapin Elementary School one mile down the road.

10 A That's possible, yes.

11 Q Can you tell me what are the possible scenarios where  
12 we would not see an evacuation of the Chapin Elementary School  
13 and see an evacuation of the Chapin High School?

14 A About the only one I can think of at this moment is the  
15 fact that Chapin High School of course is within the ten-mile  
16 emergency planning zone and Chapin Elementary School is not.  
17 it's outside the ten-mile emergency planning zone.

18 Q Well let's just assume for a minute that, as you said  
19 earlier, common sense is used and we include the Chapin Elementary  
20 School in the ten-mile zone and an evacuation is ordered. It  
21 appears that you have room on your school buses for less than  
22 half or about half the students that are in session during school  
23 at the elementary school and the high school. How do you  
24 determine who gets priority?

25 A The first thing we'd have to do, of course, if we do

G2pw

1 include the Chapin High -- Chapin Elementary School in the  
2 evacuation at a later date, we'll have to make arrangements to  
3 supplement that transportation that we now have, which is the  
4 school buses. The source for that again would be SCE&G. We  
5 would request that they make X number of buses available to us  
6 to report to school in the event the evacuation is necessary  
7 of the Chapin Elementary School.

8 Q And you believe all of that can be done within two  
9 hours?

10 A I think so. Again, if we plan for it. Our plan right  
11 now only calls for consideration and evacuation of the Chapin  
12 High School. When a study was done on evacuation routes and  
13 times by Wilbert Smith & Associates, I believe you may have a  
14 copy of the plan, their recommendation was, as it is in our plan,  
15 that the Chapin High School of course be evacuated and that we  
16 use the buses there to do that. There was no mention whatsoever  
17 of the Chapin Elementary School.

18 Q The past mayor of Chapin, Mayor Shealy, did you know  
19 Mayor Shealy?

20 A Yes, I sure did.

21 Q Mayor Shealy was very concerned in some of my conversa-  
22 tions with him about the fact that there were 90 plus widows that  
23 were the bulk of the population of Chapin, elderly widows that  
24 didn't drive, and I'm wondering what arrangements you've made to  
25 transport them to safety.

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1           A.     The arrangements we've made is to have, one bus was indicat  
 2 again in that plan by Wilbert Smith & Associates, it was indicated  
 3 one bus would be sufficient to move those people who do not have  
 4 their own transportation or for one reason or another would not  
 5 be able to drive. We have since requested that rather than one  
 6 bus, it be made two buses that be made available by SCE&G and  
 7 those two buses report to the Chapin Command Post which has  
 8 been designated the Fire Station in Chapin, the town of Chapin.  
 9 And with those two buses, it would be sufficient to move the  
 10 people that might not have their own organic transportation.

11           Q.     Do you have training in radiological emergencies yourself?

12           A.     Yes, we do.

13           Q.     What type of training have you had?

14           A.     What type of training have I had?

15           Q.     Yes, sir.

16           A.     Well, I received rather extensive training while I was  
 17 in the Army, I'm retired Army. I also graduated from the  
 18 Radiological Defense Officers course here in the state and I'm  
 19 also a qualified instructor, as a Radiological Befense Officer.  
 20 We have since trained some 79 radiological detection -- we have  
 21 seven radiological detection officers trained, six instructors  
 22 and we have 79 other monitors trained in the county.

23           Q.     Did your training include an understanding of what the  
 24 worst event could be at the V. C. Summer plant and how it could  
 25 impact Lexington County residents?

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1           A.     Most of the training that was received was not directly  
 2 allied to the V. C. Summer Plant or a peace time nuclear accident.  
 3 It's mostly related toward war time accidents but the instrumenta-  
 4 tion that is used and the principles as far as monitoring and  
 5 emergency procedures and so forth are applicable in both cases.

6           Q     Can you tell me what means of public notification that  
 7 your office is prepared to utilize in the event of an emergency?

8           A.     Yes, very similar to what has already been discussed  
 9 by the other two county directors. In our case, we have an  
 10 emergency operations center located in the basement of the county  
 11 administration building. Within that center, there is a  
 12 communications center that is operational 24 hours a day. It is  
 13 manned by two county dispatchers who are on shifts, two twelve  
 14 hour shifts. The emergency operations center, for all practical  
 15 purposes is operational 24 hours a day, certainly when we are  
 16 all there, my office is located downstairs, when we are there, and  
 17 after we leave after normal duty hours, of course it's occupied  
 18 by the dispatchers. These dispatchers would be the ones who  
 19 would be receiving any information for emergency messages that  
 20 might originate either from the state office or from the plant  
 21 itself. We also have a ring down phone that connects directly  
 22 from the emergency operations center to the site. These dispatchers  
 23 dispatch for all of the county services, ambulance, fire, law  
 24 enforcement with the exception of the sheriff's department, but  
 25 we cross -- we monitor each other's frequencies and quite often

1 we do dispatch for the sheriff's department when their system  
2 goes down.

3 Q And you said that your reception center is at the  
4 Irmo Middle School?

5 A Yes, Campus R.

6 Q And at the Irmo Middle School, are you the lead agency  
7 for the reception center?

8 A You say, am I the what agency?

9 Q Lead agency, are you in charge of the reception center?

10 A No, I'm not. Our Emergency Welfare Service, which in  
11 our county is the Director of Social Services is the one who  
12 coordinates emergency welfare service and of course that includes  
13 the reception center.

14 Q What services does your office provide at the reception  
15 center?

16 A Again, what takes place at a reception center is if  
17 and when it is indicated the reception center should be established,  
18 the ESS Director with the concurrence of the County Administrator  
19 and some of our recommendations and so forth, would notify some of  
20 his own staff to move to that location. We would concurrently  
21 be calling the School District 5 and notifying them that we  
22 are going to open the shelter there, the reception center there  
23 and they would of course, District 5 would then be calling the  
24 Campus R principal and notifying him, these things would be  
25 happening at the same time.



G6pw

1           Some of the activity that would be taking place there  
 2 at the reception center, of course, we have designated one of  
 3 our ambulance units to report directly there. Law enforcement  
 4 would also be there to help in traffic control and so forth,  
 5 and the registration would take place and people would be monitored  
 6 if necessary.

7           Q     Now my question was not what happens at the reception  
 8 center, but what role your agency plays, what role does your  
 9 Office of Emergency Preparedness play at the reception center?

10          A     I would not be there myself, I would be in the Emergency  
 11 Operations Center. I merely coordinate the fact, to insure that  
 12 ESS is ready to go, that their plans are updated, that they  
 13 know specifically what the requirement is, that the School  
 14 District 5 is notified, that we have an ambulance there, etc.  
 15 That's what I would be doing, seeing that these things, checking  
 16 to see that these things are being done.

17          Q     You mentioned that decontamination would take place  
 18 there.

19          A     If necessary.

20          Q     Were it necessary, who would be responsible for that?

21          A     Again, the ambulance unit, all ambulance units are  
 22 equipped with detection sets on board. We have eight ambulances  
 23 at this time in the county, plus four others that are rescue  
 24 squad. All of these ambulances have detection sets on board.  
 25 The majority, in fact I believe all, with the exception of two or

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1 three, all the ambulance personnel have received monitor training.  
2 We do have a number of ladies in our ambulance service who of  
3 course would be available to monitor the distaff side.

4 Q And I'm still not sure exactly who it is, the personnel  
5 that are going to be doing the decontamination were it necessary.

6 A The monitoring would be the ambulance service personnel.

7 Q And the decontamination?

8 A If necessary, they would have to take showers there  
9 and so forth, they would see that it's done.

10 Q The ambulance personnel would see that it's done?

11 A Yes.

12 Q Now on page Q-22 of your plan, the Lexington County  
13 Emergency Plan, it mentions that you do not, "Lexington County",  
14 this is line 13, "does not have the capability for determining  
15 need for decontamination." Has that changed?

16 A No it hasn't, only in the respect that if we have  
17 monitors and if the monitors detect any radiation, for example,  
18 of any appreciable level, people could be asked to take showers  
19 and so forth. We don't have any sophisticated method of detecting  
20 other contamination other than what we have, the equipment that  
21 we have on board now.

22 Q And what is that equipment?

23 A It's the CDV-700, which is the same one that is issued  
24 to most of the counties.

25 Q And do you know what level you consider someone

G8pw

1 contaminated?

2 A. Probably at the same level as was mentioned earlier,  
3 .015 maybe or .105 milliroentgens.

4 Q. Were it determined at the reception center that someone  
5 was decontaminated, then what would happen -- someone was  
6 contaminated?

7 A. Someone was contaminated? We would ask them to take  
8 a shower and that's really all that would be necessary, and  
9 of course check them again to be sure they changed clothing and  
10 so forth. And safeguard that clothing. That's all that would  
11 be necessary.

12 Q. So the reference in your plan that "contaminated  
13 victims will be treated at Lexington County Hospital" has been  
14 changed?

15 A. The only people that will be treated at Lexington  
16 County Hospital will be the ones that had received any kind of  
17 injury; for example, had been involved in an accident and as a  
18 result of that, if they were contaminated they would have to  
19 be sent to the hospital, yes, that is still correct, they would  
20 be sent to the hospital.

21 Q. And how many people can the Lexington County Hospital  
22 accomodate?

23 A. As far as radiation casualties go?

24 Q. Yes, as far as those contaminated individuals you  
25 might be sending there.

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G9pw

1 A They provided us with a copy of the Lexington County  
2 Emergency Plan and they have, part of the section of their plan  
3 is for decontamination, a decontamination scenario. The number  
4 of people, I'm not quite certain how many they can handle at any  
5 one time. I would just hazard a guess, maybe ten people, I'm  
6 not sure, depends upon the severity of the contamination and  
7 whether in fact the people are injured in addition to being  
8 contaminated, and to what degree. I think the hospital could  
9 best address that.

10 Q Do you have a supply or plan on having a supply of  
11 potassium iodide available for Lexington County?

12 A We don't have one, no, not to my knowledge. We don't  
13 plan on having one. That would be the prerogative of the Health  
14 Officer, of course.

15 Q The County Health Officer?

16 A Yes.

17 Q Has your office been involved in any public outreach,  
18 public education for people in the D-2 zone to appraise them of  
19 the possibility of some type of emergency response?

20 A Not as far as fixed nuclear response goes, no, but I  
21 have been to some other units, yes.

22 Q Do you intend to have some type of public outreach  
23 program?

24 A Yes, we're going to have to, that's the secret of the  
25 whole thing, I think, is getting people knowledgeable about what

G10pw

1 to do and what not to do.

2 Q Are you concerned that educating people about the  
3 possibility of an accident in the magnitude we're talking about  
4 is going to scare them?

5 A I don't believe so, not if they're told the truth  
6 and they're told things correctly, you know, we're not trying  
7 to excite or exaggerate the situation. I think they're intelli-  
8 gent people and they would understand it.

9 Q And what is your updated assessment of that truth  
10 in terms of the possibility of a significant accident, a general  
11 emergency with off-site release radiation happening?

12 A What is my estimation of it?

13 Q Yes, sir.

14 A I think that it's relatively remote.

15 Q And have you based your opinion on any information  
16 that you gathered? Where did that assessment come from?

17 A I'm not an expert on anything. It's just information  
18 that I've gathered from, for example, reading 0654, which, NUREG  
19 0654, which indicates that these are the things we're supposed  
20 to do and as I see it, I don't get the impression that there's  
21 any imminent great danger hanging over us.

22 Q Did you think that the accident at Three Mile Island  
23 was a significant great --

24 MR. GOLDBERG: Judge Grossman, I'm going to object I  
25 think to th's line of questions. I've allowed one or two to go

1 by but this individual is an expert in carrying out whatever  
2 protective measures, including evacuation, may be necessary under  
3 an integrated local and state plan. He is not an expert in  
4 radiation, as he has indicated, and I think persisting questions  
5 designed to elicit answers which he is not expert, serve no useful  
6 and unduly burden the record.

7 MR. BURSEY: Judge Grossman, I'd like to respond to that.

8 JUDGE GROSSMAN: Yes.

9 MR. BURSEY: The gentleman testified that he has a  
10 responsibility for public education, he testified he thinks the  
11 public needs to know the truth. How do we determine what the  
12 truth is? We need to examine his sources for the truth and I  
13 would like to do just a little exploration in regards to what  
14 his understanding of the truth is, I know it's a very subjective  
15 thing, but I think it's very important that this is the  
16 threshold through which the information may pass for the people  
17 of Lexington County, that we examine that a little bit.

18 JUDGE GROSSMAN: The witness may answer the question.

19 THE INFORMATION THAT I would consider imparting to the  
20 people as an educational process in Delta-2, for example, would  
21 be that information which is pertinent to them which is in the  
22 emergency evacuation plan, as far as Annex Q goes of the plan,  
23 which tells them, which educates them to what the signals are,  
24 how they would be notified, where they would be expected to go,  
25 what routes they would leave the area and so forth, these kinds



1 of things. These are the things that I would address in trying  
2 to educate the local population, certainly not in the pros and  
3 cons of anything.

4 BY MR. BURSEY:

5 Q Well I think I was trying not to get into the pros and  
6 cons of it, but just simply what would happen to you if you're  
7 sitting in your home in Chapin, the siren goes off and you're  
8 watching soap operas and you decide, I'm not going to leave, this  
9 is ridiculous, you can't get hurt from this stuff, the chances  
10 of it hurting me are very remote, Mr. Andonaegua said so. I mean  
11 that's what I'm concerned about, is that people's perception of  
12 the hazard. There's no assessment of the hazard in the plan.  
13 Do you feel you have some responsibility to the public as to  
14 informing them as to the level of the hazard?

15 A No, I don't think I'm qualified to do that. I'm  
16 qualified to explain the plan and those parts of the plan that  
17 I'm responsible for, for coordinating and so forth, but I'm  
18 not an authority on radiation hazards and so forth; therefore, I  
19 would not discuss that with the people. Someone else would have  
20 to take that responsibility.

21 Q Can you postulate who that someone else should be?

22 A No.

23 Q You're not aware of anyone having a delegated role to  
24 do that?

25 A Not to my knowledge. There's a number of people who

G13pw

1 could express it.

2 Q Mr. Andonaegui, this sounds like a silly question, but  
3 how is your phone listed?

4 A How is my personal phone listed?

5 Q No, sir, your office phone.

6 A It's listed, I believe it's under the Department of  
7 Public Safety.

8 Q Would you agree that it's very difficult to find your  
9 phone number?

10 A I wouldn't think so, but perhaps it is.

11 Q The number that's in the telephone directory, 356-8342,  
12 is not a working number?

13 A Yes, it is, it rings at my desk.

14 Q The person that I had trying to get in touch with you  
15 all last week said that you were hard to reach and I just was  
16 wondering if there's going to be any, if greater availability,  
17 the standardization of the terms of offices, each of the  
18 county offices is called something different and I'm wondering if  
19 you're aware of that problem and have any observations as to how  
20 it can be dealt with.

21 A There's a number in Lexington County, 359-2521 and in  
22 most of the separate directories, it's on the cover, and we  
23 also have issued literally thousands of small stickers that go  
24 on the telephones and that's the emergency number that can be  
25 reached for any emergency during duty hours or after duty hours.

G14pw

1 All of us can be reached, again our dispatchers are on duty 24  
2 hours a day and answer the phones all day long. So if for example  
3 after normal working hours any one of us can be reached by reaching  
4 that number, the dispatchers have a way of toning us out and  
5 letting us know there's an emergency, whatever it might be.

6 Q Do you see the implementation of the emergency plan in  
7 Lexington County straining your finances?

8 A No.

9 Q Do you know what public measures need to be taken for  
10 sheltering in the event of a radiation being released from the  
11 plant and the public order is to take shelter? Can you tell me  
12 what that means?

13 A Yes. If I understand your question correctly, depending  
14 upon the seriousness of the problem, the people might be told by  
15 the news media or whatever, that they should take shelter inside  
16 your homes, stay indoors, shut off your air conditioners, for  
17 example, is that what you're referring to?

18 Q Yes, sir.

19 A I'm familiar with that, if that's your question.

20 Q Is there more?

21 A Yes, they might be asked to evacuate, if necessary.

22 Q Is there anything about respiration that the public is  
23 supposed to be told?

24 A Well they're supposed to stay indoors, yes. If a  
25 person has a respiratory problem, what they're supposed to do and

G15pw

1 so forth?

2 Q No, sir, it's my understanding that the emergency  
3 information is supposed to include some information about  
4 covering your face with something to breathe through. I was  
5 just wondering if you were aware of that.

6 A I don't recall instruction going out to people telling  
7 them to cover their face or anything else, no.

8 MR. BURSEY: Mr. Andonaegui, that's all the questions I  
9 have right now If you'd answer the questions of any of the  
10 other parties, and thank you, sir.

11 JUDGE GROSSMAN: Mr. Knotts?

12 CROSS EXAMINATION

13 BY MR. KNOTTS:

14 Q Mr. Andonaegui, in response to one of Mr. Bursey's  
15 questions, you gave an answer which I took down, something like  
16 this, and I hope this will remind you of what the question was  
17 because I didn't get it all down. Your response was something  
18 like this, "They provided us a copy of the Lexington County  
19 plan", and it was in the context of a hospital that you were  
20 dealing with. Was that the Lexington County Hospital?

21 A Yes, sir.

22 Q And does the hospital have its own emergency plan?

23 A Yes, sir, they do.

24 Q And was your reference to the Lexington County Hospital's  
25 emergency plan that "they provided us", do you recall that?

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Gl6pw

1           A.     What I intended to say was the fact that Lexington  
 2 County Hospital provided us with a copy of their plan. The  
 3 initial plan that they first made, I was involved in assisting  
 4 them in a committee setup they had in developing the plan.

5           Q     I see.

6           A.     And who they would call for initial support, how we  
 7 would coordinate these different activities and so forth. Since  
 8 then they have updated their plan at different times as different  
 9 construction took place, for example, and they have provided us  
 10 with copies of the updated plan. I was referring to the Lexington  
 11 County Hospital's Emergency Plan.

12          Q     I see. That's what I was thinking. Now let me ask you  
 13 this, in connection with the discussion of schools and school  
 14 buses that you had with Mr. Burse, you indicated that if the  
 15 school buses that were available were not sufficient, you might  
 16 call on SCE&G for buses, and I was wondering, sir, if in addition  
 17 to SCE&G, there were other sources that you might call upon; for  
 18 example, might other school buses be available to you within  
 19 the county, not at that school but somewhere else in the county?

20          A.     Yes, that's quite possible. One of the members of our  
 21 emergency operations center staff, for example, is the coordinator  
 22 for all school bus transportation. He would have at his fingertips,  
 23 almost literally, the availability of different transportation,  
 24 buses for example, where they would be located above and beyond  
 25 what we would have immediately available and this certainly would

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G17pw 1 be a resource.

2 Q I see. And would that resource be available to you  
3 within the kind of time frame or less that you were discussing  
4 with Mr. Bursey? I believe you mentioned two hours, or he  
5 mentioned two hours.

6 A I would think that's certainly reasonable, yes.

7 Q Thank you, sir. Now I'd like to ask you as I have the  
8 other county witnesses here to look at a copy that we have of  
9 the Lexington County plan, Annex Q, Fixed Nuclear Facility  
10 Radiological Emergency Response Plan to the Lexington County  
11 Emergency Operations Plan and ask if at a convenient time, you  
12 could let us know whether that's an uptodate copy of the plan so  
13 that we may proceed to put it into evidence.

14 A Yes, sir.

15 MR. KNOTTS: That's all the questions I have for the  
16 moment. I would like to come back to the matter of the plan.

17 JUDGE GROSSMAN: Mr. Goldberg?

18 MR. GOLDBERG: No questions.

19 JUDGE GROSSMAN: Mr. Wilson?

20 MR. WILSON: No questions, Mr. Chairman.

21 JUDGE LINENBERGER: Sir, while we're on the subject of  
22 buses and your comment about the, about SCE&G perhaps providing  
23 additional vehicles if needed, is there a formal contract or  
24 memorandum of understanding between Lexington County and the  
25 utility to insure that this supply of additional vehicles is a



G18pw

1 formalized agreement?

2 THE WITNESS: No, sir, not a formalized agreement. The  
3 only buses at this point that are designated are the one or  
4 two that would be reporting to move the disadvantaged people or  
5 people that don't have privately owned vehicles. To answer your  
6 question, no there is no formalized agreement for additional buses  
7 at this time.

8 JUDGE LINENBERGER: Do you consider this as an essential  
9 deficiency in your plans?

10 THE WITNESS: No, sir, I don't consider it a deficiency.  
11 I consider it something we want to address but I don't see that  
12 there's a great urgent need at this particular moment.

13 JUDGE LINENBERGER: In discussing your communications  
14 net, I believe you indicated that along with the comment that  
15 it's operational on a 24 hour a day basis, that it could and  
16 occasionally serve the county sheriff's office is his radio net  
17 goes out, is that correct?

18 THE WITNESS: Yes, sir.

19 JUDGE LINENBERGER: Now, sir, to turn the coin over,  
20 who serves you if your net goes out?

21 THE WITNESS: He can dispatch for us as well.

22 JUDGE LINENBERGER: And is your emergency plan set up  
23 in a way that if in the midst of an emergency your communications  
24 went out, that -- is it understood that the sheriff will take over  
25 for you in this communication duty?

G19pw 1

THE WITNESS: It's done as a matter of standard  
operating procedure. I might explain at this point that our  
emergency operations center is federally funded. In order for us  
to have received federal funds to construct that emergency  
operations center, we had to go along with some rather stringent  
requirements of construction and backup communications as well as  
emergency power source. We have, of course we're on commercial  
power most of the time. If for some reason we should lose  
commercial power, we automatically go onto emergency power. We  
have a generator located in our emergency operation center in  
one of the additional rooms, and that automatically goes on. It's  
tested once a week. We have 3500 gallons underground diesel  
capacity, which would probably keep us going for about 14 days.  
Again, this was a federal requirement. So we have a redundant  
system built into our emergency system so that it's very unlikely  
that we will lose our own power.

JUDGE LINENBERGER: Very good. You had some comments  
about contamination and you indicated that the ambulance drivers  
are trained to assess contamination levels of people and  
presumably make a determination whether some individual might  
need to be decontaminated, is that correct?

THE WITNESS: That's correct, sir. I might add that  
they are ambulance drivers of course, but they are qualified  
emergency medical services personnel, the majority of our ambulance  
service are all advanced medical technicians, paramedics. They

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1 are very highly qualified. Most of these have received radiological  
 2 monitoring training and there's a number of them that have been  
 3 through radiological defense officer's training. So we would have  
 4 at least one of our RDO's as we refer to them, radiological  
 5 defense officers, at the reception center supervising this part  
 6 of the operation, giving whatever assistance might be necessary.

7 JUDGE LINENBERGER: All right. Now suppose we come to  
 8 the need for decontamination, there has to be some supplies and  
 9 equipment available someplace to accomplish this decontamination.  
 10 Is there a, is there in storage at various places the supplies  
 11 and equipment necessary to accomplish the decontamination?

12 THE WITNESS: I'm not sure I know what resources you're  
 13 referring to, sir. The people would have their own clothing  
 14 with them to change clothing after showering, for example. As far  
 15 as the bags to put the clothing that they would be removing, those  
 16 would be plastic bags, for example, which they carry a certain  
 17 number of those on every ambulance, for example.

18 JUDGE LINENBERGER: Well let me be a little more  
 19 explicit. Suppose you're evacuating 100 people from some  
 20 locality and your ambulance drivers find that 50 of them need  
 21 decontamination, need to be decontaminated. This might very well  
 22 require, in addition to whatever washdown of the people is needed,  
 23 some replacement clothes for them. You wouldn't let hem go  
 24 off with their contaminated clothing. Do you have emergency  
 25 clothing supplies stashed away somewhere to meet a need like that?

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G21pw

1 THE WITNESS: Not for that particular need. I do have  
2 a number of Class X Army fatigues. We have about four or five  
3 duffel bags full of fatigue jackets and trousers. I don't,  
4 they're not particularly targeted for that purpose but they  
5 certainly can be used for that purpose.

6 JUDGE LINENBERGER: What happens if your ambulance  
7 drivers, for example, determine that a police car, fire equipment  
8 has become contaminated and should be decontaminated before it  
9 can be used further. Do you have facilities for special wash down  
10 of vehicles to decontaminate them?

11 THE WITNESS: Not a special place, but there is a  
12 location there within the complex, the school complex, that  
13 could be utilized for washing down vehicles, for example.

14 JUDGE LINENBERGER: And the contaminated wash water  
15 would then go where? On the ground?

16 THE WITNESS: We would have to dam it so that it would  
17 be maintained in a certain place rather than let it go down the  
18 normal drainage system.

19 JUDGE LINENBERGER: Do you have people that understand  
20 the need for this damming and the equipment needed to construct  
21 the emergency dam so as to dam any wash water?

22 THE WITNESS: Our RDO's, radiological defense officers,  
23 during part of their course, of course, understand, get some  
24 understanding of what has to be done, what might be needed. Granted  
25 we might have to refresh their memories and give them some

G22pw

1 additional training in this. The training will be a continuous  
2 ongoing thing anyway.

3 JUDGE LINENBERGER: But I would think if all of a sudden  
4 they're confronted with an ambulance or fire truck that needs  
5 decontaminating, they may be confronted with the need for a  
6 bulldozer to build a dam somewhere to hold the dirty water so  
7 it doesn't run into a drain. Now where are they going to get  
8 that bulldozer in an emergency like that?

9 THE WITNESS: I don't foresee that the dam would be  
10 such a structure that it would take a bulldozer for example. We  
11 do have in our own Public Works Department, we have a number of --  
12 we have bulldozers if necessary. We have scrapers, we have  
13 dump trucks, et cetera. In our plan, as a matter of fact,  
14 identified in one of the annexes, the Public Works Annex, the  
15 resources that they have. If this were necessary, it looked  
16 like we were going to have a contamination of any appreciable  
17 level, we would start cranking these resources and have them  
18 report to wherever the decontamination site was going to be.

19 JUDGE LINENBERGER: You mentioned that in terms of  
20 treating patients exposed to radiation at the Lexington Hospital  
21 could probably accomodate maybe in the order of tens of people.  
22 If you had more people than that, do you have, have you  
23 identified and made arrangements with any other backup hospital  
24 facilities to handle the overflow that Lexington might not be  
25 able to accomodate?

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G23pw 1 THE WITNESS: There are of course a number of hospitals  
2 available in the area. We don't have any fixed contracts with  
3 the other hospitals to accept any additional casualties, for  
4 example, that could not be handled by Lexington County. Our  
5 County Medical Officer would be responsible for knowing which  
6 hospitals are available and making these determinations with the  
7 chief of staff of the hospital and so forth, and knowing where  
8 to move certain people.

9 JUDGE LINENBERGER: But I would think you wouldn't want  
10 to wait until the need arises to find out where to take them  
11 and who has the right facilities. Not all hospitals are  
12 prepared to handle irradiated patients, so it would seem to me  
13 it would be prudent to identify at least some of these hospitals  
14 in advance of the need for them.

15 THE WITNESS: Well besides our hospital of course, there's  
16 Richland Memorial Hospital. Again, that's a hospital that --

17 JUDGE LINENBERGER: Can they handle radiation victims?

18 THE WITNESS: Yes, they can. Colonel Boyd was mentioning  
19 Richland Memorial Hospital. Now granted it might be that  
20 maybe the evacuation involves contamination casualties from  
21 both towns, then another determination would have to be made,  
22 perhaps Moncrief Hospital or one of the other hospitals would have  
23 to be used.

24 JUDGE LINENBERGER: To what extent does your plan  
25 anticipate the possible need for concern about food supplies,



G24pw

1 dairy cattle, milk supplies, meat supplies, vegetable crops that  
 2 might be contaminated or shouldn't be brought to market for  
 3 some period of time, does the plan set up a system for handling  
 4 this?

5 THE WITNESS: Yes, sir, as was the case with the other  
 6 counties, the person that we have involved in that respect is  
 7 our County Extension Agent, Raymond Boozer. I might add that Mr.  
 8 Boozer and the people that work with him in the Extension Service  
 9 and the soil conservation people and so forth, this may be a  
 10 slight exaggeration but I think they know every single chicken  
 11 and they know them by name, rank and serial number, in Lexington  
 12 County. They're very knowledgeable as to what should be done.

13 JUDGE LINENBERGER: That's very good. Now do you know  
 14 whether they're carrying on any kind of educational program  
 15 with the farmers so that they can anticipate the kinds of things  
 16 they might have to do and the farmers can anticipate what they  
 17 might have to do before the need arises?

18 THE WITNESS: I don't know whether in fact they have  
 19 initiated that kind of program with the farmers at this point, no,  
 20 sir.

21 JUDGE LINENBERGER: Perhaps I didn't hear it, but I  
 22 don't recall your saying anything about any radio or television  
 23 educational announcements or programs or whatever, that would  
 24 give the residents some idea in advance of an emergency about the  
 25 kinds of things that will be expected of them. Is this being

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1 carried on?

2 THE WITNESS: No, sir, not at this point, there's no  
3 television programs that I am aware of, that I had initiated for  
4 example, to educate the people in that respect, no, sir.

5 JUDGE LINENBERGER: Is this something you would like  
6 to see done, do you think it would make the emergency operations  
7 move more smoothly if you had a little free instruction done?

8 THE WITNESS: I think it might be helpful, yes, sir.  
9 Again, the area that we're speaking of that we're primarily  
10 concerned with, is a relatively small area with a sparse population.  
11 They can be reached certainly by those means or more personal  
12 means, town meetings and so forth.

13 JUDGE LINENBERGER: Well right now, at this very moment,  
14 of course the Summer plant is not operating, but let's assume  
15 there were, let's assume that the Summer plant were in operation  
16 and you were notified of an emergency of some sort. What would be  
17 the means by which you would notify the residents in the area  
18 you're responsible for that they may have to take action? Do  
19 you have --

20 THE WITNESS: Well obviously the sirens are not in place  
21 yet so we would not be able to use that system. The brochures  
22 that were passed out to residents of the area indicated that sirens  
23 would be placed, would be in place and if and when -- at that time  
24 you're supposed to turn on your radio or television and so forth.  
25 What we would do, for example, at this point since the sirens are

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1 not in, if we got the notification, the word that we're supposed  
2 to notify the people to let's say take protective actions, like  
3 stay indoors, what we would do is this, Chapin, the town of  
4 Chapin has the Chapin Fire Department that has approximately four  
5 or five full time personnel including the chief and about 30  
6 volunteer firemen. We have organized these volunteer firemen  
7 into three teams, Team Alpha, Bravo, Charlie. We have designated  
8 each of these teams part of that sector involved in that ten-mile  
9 APZ. These people would, upon our notifying them, the fire  
10 chief, we would tone them out from our EOC, we have a method,  
11 radio method whereby we, our dispatcher, would hit one button  
12 and each of these 30 people would be notified instantaneously  
13 by means of a plectron receiver, a radio receiver that they  
14 keep with them at all times. We'd hit that button, their  
15 receivers would be opened and we would give them the message,  
16 which is sometimes given quite often, Chapin Station so and so,  
17 man your stations. That means all these people would report  
18 immediately to the Chapin Fire Department. These people are  
19 organized into three teams. Those three teams would then go  
20 with vehicles that are already there in the Chapin Fire Department  
21 to each -- within each of their areas of responsibility, and  
22 notify the people that so and so emergency is occurring or will  
23 occur or whatever your subject might be. That's what we have  
24 set up at this point, until we get the sirens in. After we get  
25 the sirens in, these people will still go out and do that as a

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1 backup to the sirens, to be sure the people are reached.

2 JUDGE LINENBERGER: Does that mean you've lost your  
3 firefighting capability while these people are out on that kind  
4 of a job?

5 THE WITNESS: Not necessarily, sir. We have 17 fire  
6 stations within the county fire service and we wouldn't lose  
7 the capability, no, sir.

8 JUDGE LINENBERGER: Well finally now, it seems from what  
9 you've said that there are several facets of the plan that perhaps  
10 might be a little bit more sophisticated or finished up or  
11 something, let me ask you, is funding a problem for you so far  
12 as implementation of this plan is concerned?

13 THE WITNESS: No, sir, it hasn't been. We have received  
14 support from our county without any great problem. We are  
15 adequately funded.

16 JUDGE LINENBERGER: All right, sir, thank you very  
17 much.

18 JUDGE GROSSMAN: Are Class X uniforms, fatigues?

19 THE WITNESS: Yes, sir.

20 JUDGE GROSSMAN: How many of those uniforms do you have  
21 available?

22 THE WITNESS: I've got about four duffel bags, I guess  
23 we've got maybe 50 sets.

24 JUDGE GROSSMAN: Thank you.

25 THE WITNESS: Yes, sir.

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JUDGE GROSSMAN: Mr. Bursey, any redirect?

REDIRECT EXAMINATION

BY MR. BURSEY:

Q Mr. Andonaegui, you mentioned again the school buses and I hate to keep coming back to school buses, but I'm concerned about who is going to drive them. Have you had any discussions as to 16 year old school bus drivers driving in an evacuation under very high pressure situations?

A It certainly is a consideration, yes. We wouldn't prefer that, no.

Q Do you have alternative plans?

A Well we have a relatively large manpower resource which is, among others, which is our fire service. We have some 450 to 500 volunteer firemen in our county fire service. Each one of these individuals is equipped with one of the pectron receivers and again we can contact them at just about any time of the day and if we need additional manpower we can make those people available at wherever, whatever place we want. This is a resource.

Q This is a what?

A It's a resource.

Q Now has your plan considered what you would do in the event that evacuation was necessary let's say at the Chapin Elementary School and you get the buses in and you get the children on and a distraught mother comes up and tries to stop the bus and

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1 get their daughter off, what type of measures are you going to  
2 take to prevent that from happening over and over again and not  
3 make any headway in evacuating the schools?

4 A. I don't know what, I'd just have to consider that  
5 problem at the time it occurs, if it ever occurs. Obviously if  
6 the lady wanted to remove her child from the bus, she's the  
7 mother, it's her prerogative. If she wants to do that she can  
8 do it. Just as I'm sure you would have that prerogative yourself.

9 Q. Well it would seem to me that in order for me to have --  
10 I have a child at that school. I may be in Columbia, I may be  
11 somewhere else. I would think that children being, I think  
12 someone mentioned earlier, our most valuable resource, that the  
13 kids would get good treatment, should get good treatment, priority  
14 treatment and I would want to trust that your emergency plan is  
15 going to safely and quickly get my daughter out of danger. I  
16 don't have that comfortable feeling right now and I might be  
17 amongst those trying to get my daughter. If that happened  
18 repeatedly you couldn't get anybody out of the school.

19 A. Well I think that's very hypothetical.

20 Q. Our entire discussion here today is hypothetical,  
21 emergency plans are hypothetical.

22 A. You have your version and I have mind, I don't think it  
23 would happen.

24 MR. BURSEY: Thank you, sir.

25 JUDGE LINENBERGER: Any recross?



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MR. KNOTTS: No further questions, Judge Grossman, I would like again to request the witness, when he gets a chance --

JUDGE GROSSMAN: Yes, I will handle that.

MR. KNOTTS: Thank you.

JUDGE GROSSMAN: Mr. Goldberg?

MR. GOLDBERG: Yes, Judge, one or two follow up.

RECROSS EXAMINATION

BY MR. GOLDBERG:

Q In answer to questions by Judge Linenberger, Mr. Andonaegui, I believe you indicated that the area of your county which fell within the ten-mile zone was small and the population sparse. Could you give me some idea of the size of that area and the size of that population?

A Yes, the population is 712 and the area I'm speaking of is 11 square miles, approximately.

Q Mr. Andonaegui, assuming that the warning sirens are in place, do you have any idea how long it would take for you to evacuate that area upon notification?

A The figure that was arrived at in the study that I mentioned earlier by Wilbur Smith & Associates is a total of 66 minutes. This includes, I may add, includes 60 minutes for notification receipt and preparation for evacuation; therefore travel time of approximately 6 minutes to reception center.

Q Perhaps I -- let me just ask the question again. Once a decision was conveyed to you that you should commence an

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1 evacuation of your area of the county that fell within the zone,  
2 what amount of time do you believe you can effect that evacuation?

3 A. I think it can be done within an hour.

4 MR. GOLDBERG: I have no further questions.

5 JUDGE GROSSMAN: Mr. Wilson?

6 MR. WILSON: No questions.

7 JUDGE GROSSMAN: Mr. Bursey, let me just make sure on  
8 the schedule. Mr. Shealy is going to be called after the state  
9 people, is that correct?

10 MR. BURSEY: Yes, sir.

11 JUDGE GROSSMAN: Okay, fine. Why don't we take a ten-  
12 minute --

13 MR. BURSEY: Just a minute, state people being the  
14 Adjutant General and the Office of Emergency Preparedness?

15 JUDGE GROSSMAN: Yes.

16 MR. BURSEY: Yes.

17 JUDGE GROSSMAN: Okay, why don't we take ten minutes  
18 in which Mr. Andonaegui can look over that plan and I suggest  
19 Mr. Knotts that you show that county plan to Mr. Douglass too  
20 during these ten minutes.

21 MR. KNOTTS: Yes, I certainly will, Judge Grossman.

22 JUDGE GROSSMAN: Okay, fine. Ten minute recess.

23 (A short recess was taken.)

24

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JUDGE GROSSMAN: Mr. Andronaegui, can you resume your seat here at the witness table?

Have you reviewed that plan that Mr. Knotts has given to you?

MR. ANDRONAEGUI: Yes, sir, I have.

MR. KNOTTS: Mr. Andronaegui, it is my understanding that there are a few corrections, updates or additions to the plan and that you were able to supply us with replacement pages to reflect the current status of the plan as of today?

MR. ANDRONAEGUI: That is correct.

MR. KNOTTS: Would it be agreeable, Mr. Chairman and the parties, for us to supply that for the record as soon as possible, either tomorrow or the beginning of the next session?

JUDGE GROSSMAN: Mr. Bursey?

MR. BURSEY: I have no problems with that.

JUDGE GROSSMAN: Mr. Goldberg?

MR. GOLDBERG: No objection.

MR. WILSON: No objection.

JUDGE GROSSMAN: Fine. So we will use that procedure. Thank you very much for appearing, Mr. Andronaegui.

MR. ANDRONAEGUI: Thank you, sir.

(Witness excused.)

MR. GROSSMAN: Mr. Bursey, could you call your next witness?

1 MR. BURSEY: Yes, Judge, we would like to call Mr.  
2 Douglass of the Fairfield County Office of Emergency Preparedness.  
3 Whereupon,

4 GEORGE DOUGLASS

5 was called as a witness by and on behalf of the INTERVENOR and,  
6 having been first duly sworn, was examined and testified as  
7 follows:

8 JUDGE GROSSMAN: Would you state your full name and  
9 spell it for the reporter, please?

10 THE WITNESS: My name is George Douglass, (Spelling)  
11 D-o-u-g-l-a-s-s, Director of Disaster Preparedness, Fairfield  
12 County.

13 DIRECT EXAMINATION

14 BY MR. BURSEY:

15 Q Mr. Douglass, how long have you been the Director of  
16 the Office of Emergency Preparedness in Fairfield County?

17 A February 1, 1979.

18 Q Were you involved in the development of the plan for  
19 Fairfield County?

20 A Most of it, yes, sir. There was some prior planning  
21 prior to me taking office.

22 Q How many people work in your office?

23 A Myself and my secretary.

24 Q And your funding is through the county?

25 A Yes.

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1 Q And what is your budget for the current fiscal year?

2 A Twenty thousand dollars.

3 Q That is for yourself, your secretary, and some

4 supplies?

5 A Yes.

6 Q Can you give us a summary of your responsibilities

7 in the event of a nuclear accident at the V. C. Summer plant?

8 A My responsibility would be the preparing of emergency

9 plans for the county. The coordination of the local agencies,

10 the county government and the public to safeguard property and

11 lives in the event of an emergency of any kind, whether it be

12 nuclear or radioactive or whatever.

13 Q Can we assume that much of your plan is similar to

14 the plans that we have heard from the other counties?

15 A Yes, most of it would be.

16 Q Does your office have a greater role in the emergency

17 due to the fact the facility is located in your county?

18 A I would say so, yes.

19 Q Can you tell us in what areas you are responsibility

20 differs from let's say the responsibility of Mr. Longshore

21 of Newberry?

22 A Well, the responsibilities wouldn't be very much

23 different in Fairfield and Newberry County. However, we have

24 a greater area in square miles to cover, probably not in

25 population, but in square miles, yes.

1           The plant is physically located in Fairfield County,  
2 the plant site, itself.

3           Q     What kind of training have you had in radiological  
4 emergencies?

5           A     I have had active duty and reserve training, a total  
6 of 23 years with the military and we had quite a bit of radio-  
7 active training there. Since being in this office, I have  
8 attended the RDO course that is put on here at the state and  
9 we train three RDO instructors and have put four people through  
10 the RDO course here at the state.

11          Q     And if we could, let's postulate an accident at the  
12 V. C. Summer plant, a general emergency where large amounts of  
13 radiation were released. What would your first act be?

14          A     Upon being notified?

15          Q     Yes, sir.

16          A     I would activate our EOC and keep our County  
17 Administrator and County Council informed and, you know, depend-  
18 ing on the degree of emergency, notify our warning officer and  
19 possibly, you know, on the evacuation if it be necessary if  
20 it was the worst type.

21          Q     What means of notification would you rely on?

22          A     Notification from the plant itself into our EOC  
23 central dispatcher. The other means of notification of the  
24 public that we have now is through our warning officer, chief  
25 law enforcement officer of the county, in conjunction with the



1 rescue squad, our volunteer fire department. We have three  
2 sectors that we are involved with. A sector, B sector and  
3 C sector. Volunteer rescue is responsible for the A sector,  
4 Law enforcement for the B sector and our rural voluntary  
5 fire department for the C sector. They would move in with  
6 their vehicles, all have vehicles equipped with loud speakers  
7 and sirens and we would also put notice on our local radio  
8 stations to inform the public.

9 Q. About how many people are we talking about in Fairfield  
10 County that are within the 10-mile zone?

11 A. About 3,600 some odd.

12 Q. And has there been any public education efforts on  
13 the part of your office to educate these 3,000 plus people about  
14 what they may be faced with doing in the event of an accident?

15 A. We have one program. I am not certain of the name of  
16 it but it has to do with children that are very intelligent.  
17 We have supplied the teachers of these children with information.  
18 They are being taught and they take it back into the schools.  
19 We have no formal program as such now in the schools. We plan  
20 to. We have a brand new superintendent of education and he has  
21 indicated that he is willing to work with us in any way, but  
22 insofar other than one talk show over the radio and talks that  
23 we have had at civic clubs, lions clubs, rotary clubs, civitan  
24 nothing more formal than that.

25 Q. Is it your office's position that a plan is going to

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1 be more effective if the public understands what happened to  
2 them before an accident happens?

3 A. I think public education is most important.

4 Q. Would you agree that that public education should  
5 include the possibility of something happening?

6 A. Certainly.

7 Q. The impacts that could result?

8 A. Well, I think in the beginning that public education  
9 should be geared around as to what would be the best for them  
10 in the various types of accidents that could occur and their  
11 role in the evacuation and what they should do for several  
12 days, you know, as it is blown up and elaborated upon, then  
13 it could cover the whole phase of it.

14 Q. Well, let me--we have blended in impacts with what  
15 to do. I have noted down four points that I would like to see  
16 dealt with. The possibility of an accident. The impacts of  
17 an accident. What do do in case of an accident, and how to  
18 do it, and do you have any problem with that being broken down  
19 that way; do you think that the public should be educated  
20 on those points?

21 A. On those points, yes. I wouldn't put it in that  
22 priority if that is what you were--

23 Q. Well, not saying priorities, what is your under-  
24 standing of the possibility of the people in Fairfield County  
25 being faced with a terrible nuclear accident?

47

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1 A. I think it is very, very remote. Almost approaching  
2 nil.

3 Q. What do you base that opinion on?

4 A. My exposure to the information that I have about  
5 nuclear plants and their operation; and as Will Rogers would  
6 say, "what I have read in the paper".

7 Q. Where does most of that information that you have  
8 read about the V. C. Summer Plant come from?

9 A. The Nuclear Regulatory Commission, FEMA, local  
10 news media, TV, my tours to the plants mainly.

11 Q. You say the possibility is remote. What would be  
12 the impact that you would educate people to be psychologically  
13 prepared for in the event of a worst accident?

14 What could happen to them, especially if they don't  
15 listen to your suggestions as to what to do about it, what can  
16 happen if someone ignores you?

17 A. As I say, if I understand your question, I wouldn't  
18 put a great deal of emphasis on that at this time. I would  
19 explain to them what they should do, how they should do it for  
20 self protection. The impact on them, I wouldn't get into real  
21 heavy at this point.

22 Q. Why they should do it more or less, what to do and  
23 how to do it, but you don't think it is necessary to get into  
24 the why they should do it?

25 A. Yes, I do.

Q. I am sorry. You gave an affirmative answer to a negative question.

JUDGE GROSSMAN: Would you rephrase the question?

MR. BURSEY: Yes, sir.

BY MR. BURSEY:

Q. Do you feel that people should be told why they should follow emergency instructions?

A. Yes, I do.

Q. What is your estimation your office's position on why they should follow emergency instructions?

A. For their self protection.

Q. What would happen to them if they didn't follow your instructions?

A. There would be a possibility that they may become contaminated depending on the degree of accident.

Q. And do you understand, does your office educate people about what that would mean to them in the event of a major accident, what contamination could mean?

A. We haven't to a great degree at this point, no.

Q. Do you plan to?

A. Yes, we do, as a part of the public education program.

Q. And what is it that you will tell people during your public education program the effects on them would be if they didn't leave the area in the event of a major accident?

A. I think we would take it in the category of types

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1 of accidents and, you know, the threat to them based on an  
2 alert as it progresses on to a general type accident.

3 Q Well, so do you understand what would happen to the  
4 population in the area of your county that you are responsible  
5 for where there were major release, do you understand what  
6 would happen to the people if they didn't leave?

7 A I understand what could happen, yes.

8 Of course, it depends on a great deal of things,  
9 you know, the plume area or the winds or this sort of thing.  
10 It might not even affect our county at all or it could affect  
11 it.

12 Q Let's assume that the prevailing winds generally  
13 do blow northeasterly and that the Monticello area is right  
14 in the middle of the plume zone and that we have a major  
15 release of radioactive material, then do you understand what  
16 could happen to the people of Monticello if they are not  
17 gotten out?

18 A It could be a great threat to that area, yes.

19 Q Can you be more specific what that threat means to  
20 the--let's say there is 50 people living in a four or five  
21 square mile area of Monticello.

22 A Well, depending on the velocity of the winds and  
23 this sort of thing, at the worst, they could become contaminated,  
24 yes.

25 Q Could they die?

4-10  
1 MR. GOLDBERG: Judge Grossman, we have had a whole  
2 line of questions here which I think call for answers beyond  
3 the stated competence of the witness to provide. He is in the  
4 emergency planning business. He has certain responsibilities  
5 to fulfill within that capacity. He doesn't have to be an  
6 expert on either the possibilities or consequences of nuclear  
7 accidents of some undescribed dimension.

8 JUDGE GROSSMAN: I believe that the questions are  
9 competent. They go to the emergency planning and the effect  
10 of not having adequate plans and I think the witness is  
11 competent to answer the questions.

12 There are a whole line of questions but if he  
13 answers one, I think there won't be any further, so the  
14 witness is instructed to answer the questions.

15 THE WITNESS: Would you repeat the question?

16 BY MR. BURSEY:

17 Q Yes, the question simply was, what I was asking, and  
18 you responded they would be contaminated and what I am trying  
19 to find out is what that would mean to me. I am not sure if  
20 I was living in Monticello I would know what being contaminated  
21 means. Now if you told me I was going to die, I would under-  
22 stand that. Could people die from this type of accident?

23 A I suppose if we didn't have a proper evacuation,  
24 they may depending upon the degree they were contaminated. I  
25 don't think there would be that type of release that it would



1 be the cause of any deaths, no.

2 Q Do you understand what the public would be  
3 instructed to do in the event of a general emergency?

4 A Yes, they would be instructed to evacuate, depending  
5 on the, you know, plume area and that sort of thing.

6 Q And you have been involved in drawing up the evacua-  
7 tion plans?

8 A Yes, I have.

9 Q And do you feel confident that those evacuation plans  
10 can be implemented?

11 A I feel sure we can. We recently had an exercise that  
12 made me feel very confident that our agencies would work  
13 together and that we could accomplish an effective evacuation  
14 should it be necessary.

15 Q Has your office determined how many of these 3,000  
16 plus people in this area need transportation?

17 A Basically, yes. About 20 to 30 percent we would say.  
18 The rest depending upon their providing their own transportation  
19 and a special category that would require special assistance.

20 Q Can you give us a little description of this size  
21 and the economic background of the area in Fairfield County  
22 that would be affected?

23 A The total area would be somewhere around forty  
24 square miles, in the 10-mile EPZ. It is basically a rural  
25 type area, a small community, Jenkinsville being the largest.

4-12  
1 The population is quite scattered and, uh, what other specifics  
2 were there.

3 Q Is it a middle class suburb or is it a rural area?

4 A I would say from poor to middle class?

5 Q Poor to middle class. Would it be fair to say that  
6 this area poses somewhat a problem to someone who is responsible  
7 for evacuation because it is so very rural and the population  
8 is scattered and a large percentage of it is very poor?

9 A Maybe because a large percent of it may be poor and  
10 possibly not quite as educated as some of the other areas, not  
11 because it is rural and scattered I don't think. I think that  
12 could be used as an advantage more than as a disadvantage.

13 Q Well, I am wondering if this, the poverty of this  
14 area might affect their ability to have their own transportation  
15 all the time?

16 A More so than in some other areas.

17 Q And you mentioned that 20 to 30 percent may need  
18 transportation?

19 A Yes.

20 Q How did you reach that figure?

21 A Just by estimation.

22 Q And you don't have a list yet of where these homes  
23 are located?

24 A Yes, we do. You mean the ones requiring--

25 Q Yes, sir.

1 A. Yes, we do. We have a list, there is an annex to  
2 our plan by name and address.

3 Q. Of the twenty to thirty percent who need transpor-  
4 tation?

5 A. Yes.

6 Q. So if you have a list--

7 A. Now wait, let me clarify that. Not of the twenty  
8 to thirty percent who need transportation, of the ones that  
9 would require special assistance, the elderly, the ones  
10 without electricity, this sort of thing.

11 Q. And what is the plan now for helping this thirty  
12 percent evacuate the area?

13 A. We have busses and drivers arranged to go in and  
14 get them with the coordination and guidance of law enforcement,  
15 rescue and emergency medical services.

16 Q. Are the busses going to drive up and down the roads  
17 or are they going to go to central points?

18 A. They have central points designated. The warning  
19 will be effected by volunteer fire, volunteer rescue and law  
20 enforcement.

21 Q. And where do the busses come from?

22 A. Our school bus maintenance program in Fairfield  
23 County.

24 Q. And how many busses would be needed to adequately  
25 fulfill this function?

A. I'd say anywhere from 10 to 12 probably.

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Q How many schools or institutions are in the 10-mile zone?

A There is one school.

Q Now you mentioned that there would be central points for people who don't have cars to go to. How are they going to know where these points are?

A They will be told by the agencies we have in their warning and they will be predetermined, posted and be included in brochures, check points.

Q In whose brochures?

A Brochures that the utility will put out.

Q Do you have an agreement with them to that effect?

A No, as we, you know, get further and the brochure is updated, we plan to include these, sir.

Q Would it be a brochure that would be the revised version of this brochure here I am holding up?

A That and brochures that, you know, we plan to put out and publish in the newspaper, and the public media.

Q This is Bursey's Exhibit 4, and you are saying that indeed it would be a revised copy of the company's brochure that would tell people where to go?

A Not necessarily this brochure but brochures that would be published in the news media and the newspapers we put out over our radio stations and that sort of thing.

Q Do you have any--

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A. I understand this brochure is -- there are plans to update these brochures.

Q. Do you--excuse me, sir. Do you have any figures on how many people on this, let's--well just on the 20 to 30 percent again, how many people in that percentage can't read?

A. No, I don't have any figures on it.

Q. Do you have any provisions for educating the population that doesn't have a car and can't read about where to go in the event of an accident?

A. We don't have any programs now. We have plans to institute programs to this effect.

Q. And what would that entail?

A. Community meetings, hospitals, schools and this sort of thing.

Q. Have you considered door to door?

A. We haven't at this point, no.

Q. I would like you to look at that map behind you and tell me if you can identify what it is?

A. It is a map of Fairfield County.

(Brief pause.)

Q. You say this is a map of Fairfield County and what is this circle there?

A. It appears to be the 10-mile EPZ outline.

Q. Appears to be, can you look at it and ascertain

1 for certain if it is?

2 A Yes, I would say that it is.

3 Q And can you tell me, sir, how this 10-mile circle  
4 was determined?

5 A Well, this 10-mile circle seems to be a radius  
6 drawn from the plant site. Our actual 10-mile EPZ does not  
7 follow a straight line like that. It follows natural boundaries  
8 and road boundaries and that sort of thing.

9 Q Can you indicate on here where some of these  
10 diversions from the described circle are?

11 MR. GOLDBERG: Judge Grossman, unless this map is  
12 going to be reduced to writing or placed in the record, this  
13 description is not going to have that much meaning.

14 JUDGE GROSSMAN: I assume that you are aware of the  
15 fact that we are recording this, Mr. Bursey, that we are  
16 transcribing this. I don't know where you are going.

17 MR. BURSEY: My point will be well taken orally. The  
18 map will not be necessary to understand the point.

19 JUDGE GROSSMAN: Well, okay.

20 BY MR. BURSEY:

21 Q Can you explain where when you went outside that  
22 scribed circle and where and what prompted you to do so in a  
23 specific area where you did?

24 A No, I didn't set up the actual deviation from the  
25 radius itself. We coordinated with the state office and to-



1           gether it was, you know, determined to follow certain natural  
2           boundaries, road boundaries, river boundaries and that sort of  
3           thing.

4           Q       The community of Lebanon, which sits right outside  
5           the 10-mile zone I believe, that is included, is that correct?

6           A       I really wouldn't say unless I had my map here. I  
7           have maps in the office that show it very clearly. This one  
8           does not and I can't in my head remember where--

9           Q       Let me ask something else you may remember. There  
10          is a school here, the Kelly Miller School.

11          A       Yes.

12          Q       Which sits a few hundred yards outside the zone?

13          A       Yes.

14          Q       Would there have been any discussions of that school  
15          within the zone?

16          A       Yes, there have been some discussions to include it  
17          in the zone. Right now, as far as our plans go, it is not  
18          included in the 10-mile EPZ, however, should there be an  
19          evacuation of C-2, which it lies adjacent to, Kelly Miller  
20          and also Greenbriar Headstart would be evacuated with that  
21          sector.

22          Q       Now Greenbriar Headstart, that is down the road a  
23          piece from the Kelly Miller School, is that right?

24          A       That is correct.

25          Q       And you don't have any--you were not involved in the

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decision to expand the EPZ to include Lebanon in this, what is essentially a white middle class community here, to include this and to stop right short of this school?

A. No.

Q. Do you know who made this decision?

A. No.

Q. If the Kelly Miller School and the Headstart School were to be included in emergency planning, would it be reasonable to assume that the zone is going to be expanded to include them?

A. No, I don't think so. I think our EPZ zone boundary will lie much the same as it is laid out now. However, our County Council has taken the approach that if sector C-2 were evacuated, both Kelly Miller and Greenbriar Headstart would be included in the evacuation.

End Take H

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1 Q Has the county council discussed this point?

2 A Yes, they have.

3 Q And the said that they would bring your schools in  
4 in the event of an emergency?

5 A In the event of evacuation of this sector these two  
6 schools would be included in the evacuation.

7 Q What are these schools?

8 A Kelly Miller is a regular grammar school and Greenbriar  
9 Heddstart is a special program. It's not considered a county  
10 public school.

11 Q These schools are primarily black, low-income area?

12 MR. RICHARD WILSON: Judge Grossman I fail to see  
13 the relevance of that question and I object to it.

14 JUDGE GROSSMAN: Overruled. You may pursue it.

15 BY MR. BURSEY:

16 Q Did you respond to the question, sir.

17 MR. DOUGLASS: Should I, sir.

18 JUDGE GROSSMAN: Yes, you may.

19 MR. DOUGLASS: They are majority black, I would say,  
20 as most of the schools in Fairfield.

21 BY MR. BURSEY:

22 Q Would the area of New Lebanon that was included in  
23 the extension of the ten-mile zone, do you know how much of  
24 an extension that went into, how far outside the ten-mile line  
25 was taken in?

1 A. No, sir, I'm sorry. I do not.

2 Q. Can you find that out for us? I mean do you have that  
3 with you?

4 A. I don't have it with me; I have it in my office.

5 Q. Can you make an estimate?

6 A. I would prefer not to. I'm just not sure.

7 Q. Is that area where the zone was extended, can you  
8 give me some demographicson that area?

9 MR. RICHARD LONG: Same objection.

10 JUDGE GROSSMAN: I'll allow you some leeway, Mr. Bursey,  
11 but I think if you have something you're driving at, why don't  
12 you just say it right out?

13 BY MR. BURSEY:

14 Q. The zone is Fairfield County has been extended by,  
15 ass the witnesses pointed out, the County Council. In Lebanon  
16 area the zone has been extended considerably outside the ten-  
17 mile zone to include an area where one of the county councilmen  
18 live. However, right down several miles around that circle  
19 we have two black schools that have been gerrymandered out of  
20 that area, and that's my point.

21 JUDGE GROSSMAN: Well, as I understand it you're not  
22 claiming they were gerrmandered out of the ared but your position  
23 is possibly--

24 MR. BURSEY: They should have been gerrmandered in,  
25 I'll put it that way. The zones should have been extended to

1 include two schools sitting right on the edge. And it was  
2 the decision on the part of the council not to include them in  
3 the evacuation zone, but if there is an accident, we'll go  
4 get them.

5 JUDGE GROSSMAN: Is it your position then that the  
6 Emergency Plan is deficient in that it doesn't cover some schools  
7 that are right on the boundary of the EPZ?

8 MR. BURESY: Yes, sir.

9 JUDGE GROSSMAN: Mr. Goldberg?

10 MR. GOLDBERG: I thought I understood the witness  
11 to say that if there was evacuation in that zone, that these  
12 schools would be encompassed within them. I would think that  
13 would end the discussion.

14 JUDGE GROSSMAN: Well, my understanding was that they  
15 are going to be included as on a voluntary basis by the county  
16 concil, but that they are not included in the Emergency Plan.

17 Now, Mr. Bursy, I don't see the relevance of the  
18 ethnic backgrounds of person involved. If your position is  
19 that the Emergency Plan is inadequate because it does not include  
20 those schools, I think that's a proper position for you to take,  
21 but I don't think there's anything profitable about doing any  
22 further the ethnic demographics there.

23 MR. BURESY: It's just a matter of fact I'm pointing  
24 out to the Board. I could go into more matters of fact in the  
25 particular area that would give us reason to believe that areas

1 are indeed low-income areas, and especially if they happen to  
2 be low-income black areas, have less likelihood to be considered  
3 in whether it's an Emergency Plan or paving of a highway or  
4 a sewer system, I think is relevant.

5 JUDGE GROSSMAN: Well, I don't think we're concerned  
6 with what's likely to be included. We're concerned with the  
7 adequacy of the Plan and I think we really ought to restrict  
8 the questioning to that area.

9 MR. BURESY: Thank you, sir. I'm just a bit confused  
10 as to the inclusion of these two schools at the time of emergency.  
11 Are they do be included in the planning between now and the event  
12 of an emergency?

13 MR. DOUGLASS: Mr. Bursey, your statement was not  
14 exactly correct a few minutes ago. You said that they are in-  
15 cluded in the evacuation, or not included in the evacuation.  
16 The correct terminology is they are excluded from the ten-mile  
17 EPZ, but they are included in our evacuation plan if the sector  
18 that they're lying adjacent to is evacuated.

19 BY MR. BURSEY:

20 Q Thank you, sir. Now, I understand that you're planning  
21 on utilizing school buses in the event of an evacuation?

22 A Yes, sir.

23 Q Now, where are these school buses located?

24 A In our school bus maintenance shop pool.

25 Q And where is that, sir?



1 A. Five miles south of the Town of Winnsboro on 321 Bypass.

2 Q. And how far from the McCrory-Liston School is that?

3 A. Well, twelve miles probably, twelve or thirteen miles.

4 However there are buses available at McCrory-Liston School during  
5 school hours.

6 Q. What is the name of the school that's in the zone?

7 A. McCrory-Liston.

8 Q. That is McCrory-Liston.

9 A. In A-2 sector.

10 Q. Have you had some concern about sixteen year old bus  
11 drivers in the event of an emergency?

12 A. Yes.

13 Q. And do you have any alternative plans that--do you  
14 have any alternative plans in the event of an emergency to  
15 substitute drivers?

16 A. Yes, we do. If, during school hours--an emergency  
17 occurs during school hours, buses are readily available and we  
18 plan to use the regular student drivers to evacuate the students  
19 by school buses to the Reception Center, there thinking that  
20 they have to be evacuated anyway. They may as well do their  
21 regular duty and responsibility and drive the bus out of the  
22 affected area.

23 In the event it's not during school hours or happens  
24 on the weekends or during summertime when school is not in session,  
25 there are drivers that are available from our school bus maintenance

1 shop and drivers available from our county engineering department  
2 that will operate these school buses.

3 In other words, if we have to send school buses into  
4 the affected area, they would not be driven by students.

5 Q That's found in your plan?

6 A Yes.

7 Q Now, in the event of an accident during school and  
8 you brought the school buses in to move the children from the  
9 school and to--

10 A From this one school that wasn't available to move.

11 Q McCrory-Liston has adequate buses on site?

12 A Right.

13 Q How many buses are available?

14 A I can't answer that question. Definitely enough to  
15 take care of the students.

16 Q Okay. Now, my calculations show that we have perhaps  
17 as many as between eight and nine hundred people in this zone,  
18 without their own means of transportation. Are school buses  
19 going to be able to accommodate the school children and this  
20 eight to nine hundred people?

21 A We feel like they will. We have additional buses  
22 and vans available through county agencies, Department of Social  
23 Services, Council on Aging and this sort of thing. The Rescue  
24 Squad has vans. The Fire Department could be utilized with  
25 some of their vehicles and also Emergency Medical Services.

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1 Q Now, let's take one of these buses that has been loaded  
2 up with people out of one of the zones that could possibly have  
3 been radiated. Where do they go?

4 A They go to our Reception Center.

5 Q And where is that, sir?

6 A Winnsboro High School.

7 Q And what happens there?

8 A They are identified. They are monitored. If contam-  
9 inated, washed, given clothing. And then if necessary, if it  
10 looks like a long-term type of accident or it's going to last  
11 any length of time, they are moved from there to our permanent  
12 shelter area at the Baptist White Oak Center, twenty miles  
13 away.

14 Q And who does the decontamination at the Reception Center?

15 A Department of Social Services will do it for the most  
16 part. They have trained monitoring people. They will be assisted  
17 by our Emergency Medical Services who have trained people. If  
18 we need additional assistance, we can call on the State office  
19 and vehicles.

20 Q And do they have--these are Department of Social Services  
21 personnel?

22 A Yes.

23 Q And they have radiological training?

24 A Yes, sir.

25 Q And do people that might be--necessitate hospitalization,

1 what are your plans for them?

2 A. They would be protected properly with the plastic  
3 coering and moved by Emergency Medical Services to Richland  
4 Memorial Hosopital.

5 Q. And do you have an arragement with Richland Memorial  
6 Hospital?

7 A. Yes we do.

8 Q. Do you have some indication of how many people they  
9 could handle?

10 A. I'm not sure but I would say upwards to at least twenty.  
11 They have some very elaborate services there.

12 Q. Do you have a back-up hospital?

13 A. Lexington is the only other hospital that I know of,  
14 if they have the capacity, if they are not filled, they would  
15 be a back-up.

16 Q. Fairfield County Hospital in Winnsboro has stated  
17 to me the inability to act as anything other than a first-aid  
18 station, is that correct?

19 A. I believe that's right. That is, insofar as radioactive  
20 contamination goes.

21 Q. Yes, sir. How is your phone listed?

22 A. It's listed under the Fairfield County listing in  
23 our local directory, Office of Disaster Preparedness, 635-4444.

24 Q. Would it--I don't know if you've ever tried to call  
25 yourself, but would it surprise you to find out that you're

1 listed as Lexington County Office of Emergency Planning of the  
2 Department of Public Safety? Not Lexington, excuse me, Fairfield?

3 A. What is your question?

4 Q. That note's not applicable to you. It has been difficult  
5 for us to reach you and I was wondering if you have any suggestions  
6 as to how that could be facilitated for the public other than  
7 the stickers that you mentioned?

8 A. No, sir. I haven't been told that I've been hard to  
9 reach. When was it hard for you to reach me?

10 A. I wasn't the one that was trying to reach you. Someone  
11 else was trying to reach you.

12 A. I've been at a Phase Management course in Richmond,  
13 Kentucky, for the last week.

14 Q. In that the rest of your staff consists of your secretary,  
15 is it going to pose a problem if there is a radiological emergency  
16 and you're out of town?

17 A. I don't think so. We have a plan we've discussed  
18 with our county administrator. He's familiar with most of our  
19 EOC operations. My secretary is a very capable one. He could  
20 assist in the coordination of the various agencies and our county  
21 administrator is well aware of the steps going through to activate  
22 the EOC and get the responsible agencies to respond.

23 Q. Have you had some concern about an important part  
24 of this plan referring to people going to the radio and television  
25 for information in an area where people might not have radio

1 and television?

2 A. I suppose it would pose some problems. I don't know.  
3 I feel list most people have access to the radio.

4 Q I understand in this vicinity some people may not  
5 even have electricity, I believe you mentioned. Would it not  
6 be reasonable to do some door to door work?

7 A. We very definitely plan to. There's a plan that,  
8 you know, if they have left their homes, they would tie a white  
9 handkerchief to let us know that that house has been evacuated;  
10 otherwise, it would be checked on from door to door. We feel  
11 like we don't have adequate resources possibly in law enforcement  
12 to cover this, but arrangements have been made with mutual aid  
13 agreements and with the National Guard if we need to call on  
14 them through the Adjutant General's Office through our state  
15 office to assist in this door to door.

16 Q On page Q-56 in your plan, there lists some agricultural  
17 producers, cows, and there's some inclusions that just say,  
18 fifty acres, two hundred acres. I assume that's crops. Is  
19 this the complete list of cows and crops that are in the emergency  
20 zone?

21 A. We feel that it is. We worked with Clemson University  
22 Extension Agency to work this up.

23 Q There was a gentleman that testified yesterday, Mr.  
24 Coleman, that has a dairy farm that he maintains is in the  
25



1 ten-mile zone. He's been farming there since 1948. And if  
2 he's not in the ten-mile zone, he feels that part of his land  
3 is where the cows go out. He says he's measured it by the road  
4 and it's ten miles; a straight line's probably shorter. And  
5 he milks a hundred and twenty-five cows a day, I believe, six  
6 thousand pounds of mil a day, and he's not in here.

7 A. By his residence being outside of this ten-mile area  
8 it's a possibility that he was omitted. Some of his pastures  
9 and grazing lands may be within the ten-miles EPZ. These are  
10 some refinements that possibly we'll have to work out.

11 Q. Then you would agree that if the cows go into the  
12 ten-mile zone to eat grass and come back several feet across  
13 the line in the evening to eat, that that shouldn't preclude  
14 them from being considered?

15 A. Definitely not. They should be included.

16 Q. And I'll make sure that you have that gentleman's  
17 name so that you can see that he's added to the list.

18 A. I know him very well.

19 Q. Because he was concerned, reasonably. Now, you're  
20 relying then on the Clemson Extension Service to give you a  
good list?

22 A. For the most part, yes.

23 Q. You're going to check up on it?

24 A. Yes.

25 Q. On page 261B of you plan the--it states warning teams

1 will disseminate one or more of the following messages per in-  
2 structions received from proper authorities, and then lists  
3 several messages, I assume that would be given to the public.  
4 One of them (b) states that your urge people to leave their  
5 homes. Number (c) states that you are requested to begin movement  
6 to the Winnsboro High School.

7           What's the difference that would call for (b) where  
8 you're urging people to leave and (c) where you're requesting  
9 them to leave? Which is a higher level of warning?

10           A.     The urgent message where we're urging them to leave.

11           Q.     That comes after the one that is not asking them to  
12 leave? You've got one that say, go inside and close your windows  
13 and doors. The next one says we're urging you to leave and  
14 the next one says we're requesting you to begin movement to Winnsboro  
15 High School.

16           A.     The wording may--needs looking into, but the message  
17 is there.

18           Q.     That is page 261B, paragraphs (b) and (c).

19           A.     I'm familiar with it.

20           Q.     In your sample release for a general emergency that  
21 should be given, if possible, by the Governor in person, it  
22 states that there was/is expected a radiation release of blank  
23 curies of radiation in the atmosphere. Now, is that a public  
24 broadcast? It's captioned sample release for general emergency.  
25 This is to be sent immediately over all possible means of

1 communication with primary empahsis on capabilities of South  
2 Carolina Educational Television and radic broadcast. I assume  
3 that's public?

4 A. I assume that's public.

5 Q. Were you involved in the wording of this statement?

6 A. I was involved, yes. I didn't word it in its entirety.

7 Q. I'm just wondering if there was some discussion and  
8 consideration about using the terminology that there was blank  
9 amount of curies released into the atmosphere. I'm not sure  
10 that would mean much to most folks anywhere for that matter,  
11 but specifically within the ten-miles zone of Fairfield County.

12 A. Oh, I think we would go on to say just what that meant.

13 Q. Wel, if you deviated from this statement perhaps you  
14 could. If you stuck with this statement, you wouldn't. Should  
15 I read youthe whole statement?

16 A. If you would.

17 Q. The Governor of South Carolina announces, in person  
18 ifpossible, that a serious radiological accident occurred at  
19 the V. C. Summer Nuclear Power Station at, time and date, that  
20 could cause harm to persons located in Sections, blank, and  
21 Counties, blank. Your radiological Emergency Response Map will  
22 show those areas. That's assuming everybody's got the radio-  
23 logical response map. Have you got some plan to make sure that  
24 everybody not only gets one but keeps it?

25 A. No, I think that refers to the radiological response

1 maps in the EOC and to the sectors that people would be advised  
2 as to necessary evacuation.

3 Q Well, then if the radiological response map is at  
4 the Emergency Operations Center, it's not going to do the people  
5 that are hearing this any good.

6 A The information that went to the public would be good  
7 public information. They would know what sector they were in.  
8 s that what you're getting at?

9 Q Well, no, sir, if we determine that this is for public  
10 information, it says it is broadcast over television and radio.  
11 It's broadcast from the Emergency Operations Center to the affected  
12 areas. And what I'm doing is trying to determine if you think  
13 this is clear and adequate.

14 I mean it's very important. We've got the Governor  
15 on television telling people that something bad has happened  
16 and he's telling them to look at their Emergency Response Map.  
17 I can't even find mine on the table half the time. And then  
18 it tells them there's a radiation release of blank curies. Now,  
19 I'm just going to offer that I feel people would be confused  
20 by this and you need to reword this statement.

21 A I think they're referring to the map included in the  
22 brochure which all of the people have, and this would indicate  
23 what sectors would be affected in this message. And then they  
24 would know that they should, you know, stand by for evacuation  
25 or whatever.

1 Q Yes, sir. For your information many people that I've  
2 spoken with that live in your area, as well as in my area--  
3 I live within the ten-mile zone--have not received that map.  
4 So, again, when you do your door to door, I would advise that  
5 you get those maps in people's hands, maybe put something sticky  
6 on the back of them.

7 Now, if your office itself--I think you mentioned  
8 before that you were going to see that brochures were done.  
9 Now, are you planning on actually printing one yourself?

10 A No. No, I meant maps and so forth that would bein  
11 the local newspapers and things like this, along with news articles.

12 Q Do you feel that you've got ~~some~~ influence with the  
13 company that could see that they have some additional maps with  
14 updated information about pick-up centers and the fact that  
15 people are supposed to hold onto their maps and any other thing  
16 that we've discussed here today? Do you think you could get  
17 the company to print those?

18 A No. What I was indicating is that the company, the facil-  
19 ities' plans as I understand it is to update these brochures,  
20 maybe anually, maybe very two years, whatever they feel like  
21 is necessary. Possibly at some time we may coordinate the fact  
22 of having these pick-up stations marked on that brochure. I  
23 don't know that we will, but we can certainly publish this infor-  
24 mation throughour local news media and radio stations which  
25 we plan to do.

1 Q Well, again, we might have a problem with people that  
2 don't get the newspaper or can't read or don't have a radio  
3 or television. That again speaks for the necessity for door  
4 to door work.

5 A That's correct.

6 Q Do you have any familiarity with potassium iodide?

7 A Some, yes.

8 Q Do you know what it's used for?

9 A Yes.

10 Q Can you tell us?

11 A Well, it's a thyroid blocking agent. It really goes  
12 into the thyroid gland. When KI is used it will move in and  
13 present any harmful radiation from going into the thyroid.

14 Q Do you plan on having potassium iodide in your inventory  
15 in Fairfield County?

16 A No, we don't. If it's required, it will be provided  
17 by DHEC and administered by our local health officer on a need  
18 basis only, say, for emergency workers or something like this.

19 Q Then it's your office's position that potassium iodide  
20 would be used just for workers that might be exposed?

21 A I would say just emergency workers possibly, you know,  
22 on a--and there only on a need for it.

23 Q And so you don't have any plans in Fairfield County  
24 for civilian distribution of potassium iodide?

25 A Absolutely not.



1 Q And did you--who made that decision?

2 A Well, it's the decision of the county coordinated  
3 with State advice and NRC and FEMA advice.

4 MR. PURESY: Mr. Douglass, that's all the questions  
5 I have for you right now. If you'd answer the questions any  
6 other parties might have, I'd appreciate it. Thank you.

7 JUDGE GROSSMAN: Mr. Knotts?

8 CROSS-EXAMINATION

9 BY MR. KNOTTS:

10 Q Mr. Douglass, would you happen to be able to locate  
11 for us where Salem Crossroads is on that map?

12 A This is it right here. That would be Sector A-2.

13 Q All right. And what's the scale on that map, sir?

14 Where would three miles above Salem Crossroads be?

15 A It would be at this crossroad intersection about here  
16 [indicating].

17 Q Just speaking roughly, that is somewhat outside the  
18 ten-mile zone?

19 A Yes, sir.

20 Q Thank you, sir. Mr. Douglass, during the last recess  
21 did you have an opportunity to look at the copy that Mr. Mahan  
22 provided you of Fairfield County Emergency Plan Annex for Fixed  
23 Nuclear Facility?

24 A Yes, I have.

25 Q And it is my understanding that with certain replacement

1 pages to reflect updating and recent corrections which you are  
2 able to provide to us, that with those replacement pages that  
3 would be an up to date copy, is that correct, sir?

4 A. yes, sir, there's been a few minor changes in the  
5 way of additional pages to be added. These have been provided  
6 to the State and, as I understand it, to FEMA Atlanta also.

7 Q. Very well, sir. And arrangements have been made to  
8 obtain those. And with the approval of the Board and the agree-  
9 ment of the parties, we would like to make the same arrangement  
10 to provide that for the record.

11 JUDGE GROSSMAN: Mr. Bursey, any objection?

12 MR. BURSEY: No objection.

13 MR. GOLDBERG: No objection.

14 JUDGE GROSSMAN: So ordered. Does that conclude your  
15 questioning?

16 MR. KNOTTS: Yes, it does, Judge Grossman.

17 JUDGE GROSSMAN: Mr. Goldberg?

18 MR. GOLDBERG: One question, please.

19 BY MR. GOLDBERG:

20 Q. Mr. Douglass, do you have any estimation of the length  
21 of time it would take for you to evacuate those residents within  
22 Fairfield County that lie within the Emergency Planning Zone  
23 including the students in the Kelly Miller Grammar School and  
24 Greenbriar Head Start School?

25 A. I would say roughly from one to two hours, probably

1 two hours. Now, in the study by Wilbur Smith they said it would  
2 probably take three hours to get all of the persons requiring  
3 special attention. I think we could do it in less time than  
4 that. I think we could do it in two hours.

5 Q You believe you could improve on the time estimates  
6 in the Wilbur Smith study?

7 A Yes, I do.

8 Q Thank you.

9 JUDGE GROSSMAN: Mr. Wilson?

10 BY MR. RICHARD WILSON:

11 Q Just briefly, Mr. Douglass, earlier you mentioned  
12 when you were counting the number of radiological defense officers  
13 or persons qualified as RDO's in your office, you mentioned  
14 three qualified as instructors and I think four other persons,  
15 is that right?

16 A That have recently been through the RDO school. Now,  
17 the instructors have been through RDO and the instructor's course,  
18 and those have recently been through RDO. Now, we have other  
19 people trained as monitors that have not attended RDO school.

20 Q Right. As far as RDO's go, qualified RDO's, how many  
21 of those do you have totally, including yourself?

22 A Including myself, six, I would say.

23 MR. RICHARD WILSON: Thank you, that's all I have.

24 JUDGE GROSSMAN: Mr. Douglass, could you clarify for  
25 me how those two schools could be included in the emergency

1 plan but not included in the Emergency Planning Zone, as I believe  
2 you indicated?

3 MR. DOUGLASS: Our position on this, sir, is that  
4 should we get an accident that a plume would move through Sections  
5 C-1 and C-2 necessary to evacuate those two sections, we auto-  
6 matically would include these two schools in those sectors.  
7 However, they do lie technically outside of the ten-mile EPZ.

8 In other words, we don't have plans to change the  
9 physical markings of the ten-mile EPZ to include these schools,  
10 but it's in our plan that they would automatically be evacuated  
11 if Sector C-2 was necessary to be evacuated.

12 JUDGE GROSSMAN: Well, I don't understand that. The  
13 EPZ is not an automatic ten-mile line. What's included in the  
14 EPZ is what's approximately ten miles that you want to include  
15 in the Emergency Planning Zone. Now, is there some other category  
16 that NRC and FEMA haven't divulged to us in which you not only  
17 have an EPZ, but you have an emergency plan area, maybe not  
18 a zone?

19 MR. DOUGLASS: No, sir, this is not included in the  
20 Nureg 0654, but it was a county decision to do this. And should  
21 it affect some other area or community that would like close  
22 to this, we would probably do the same consideration there.

23 JUDGE GROSSMAN: Well, I attempted to clarify the  
24 record and get my understanding and I'm not sure that--and you  
25 corrected my understandihng, btu I'm not sure that it was incorrect.

1 Let me restate again what I understand the case to  
2 be and you can explain how I'm wrong, if I am. That you do  
3 not have those schools included in the Emergency Plan, but that  
4 as a voluntary measure, the county council has determined to  
5 evacuate those two schools along with everything that is included  
6 in the Emergency Planning Zone, is that incorrect?

7 MR. DOUGLASS: That's incorrect. They are included  
8 in our Emergency Plan, that they will be evacuated along with  
9 Sector C-2. However, they lie outside the boundary of Sector  
10 C-2. But it's in our Plan that they will be evacuated if Sector  
11 C-2 is evacuated.

12 JUDGE GROSSMAN: Well, if was my understanding that  
13 if they were outside the ten miles, but approximatley near the  
14 ten miles and included in your Emergency Plan, that they are  
15 included in the Emergency Planning Zone. But if I'm incorrect,  
16 I'm sure Mr. Goldberg will point that out to me.

17 MR. GOLDBERG: I wasn't going to point out any incorrec-  
18 tion. I was just going to say that perhaps for the benefit  
19 of the record since the Plan has been offered in evidence, perhaps  
20 Mr. Douglass, you can give us a reference to provisions for  
21 these schools in the physical Plan.

22 MR. DOUGLASS: It's more or less of a common sense  
23 decision that if you've got a heavily populated community lying  
24 on a fringe area, even though it's outside the marked-off boundaries,  
25 that if the plume area was going in that direction, that we

1 would certainly consider schools, communities, what have you  
2 in the evacuation to the extent of what resources we have.

end take i  
3

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Jlpw

1 JUDGE GROSSMAN: Well my problem is with determining  
2 where the marked off area is and I had assumed that the marked  
3 off area is what the agency included in the emergency plan;  
4 however, if that's not the case, I don't want to spend any more  
5 time here discussing it.

6 Any redirect, Mr. Bursey?

7 MR. BURSEY: No, sir.

8 JUDGE GROSSMAN: Mr. Knotts, any questions?

9 MR. KNOTTS: No further questions.

10 JUDGE GROSSMAN: Mr. Goldberg?

11 MR. GOLDBERG: No questions.

12 MR. WILSON: No questions.

13 JUDGE GROSSMAN: Fine, the witness is excused, thank you.

14 (Witness excused.)

15 JUDGE LINENBERGER: Mr. Knotts.

16 MR. KNOTTS: Yes, sir.

17 JUDGE LINENBERGER: Excuse me, but if I remember  
18 correctly, you're -- Applicant is putting on its emergency planning  
19 panel tomorrow, is that correct?

20 MR. KNOTTS: That was the plan, Judge Linenberger.

21 JUDGE LINENBERGER: All right, sir. Several of the  
22 witnesses we've heard today have adverted to certain things that  
23 they understand that either the Applicant has committed to or  
24 they will be depending on the Applicant for and it's not clear  
25 in every case whether or not this is news to the Applicant. So I

J2pw

1 was wondering if you could have your panel or somebody on the  
2 panel prepared to summarize what kinds of assistance the Applicant  
3 is planning to offer these various county organizations. There  
4 has been discussion of funding, of clothing, of buses.

5 MR. KNOTTS: We'll be very happy to do that, Judge  
6 Linenberger.

7 JUDGE LINENBERGER: We would appreciate that, thank  
8 you, sir.

9 JUDGE GROSSMAN: Mr. Bursey, could you call your next  
10 witness please?

11 MR. BURSEY: Yes, sir, I'd like to call the Adjutant  
12 General.

13 Whereupon,

14 T. ESTON MARCHANT

15 was called as a witness by and on behalf of Intervenor Bursey,  
16 and having been first duly sworn, was examined and testified as  
17 follows:

18 JUDGE GROSSMAN: Please be seated, sir, could you state  
19 your full name and spell it for the court reporter?

20 THE WITNESS: Full name is T as in Tom, initial,  
21 Eston, E-s-t-o-n, Marchant, M-a-r-c-h-a-n-t.

22 DIRECT EXAMINATION

23 BY MR. BURSEY:

24 Q Mr. Marchant, I appreciate you coming down.

25 A Yes, sir.

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J3pw 1 Q The Office of the Adjutant General, can you give us  
2 a description of your role in the preparation of the emergency  
3 plans?

4 A Yes, I think I can do that. By an act of the legislature,  
5 in the year 1979, the former Disaster Preparedness Agency, now  
6 the Emergency Preparedness Division, was placed in the Office of  
7 the Adjutant General as a division of our office. The Emergency  
8 Preparedness Division has the responsibility under the state law  
9 to handle these type situations, perform an operational type  
10 mission and that's my involvement, which is rather indirect but  
11 also direct. As the Adjutant General I'm responsible for the  
12 operations of that division of my office.

13 Q Now can you tell us what specific functions your office  
14 would perform in the event of a radiological emergency at the  
15 V. C. Summer plant?

16 A Well now the Office of the Adjutant General, in the  
17 event of an emergency of this type, would be responsible through  
18 this division of the office; that is, the Emergency Preparedness  
19 Division, which has the responsibility, as I say, under state  
20 law to function in an operational mode and we have a division  
21 headed by Colonel George Wise, who is here today with the State  
22 Office of Personnel, both federal and state employees, who have  
23 the responsibility of planning and conducting exercises in these  
24 types of situations.

25 Q Now it sounded to me that most of your responsibilities

J4pw

1 have been delegated to the Emergency Preparedness Division.

2 A. That is correct.

3 Q. Now do you have any direct responsibilities as the  
4 Adjutant General or the Office of the Adjutant General, that  
5 haven't been delegate??

6 A. If I understand your question, other than the overall  
7 responsibility for the operation of this division, as the Adjutant  
8 General and as the operational director of the South Carolina  
9 National Guard, in the event they were called on to respond to  
10 this type emergency as well as any other tpe emergency, I would  
11 have that responsibility, yes, sir.

12 Q. Do you provide a representative at the Emergency  
13 Operations Centers?

14 A. Yes, sir, I do. A member of my staff, Colonel Hipp,  
15 who is here today also, is the contact from my office to the  
16 Emergency Operations Center, yes, sir.

17 Q. Do you provide public information support to the Office  
18 of the Governor?

19 A. Do I provide --

20 Q. Public information support.

21 A. To the Office of the Governor?

22 Q. Yes, sir.

23 A. Not if I understand your question. My office does not  
24 provide any public information support. We have a public affairs  
25 officer on my staff but not for purposes of public information

J5pw

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1 for the Governor's Office, no.

2 MR. J. WILSON: Mr. Chairman, if I may interrupt, General  
3 Marchant has brought those members of his staff who are directly  
4 involved as representatives from the National Guard in input and  
5 responsibilities under the plan. As I understand it the other  
6 agencies have been allowed where desirable to have those designated  
7 members present in the form of a panel. I don't know that  
8 General Marchant was aware of that, but in the event that he  
9 wishes to have Colonel Hipp or others present, I presume there  
10 is no objection to that.

11 JUDGE GROSSMAN: That's up to Mr. Bursey. If you  
12 think, Mr. Bursey, that they may be helpful --

13 MR. BURSEY: I have a few questions I'd like first to  
14 ask the General and then if there are some specifics that we get  
15 into after that, I wouldn't object but let me ask a few questions --

16 THE WITNESS: Let me make it clear, I have two forms of --  
17 two classifications of people here that can be helpful I think;  
18 one is the Emergency Preparedness Division people themselves and  
19 the others are the people out of my National Guard operation.

20 BY MR. BURSEY:

21 Q Do you have in the Office of Adjutant General any  
22 responsibility for decontamination?

23 A No, sir, we do not.

24 Q Do you have any responsibility to provide an emergency  
25 operations center in Winnsboro?

J6pw

1 A. Through me, the Division of, Emergency Defense Division,  
2 Emergency Operations Center would be, of course, as I think has  
3 already been described, set up and my people would be there, yes  
4 Both the Emergency Preparedness people and National Guard people?

5 Q. Did you have any, your office, the office of Adjutant  
6 General have any role in development of the V. C. Summer fixed  
7 nuclear site specific radiological emergency response plan?

8 A. Yes, sir.

9 Q. Do you have a copy of that with you, sir?

10 A. Yes, sir.

11 Q. On page 3-6 of that plan --

12 A. Excuse me, 36?

13 Q. Three dash six.

14 A. Three dash six. (Pause.) If we're talking about the  
15 same plan, Mr. Bursey, I don't know that I find 3-6 -- here we  
16 are, wait just a minute, no I don't find page 3-6.

17 Q. Well, it lists the responsibilities of your office  
18 and it says (a) you're supposed to provide a representative to  
19 the EOC's.

20 A. Right.

21 Q. (b) provide public information support to the Office of  
22 the Governor. Now you were unaware of that, but do you know what  
23 they could be referring to, public information support?

24 A. If I may, I'd like -- Colonel -- General Wise, do you  
25 have a ready answer to that?

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J7pw 1

GENERAL WISE: I'm going to testify in a few minutes,  
2 sir, on that.

3 MR. BURSEY: We'll just move briefly on and then we'll  
4 get General Wise to talk about what that means.

5 THE WITNESS: Okay.

6 BY MR. BURSEY:

7 Q. And it says, line (d), be prepared to assist in  
8 decontamination procedures, are you familiar with that, sir?

9 A. If you're reading from that responsibility, I am now,  
10 yes, sir.

11 Q. Yes, sir, well that's --

12 A. Maybe I misunderstood your question, Mr. Bursey,  
13 the National Guard is my program to provide decontamination  
14 procedures per se. Now the Emergency Preparedness Division has  
15 some involvement in that, yes, sir.

16 Q. Yes, sir, they list it as a separate agency here  
17 within this fixed nuclear facility plan, and what I'm reading is  
18 the delegated responsibility of the Office of the Adjutant General,  
19 "be prepared to assist in decontamination procedures". Now who  
20 in your office is in charge of decontamination procedures?

21 A. Well actually that expression Office of Adjutant General  
22 is inclusive of the Emergency Preparedness Division and General  
23 Wise has within that Division people who are involved in that.  
24 It says Office of Adjutant General, I think it includes that  
25 being all inclusive, not broken down.

J8pw

1 Q Yes, sir, I won't argue with you, there is another line  
2 item, a separate number for the Emergency Preparedness Division,  
3 so what you're saying is that the Office of Adjutant General  
4 itself has no decontamination responsibility?

5 A No, sir.

6 Q And as the Director of the National Guard then, you  
7 have other response capabilities, is that right?

8 A Yes, sir, we would, in the event of this type emergency  
9 as well as any other type emergency, under the command of the  
10 Governor, we would have response capabilities, security measures,  
11 traffic control, route control, medical evacuation, the normal  
12 capability that the National Guard has in any type emergency.

13 Q Now would some of those responsibilities then, might they  
14 at some point include decontamination?

15 A We do not have, if I understand your question there,  
16 your point, Mr. Bursey, we do not have in the National Guard;  
17 that is, in our inventory, the capability either equipment wise  
18 nor personnel wise to do low level radiological work. We have,  
19 within our troop structure, we have the capability within individual  
20 units in the NBC area, nuclear-biological-radiological-chemical,  
21 we have a capability there to react to a nuclear blast situation.  
22 In other words, an all out nuclear confrontation, but we do not,  
23 nor are we programmed to be able in the National Guard to deal  
24 with low level nuclear contamination.

25 Q Section (c) says that you're to be prepared to provide

J9pw

1 resources if requested by appropriate authorities. What else  
2 could we anticipate that the National Guard could be called upon  
3 to do?

4 JUDGE GROSSMAN: Mr. Bursey, it appears to me as though  
5 you're asking very specific questions about the National Guard,  
6 and I don't see what your objection is to having the persons from  
7 the National Guard assist on the panel.

8 MR. BURSEY: I believe you're correct, sir. I have  
9 outlined what I wanted to with General -- this gentleman -- excuse  
10 me, sir.

11 THE WITNESS: Marchant.

12 MR. BURSEY: And I believe I have outlined those  
13 responsibilities of the Office of Adjutant General and that the  
14 General is not fully aware of them. If he would like to call up  
15 more people now, I would agree to that.

16 THE WITNESS: If I may, Mr. Chairman, I believe the  
17 question was -- I think I've already answered it or at least I  
18 thought I had.

19 JUDGE GROSSMAN: Yes, I'll strike that characterization  
20 out, Mr. Bursey, and let's just call the other two people to the  
21 panel. Do you have any objection to that?

22 MR. BURSEY: I'm not sure what you struck but let's call  
23 the panel.

24 THE WITNESS: Colonel Hipp and General Wise, you can  
25 come on up at this point I believe.

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Jl0pw

1 Whereupon,

2 COLONEL JOSEPH F. HIPPI, JR.  
3 GENERAL GEORGE R. WISE

4 were called as witnesses by and on behalf of Intervenor Bursey,  
5 and having been first duly sworn, were examined and testified as  
6 follows:

7 JUDGE GROSSMAN: Please be seated.

8 GENERAL MARCHANT: General Wise is the Director of the  
9 Emergency Preparedness Division, Mr. Chairman, on my left, and  
10 Colonel Hipp is the point of contact in my office so to speak  
11 from the Adjutant General's office per se to the Emergency  
12 Preparedness Division.

13 JUDGE GROSSMAN: Could you each state your full name  
14 and spell that for the court reporter?

15 GENERAL WISE: Yes, I'm George R. Wise, G-e-o-r-g-e R.  
16 W-i-s-e, State Director, Emergency Preparedness Division, Office  
17 of Adjutant General.

18 COLONEL HIPPI: Joseph, J-o-s-e-p-h, F. Hipp, H-i-p-p,  
19 Jr., Plans and Military Support Officer.

20 JUDGE GROSSMAN: Now let me explain the rules. Mr.  
21 Bursey can direct his questions to anyone on the panel.

22 MR. BURSEY: Thank you, sir. Colonel Hipp, are you in  
23 a position to know what various functions the National Guard could  
24 be called on for in the event of a radiological emergency?

25 COLONEL HIPPI: Yes, I am.

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Jllpw

1 MR. BURSEY: Could you briefly enumerate them for me?

2 COLONEL HIPPI: The areas that the National Guard would  
3 provide -- first off, let me say that the National Guard furnishes  
4 military support, responsibility is with state agencies. The  
5 areas that we would provide support in are to assist in warning  
6 the people, evacuation, providing security of the area, providing  
7 personnel for traffic control, providing helicopters for medical  
8 emergency evacuation, to assist in evacuating livestock as well  
9 as people.

10 MR. BURSEY: Do you have any security tasks, security  
11 perimeters?

12 COLONEL HIPPI: We would provide assistance to South  
13 Carolina Law Enforcement Division in security.

14 MR. BURSEY: Has it been discussed that you may be  
15 called upon to provide a security perimeter around hospitals?

16 COLONEL HIPPI: As well as other facilities within an  
17 area.

18 MR. BURSEY: That has been discussed with SLED?

19 COLONEL HIPPI: That's correct, South Carolina Law  
20 Enforcement Division has overall law enforcement authority.

21 MR. BURSEY: Do you understand the nature of that  
22 security perimeter around the hospital?

23 COLONEL HIPPI: Our plan is general in nature, they tell  
24 us at the time of an emergency what is required and we provide the  
25 forces to do it.

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J12pw

1 MR. BURSEY: Have they told you what would be required  
2 or why you would have to put a security perimeter around a  
3 hospital?

4 COLONEL HIPPI: Are you talking about a hospital within  
5 the area or outside the evacuation area?

6 MR. BURSEY: Either.

7 COLONEL HIPPI: A hospital within an evacuation zone  
8 would not have to be secured within that area but the overall  
9 evacuation zone would be secured. A hospital outside the  
10 evacuated area that may be receiving persons with some contamination  
11 may have to be isolated.

12 MR. BURSEY: Have you had radiological training?

13 COLONEL HIPPI: With the military, yes.

14 MR. BURSEY: Was that reactor training or defense?

15 COLONEL HIPPI: Radiological protective measures, weapons  
16 deployment as pertains to military operation.

17 MR. BURSEY: And are there people on the National Guard  
18 staff that have been trained in order to instruct National Guard  
19 people as to levels of safe exposure?

20 COLONEL HIPPI: That's correct.

21 MR. BURSEY: You have your own internal determination of  
22 that?

23 COLONEL HIPPI: That's correct. Each National Guard unit  
24 has an NBC trained team, consisting of officers and NCO's and  
25 they are school trained by the military and they in turn train their

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Jl3pw

1 unit in individual and unit protective measures.

2 MR. BURSEY: How many men can you call up in the  
3 event of a major accident at the V. C. Summer Plant? How many  
4 men could you put on alert? If the Governor wanted you to help  
5 evacuate, let's just -- the worst thing that could happen, evacuate  
6 Columbia, how many people could you turn out?

7 COLONEL HIPPE: The total strength of the National Guard  
8 of South Carolina, which is right at 13,000 people, if necessary.

9 MR. BURSEY: General Wise, do you have any knowledge of  
10 the decontamination role as listed in the fixed facility plan that  
11 the Adjutant General's office is supposed to play?

12 GENERAL WISE: I think what you're referring to is  
13 "assist", doesn't it say "assist"?

14 MR. BURSEY: Yes, sir, "be prepared to assist in  
15 decontamination procedures".

16 GENERAL WISE: That's right. In other words, in  
17 assisting in decontamination means washing. The National Guard  
18 has some fire fighting units that have fire trucks and those fire  
19 trucks can be used to help wash down vehicles, and that's all it  
20 means right there. That's the only capability they have.

21 MR. BURSEY: Can you explain briefly the role that your  
22 office has, the Emergency Preparedness Division, in the event of  
23 a nuclear accident?

24 GENERAL WISE: Well sir, we have it all. In other  
25 words, we are commanded by law, Act 199, I can read you the Act

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Jo4pw

1 if you'd like for meto read it.

2 MR. BURSEY: Well you can summarize it for us.

3 GENERAL WISE: Okay, that we are, act as the operational  
4 control really for the Governor's Office. During any type of  
5 emergency, this is manmade, any kind, weather hazard or anything,  
6 we automatically become the operation arm for the Governor and the  
7 National Guard becomes a support role. So therefore we activate  
8 the Operations Center and at that time we request, we have an alert  
9 list where we call in members of all state agencies in South  
10 Carolina that have an emergency mission. These people immediately  
11 come to the State Operation Center, which is located in the  
12 basement of the Rutgers Building. In the meantime, we evaluate  
13 the situation with the county people and then if it's necessary  
14 we establish then a Forward Emergency Operation Center in the  
15 vicinity of the nuclear site. Several of us, I for one, will move  
16 to the Forward Emergency Operations Center and we man the Forward  
17 Emergency Operation Center with similar people that are in the  
18 State Emergency Operation Center. The Adjutant General, he  
19 goes to the State Operation Center along with the Governor or the  
20 Governor's representative, most of the time the Governor is there.  
21 In the Forward Emergency Operation Center, the command element is  
22 the Governor's representative who is Mr. Bruce Dew now, Head of  
23 the Division of Public Safety and me and Brigadier General Barnes,  
24 the Deputy Adjutant General. At that time we direct the operation  
25 from there. We assume operational control of the situation when we

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Jl5pw

1 go on site with the Forward Emergency Operation Center when there's  
2 two or more counties involved and we direct the operation from there.

3 MR. BURSEY: Would then you be involved in a decision  
4 to evacuate?

5 GENERAL WISE: Yessiree, absolutely.

6 MR. BURSEY: That's quite a weighty decision, I'm sure  
7 you've given it much thought.

8 GENERAL WISE: Quite a bit, I've had a good bit of  
9 training in it.

10 MR. BURSEY: Can you tell us about that training?

11 GENERAL WISE: I've got a list here, how long you want  
12 me to go?

13 MR. BURSEY: We'll hear it all.

14 GENERAL WISE: I've attended the -- graduated from the  
15 United States Army Chemical Biological Radiological School,  
16 United States Army Nuclear Weapons Effects School, United States  
17 Army Radiological Safety Officers Course, Department of Energy  
18 Radiological Accident Recovery Course in Mercury, Nevada. Just  
19 recently completed that one in December. And the Radiological  
20 Accident Assessment Course at Emergency Management Institute in  
21 Emmetsburg, Maryland. I completed that back in May.

22 MR. BURSEY: Sir, the training that you received at this  
23 list, was that keyed for nuclear reactors?

24 GENERAL WISE: Absolutely. The last two courses were  
25 directly -- in fact, we had a nuclear accident, we staged a nuclear

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J16pw 1 accident at Camp Mercury, Nevada. YOU know, they've got three  
2 reactors right there in the desert. They staged an accident and  
3 I was the mission commander on that thing, I had to handle the  
4 whole situation from start to finish.

5 MR. BURSEY: Did you lose anybody?

6 GENERAL WISE: No. We had three people injured but  
7 we didn't lose anybody.

8 MR. BURSEY: But some of your earlier training was for  
9 nuclear warfare?

10 GENERAL WISE: That's right because that's part of my  
11 job too, you know, we continually plan for attacks on the United  
12 States.

13 MR. BURSEY: Yes, sir. Did you learn in your training  
14 then that there's a difference in radiation levels and the type  
15 of radiation that you would expect between a nuclear war and a  
16 nuclear reactor meltdown?

17 GENERAL WISE: Absolutely, the reactor meltdown is  
18 quite insignificant compared to what the other would be.

19 MR. BURSEY: There's less radiation?

20 GENERAL WISE: Quite a bit.

21 MR. BURSEY: And you learned that in your training  
22 courses?

23 GENERAL WISE: That's right.

24 MR. BURSEY: Do you know specifically how many, the  
25 amounts of radiation, say by curies that you might have released

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1 in a nuclear warhead as opposed to what you'd find in a nuclear  
2 reactor?

3 GENERAL WISE: Well a curie is a unit of measure.

4 MR. KNOTTS: I have to object to the form of the  
5 question. The question calls for an apples and oranges response.  
6 He's comparing curies released from a weapon to curies contained  
7 in a reactor.

8 JUDGE GROSSMAN: Well I think the witness is prepared  
9 to answer the question. You may answer, sir.

10 GENERAL WISE: Well sir, I'm not a nuclear physicist;  
11 however, curies, that's a unit of measure and from a nuclear  
12 weapon that would be real insignificant, it would not be measured  
13 in the curies because it would be billions of curies that would  
14 be released from a 20 KT nuclear weapon. So that's no comparison  
15 at all.

16 MR. BURSEY: A 20 killiton weapon you're saying?

17 GENERAL WISE: Yes. Do you have the figures on how  
18 many curies it would release?

19 MR. BURSEY: Happen to have sitting next to me a nuclear  
20 physicist who advises me that a reactor contains approaching a  
21 billion curies.

22 MR. J. WILSON: Objection to Mr. Bursey now purporting  
23 to give testimony from someone who is not under oath and not  
24 present to give testimony.

25 MR. BURSEY: I'll tell you later.

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1 JUDGE GROSSMAN: Mr. Bursey, it's getting late in the  
2 day, please sharpen up your questions.

3 MR. BURSEY: Yes, sir. I thought we were right on  
4 target there because there's a point that I wanted to make that  
5 there is a difference between the two and General Wise and I dis-  
6 agree as to which one actually has more radiation and the point  
7 that I would infer from that --

8 JUDGE GROSSMAN: The point is already made in the record,  
9 Mr. Bursey.

10 MR. BURSEY: Thank you, sir.

11 General Wise, did your schooling then teach you what  
12 to expect in a breach of containment accident, what type of  
13 impacts the public around that reactor would be faced with?

14 GENERAL WISE: Mr- Bursey, I read the same reports you've  
15 read and all the schools are based on those reports; Rasmussen's  
16 Report, Wash 1400. Nobody really knows. I've got some quotes  
17 here I could read you, I've got one from Harvard University here.

18 MR. BURSEY: Well, sir, I think that --

19 GENERAL WISE: We really don't know.

20 MR. BURSEY: If you're familiar with those reports  
21 then, you certainly know more than virtually any other state  
22 officials that has appeared so far in regards to what we call a  
23 maximum credible event in regards to what could happen --

24 MR. GOLDBERG: Judge, I'm going to have to object to  
25 the use of that term in questioning on the basis of that language



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1 and I'm also going to object on the grounds of relevancy to the  
2 whole line of questions.

3 JUDGE GROSSMAN: I haven't yet heard the question, Mr.  
4 Goldberg.

5 MR. BURSEY: Your office is responsible for providing  
6 state radiological emergency response training, is that right?

7 GENERAL WISE: In a sense, yes.

8 MR. BURSEY: In this plan, the fixed nuclear facility  
9 plan, it says your office is, is that delegated to someone else?

10 GENERAL WISE: No, we have a radiological defense  
11 officer and I have him right back here, I could call him if you'd  
12 like to talk to him.

13 MR. BURSEY: Let me ask the question, you call him if  
14 you want to. The question is that since you're versed with  
15 terrible accidents, do you pass that information on in your  
16 training?

17 GENERAL WISE: I didn't understand that, say that again.

18 MR. BURSEY: Since you are aware, through your studies,  
19 through your reading of the documents that you noted, you're aware  
20 of what the results of a terrible accident could be at a  
21 nuclear facility.

22 GENERAL WISE: Right.

End J.

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MR. BURSEY: Is that contained in your training for the state radiological emergency response teams?

MR. WISE: We train the people how to use the instruments and how to do the monitoring and things of that nature, but to really tell somebody how bad a Class 9 accident is going to be, we don't know.

MR. BURSEY: What do you tell them?

MR. WISE: We don't tell them anything but just how to operate the instruments and how to cope with a nuclear accident, that is the training, that is what we are supposed to do.

MR. BURSEY: Thank you, sir. Who participates in the State Radiological Emergency Response Training?

MR. WISE: Various people.

MR. BURSEY: Are those offices of Emergency Preparedness county offices?

MR. WISE: County offices, highway patrol, volunteer firemen. A lot of different people. A lot of retired people that are just volunteers that work with the county. We have a good many retired military people that just volunteer to work with the counties and they take the course also.

MR. BURSEY: Could I volunteer to take that course?

MR. WISE: Sure you could. It is one hundred percent federally funded.

MR. BURSEY: Is your budget still intact?

1 MR. WISE: We can take care of that training.

2 MR. BURSEY: That is all the questions I have for  
3 you all right now and I appreciate your coming and the other  
4 parties may have some questions.

5 JUDGE GROSSMAN: Mr. Knotts?

6 MR. KNOTTS: Judge Grossman, I have no questions  
7 for the Adjutant General or for Colonel Hipp. I do have  
8 some questions for General Wise and I would like the opportunity  
9 to question some of General Wise's associates in his office  
10 and perhaps the economical thing to do would be to pass the  
11 entire panel with the understanding that I do have some  
12 questions for General Wise.

13 JUDGE GROSSMAN: Well, I really think that if you  
14 have cross on what Mr. Bursey--on Mr. Bursey's direct, that  
15 you should--

16 MR. KNOTTS: I do not have cross. I have direct.

17 JUDGE GROSSMAN: In other words, you would like to  
18 call Mr. Wise and the two members of his office as your  
19 witnesses.

20 MR. KNOTTS: Two or three, yes, sir.

21 JUDGE GROSSMAN: And do you intend to do that today?

22 MR. KNOTTS: If there is no objection. The man is  
23 here. I don't see why not.

24 JUDGE GROSSMAN: Fine. The Board certainly has  
25 no objection to that. Mr. Goldberg?

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MR. GOLDBERG: No objection and no cross.

JUDGE GROSSMAN: Mr. Wilson?

MR. WILSON: I have no objection to that procedure. I would ask, apparently for some direction now. Is Mr. Shealy going to be reached tonight? It is well after five o'clock now?

JUDGE GROSSMAN: Yes, he is going to be the next witness.

MR. WILSON: What I am wondering though is with the direct, which is now a panel that has been expanded and these are people also who lead the other agencies through emergency response, I would anticipate some time being involved both with Mr. Bursey's cross of these people and--

JUDGE GROSSMAN: Mr. Knotts wants to call a witness or a panel. That is something that will happen after Mr. Bursey calls his next witness. Now I don't see any question there. Mr. Wilson, Mr. John Wilson, do you have any problems?

MR. J. WILSON: I simply have a matter of clarification. Mr. Bursey said he had nothing further from these witnesses at this time. Now I want to be sure, this is his one chance, he subpoenaed them, they are here today, if he has any other questions direct or redirect or recross or whatever, I employ him to come forth now.

JUDGE GROSSMAN: Well, he has an opportunity for redirect if there are any questions, either cross examination or

K 4

1 Board questions and he certainly has that opportunity. Now if  
 2 Mr. Knotts then calls Mr. Wise again and two other witnesses,  
 3 Mr. Bursey has an opportunity to cross examine at that point,  
 4 and, you know--

5 MR. J. WILSON: I understood that but I understood  
 6 that none of the counsel had any further questions of either  
 7 General Marchant nor Colonel Hipp.

8 JUDGE GROSSMAN: Mr. Bursey uses that phrase after  
 9 he concludes his questioning but he is only entitled to what  
 10 an attorney is ordinarily entitled to and that is redirect  
 11 with regard to questions that were asked on cross or Board  
 12 questions afterwards and he doesn't have an opportunity for  
 13 further questioning outside the scope of that?

14 Do you understand?

15 MR. J. WILSON: Yes, sir, but am I incorrect in my  
 16 understanding that neither of the other counsel have questions  
 17 direct or cross of either General Marchant or Colonel Hipp?

18 JUDGE GROSSMAN: Well, we have gotten past Mr. Knotts  
 19 and Mr. Goldberg and I haven't heard from Mr. Richard Wilson  
 20 nor has the Board stated whether it has any questions. Mr.  
 21 Wilson?

22 MR. R. WILSON: Just briefly.

23 CROSS EXAMINATION

24 MR. R. WILSON: Colonel Hipp, earlier you were  
 25 mentioning the capabilities that the guard had in support of

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1 other staging in local units particularly in regard to the  
2 decontamination, I believe you indicated that you had fire  
3 trucks that were available? Oh, I am sorry, okay, it was the  
4 general.

5 General Wise, does the National Guard also have  
6 available additional shelters such as tents to house displaced  
7 persons?

8 MR. WISE: Oh, yes.

9 MR. R. WILSON: And do you also have backup communi-  
10 cation system and those sort of things as well?

11 MR. WISE: Yes.

12 MR. R. WILSON: What about such things as water  
13 tanks, these are for field kitchens, these are basic support  
14 mechanisms too, aren't they?

15 MR. WISE: Yes, sir. We have water tanks and field  
16 kitchens.

17 MR. R. WILSON: And generally then, you know, what  
18 was pulled in would be, would depend upon what the situation  
19 required, is that right?

20 MR. WISE: The magnitude of the situation.

21 MR. R. WILSON: So as far as the National Guard's  
22 commitment to responding to a given situation, am I correct  
23 in assuming this is going to be a somewhat flexible response  
24 depending upon the particulars of the situation that you are  
25 confronted with?



1 It depends on what you are faced with how you  
2 respond, is that right?

3 MR. WISE: The Governor will not authorize mobilizing  
4 the National Guard until all the local resources and state  
5 resources have been exhausted.

6 MR. R. WILSON: That answers my question. Thank you.

7 EXAMINATION

8 BY JUDGE LINENBERGER: (Witness Wise)

9 Q General Wise, I think I noticed your presence here  
10 during some of the earlier presentations today by various  
11 county officials in which they indicated what their emergency  
12 response plans are, how they go into action and the kinds of  
13 things they take care of; and these span quite a spectrum  
14 obviously of capabilities; now all of these gentlemen are  
15 talking about the same kinds of postulated events that you are  
16 here to talk about and, therefore, I would like to hear from  
17 you something that will help us understand how the responsibilities  
18 of your organization are coordinated with those of the county  
19 organizations. In other words, I can conjure up a rather  
20 horrifying picture here of an emergency response official in  
21 some county deciding that something has to be done and General  
22 Wise says well, now, that is a lovely way of doing it, I am  
23 going to call him off and see that it is done my way because  
24 I have more experience and I know that that's the right way to  
25 do it.

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Well, it may be but I think that would lead to confusion to say the least. Now I doubt very much that that sort of thing will happen and I put the worst case out here to illustrate what it is I'd like to hear you talk about if you would please, sir.

A. All right. You want to know the relationship between my office and the county office?

Q. Yes, sir, in one of these evacuation activities.

A. Okay. Whenever we go in...well, we will use the V. C. Summer plant. For instance we set up a forward emergency operating center at the Winnsboro National Guard Armory and it involved four counties and so we then, as soon as we got the notice from the Department of Health and Environmental Control, Mr. Shealy. He is the intelligence man. He is the one that feeds us the intelligence and tells us when we should move because he has got the nuclear physicists and people like that working for him and we don't have them.

All right, as soon as he calls us we have an accident or a potential accident, and we notify the counties immediately but they have already been notified too. They get notified too in different ways, and they immediately activate their emergency operation center at the county level, bring in the chairman, the county council. You see, the chairman of the County Council is under home rule which we have in South Carolina, he is the boss. He runs that county with the assistance

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1 of the counsel, but the Emergency Preparedness Director, he is  
2 just working under him kind of as an operations man, like I  
3 would be if we mobilized because the Governor is boss, you  
4 see.

5 We go in like that, then we assess the situation  
6 and in the meantime before, it takes us a little while to get  
7 up there and in the meantime, they are still doing their  
8 thing. They are organizing their emergency operating center  
9 and if any of the other things needs to be done, they are  
10 taking care of them.

11 When we get up there, we get on sight and we let  
12 them know that we are operational and we assess the situation  
13 that they have but these fellows don't work for me. They  
14 work for the County Council. We provide them with technical  
15 assistance and you see, some of these small counties run out  
16 of resources pretty fast. They have got a few deputy sheriffs,  
17 they run out of resources, so they may call us for assistance,  
18 if they need more highway patrolmen or what have you.

19 In the plan, we have a plan where we set up the  
20 two-mile roadblocks. We have the highway patrol assisting on  
21 the anti-looting and so on and so forth, but that's the  
22 situation right now, sir.

23 Q Well, are you saying that it is primarily one of  
24 providing assistance to the local operations rather than  
25 directing them?

k 9  
1 A. Right, sir. We don't direct them. We assume  
2 operational control and there is a difference there. We go  
3 up there and we assume operational control and more or less  
4 assist them with state resources, and if we need more resources,  
5 we have chains where we can go on up to the federal level. We  
6 can get support from the Savannah River plant or wherever we  
7 need it.

8 Q. If for example, to use the example you just used  
9 that a local organization runs out of a certain type of  
10 personnel, deputy sheriffs for example.

11 A. Right, sir.

12 Q. And you provide some personnel to assist them, do  
13 the people that you provide then report to that local county  
14 operation rather than back to you?

15 A. Yes, sir.

16 Q. And they take their orders from them?

17 A. Absolutely, sir.

18 Q. So, in other words, you are overlooking the overall  
19 progress of the operation but you are not directing it in  
20 terms of telling the various units what they should be doing?

21 A. No, sir, I can't do that under state law. Now if  
22 they break down to the point where they are ineffective or  
23 inefficient, the state law says that we will move in and  
24 assume command. That is in Act 199 of 1979.

25 Q. So, upon the advent of chaos in the system, you could

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1 step in and straighten things out?

2 A. Right, sir.

3 Q. Well, now, I have to ask who makes the determination  
4 that things are breaking down? Maybe you are getting anxious  
5 and the local folks don't think they're breaking down and you  
6 do, how is that determination made?

7 A. Let me get the act right here and I will just read  
8 it to you.

9 MR. J. WILSON: Judge Linenberger, if I may,  
10 perhaps General Wise is not clear. I am not either with  
11 respect to your question. Are you speaking of cooperation  
12 and coordination short of a declared emergency by the  
13 Governor or in the event that the Governor has declared an  
14 emergency?

15 MR. LINENBERGER: In the emergency.

16 MR. J. WILSON: And it is a declared emergency  
17 by the Governor who controls?

18 JUDGE LINENBERGER: Yes, sir.

19 MR. WISE: All right, sir, then it states here,

20 "The State Government shall be responsible for  
21 assuming direction and control of an area or local government  
22 emergency operations when requested by the county legislative  
23 delegation or their designee, or when local government  
24 authority has broken down, or is non-existent, or when the  
25 nature of magnitude of an emergency is such that effective

1 response and recovered action is beyond local government's  
2 capability or when in the event of a war emergency or declared  
3 natural or man-made emergency, state direction is required  
4 for implementation of a national plan."

5 BY LINENBERGER:

6 Q All right, sir, now let me see if I understand it  
7 correctly. We have a problem at Summer. There is a declared  
8 emergency by the Governor. The local organization is moving  
9 in to accomplish their missions in accordance with the various  
10 plans that have been submitted and approved, and you are  
11 helping out where you can, and you begin to see--you see things  
12 begin to go wrong, get out of control, lack of coordination,  
13 communication, whatever; then, are you empowered to make  
14 such a determination that well, this is too big for them to  
15 handle so the state organization under you will take over?

16 A No, sir. I am not empowered to do that but the  
17 governor's representative who would be with me would be.

18 Q Would be empowered to. So there is someone there  
19 empowered to hand the stick to you if it need be?

20 A Yes, sir.

21 Q And is the governor's representative always the  
22 same person or--

23 A Well, sir, it was and it will be, yes, sir. He has  
24 a special assistant who heads the Division of Public Safety,  
25 I believe that is what they call it, it was Mr. Lee Thomas.



1 It is a new gentleman now by the name of Mr. Duke and he is the  
2 governor's special representative and he will be with me.

3 In fact, we make the decision on recommended evacuation.  
4 We recommend the evacuation to the county.

5 Q Uh-huh.

6 A You see in this state, nobody can order or compel an  
7 evacuation but the governor. He is the only one. The county  
8 can recommend the evacuation, but it goes in like anything else  
9 that has to be directed by the governor.

10 Q All right. I think that explains how you work vis a vis  
11 the governmental energy.

12 JUDGE LINENBERGER: Thank you very much.

13 JUDGE GROSSMAN: Mr. Bursey, any redirect?

14 REDIRECT EXAMINATION

15 BY MR. BURSEY: (Witness Wise)

16 Q Sir, would you--do you have an outline in your guide  
17 lines anywhere the factors that you consider in making the  
18 decision to evacuate?

19 A No, I don't, Mr. Bursey. I have the federal--right  
20 here--Environmental Protection Guides right here, EPG's. I  
21 usually try to go by these, however, you know it says the public  
22 can get up--one to one to five of general population on the  
23 airborne radioactive material and then it can go up five to  
24 twenty-five on the thyroid, the public can, well we try to go  
25 by this, however, we take a little bit of precaution. We check

1 to see what the projected dose is going to be and we can  
2 figure the projected dose based on the curies released from  
3 the plant and if the projected dose looks like it is going  
4 to get up in the one to five, although it might not be but  
5 about 500 millirems, we would probably evacuate.

6 Q Along that line, can you and Bruce Dukes and --

7 A Gil Barnes, the deputy Adjutant General.

8 Q Would be the ones that would make that decision.

9 A Well, we make the decision but then we call back to  
10 the state Emergency operation center and advise the governor  
11 and he makes the decision. He is the guy that makes the  
12 decision.

13 Q You need, do you need unanimity amongst the three  
14 advisors to--

15 A Yes, we do, we usually--we go on mostly information--  
16 based on information that comes from DHEC. They give us the  
17 projected dose because there again they have the nuclear  
18 physicist. I am not a nuclear physicist.

19 MR. BURSEY: Thank you, sir. That's all.

20 JUDGE GROSSMAN: Mr. Knotts?

21 MR. KNOTTS: Any questions I have, I will save for  
22 direct examination, Judge Grossman.

23 JUDGE GROSSMAN: Mr. Goldberg?

24 MR. GOLDBERG: No questions.

25 JUDGE GROSSMAN: Mr. Wilson?

1 MR. R. WILSON: No questions.

2 JUDGE GROSSMAN: Thank you gentlemen, you are excused,  
3 except General Wise, Mr. Knotts would like to question you after  
4 the next witness, so, could you --

5 MR. WISE: I will be glad to.

6 JUDGE GROSSMAN: Fine. Thank you.

7 MR. KNOTTS: I will only be a few minutes and I don't  
8 want to interject myself.

9 JUDGE GROSSMAN: Let me ask Mr. Bursey, how long do  
10 you expect to take with Mr. Shealy?

11 MR. BURSEY: Well, I don't expect that it will be  
12 brief. I don't expect that it will be lengthy, but Mr. Shealy  
13 is the agency that we have been--that has been referred to for  
14 the last two days as where the buck stops.

15 JUDGE GROSSMAN: I think we will go with that. I  
16 think we ought to take a little break now for 10 minutes.

17 (Short recess.)

18 JUDGE GROSSMAN: Mr. Bursey, could you call your next  
19 witness, please?

20 MR. BURSEY: Mr. Heyward Shealy.

21 Whereupon,

22 HEYWARD SHEALY

23 was called as a witness by and on behalf of the Intervenor and,  
24 having been first duly sworn, was examined and testified as  
25 follows:

1 JUDGE GROSSMAN: Please be seated, sir, and would you  
2 state your full name? Spell it for the reporter.

3 THE WITNESS: I believe that I did this yesterday but I  
4 am Heyward Shealy, (Spelling) Shealy, and to spell my first  
5 name, (Spelling) H-e-y-w-a-r-d.

6 DIRECT EXAMINATION

7 BY MR. BURSEY:

8 Q Mr. Shealy, what do you do?

9 A I am the Chief of the Bureau of Radiological  
10 Health, Department of Health and Environmental Control.

11 Q And how long have you held that position?

12 A I have had that position since January of 1968.

13 Q And what is your training in radiological matters?

14 A Well, my training goes back to 1954 when I worked  
15 at the Atomic Energy Plant, Savannah River Plant as Health  
16 Physics Inspector. This training continued until 1968. I  
17 went with a nuclear reactor program that was licensed by the  
18 Atomic Energy Commission to operate a nuclear power reactor,  
19 participated in various phases of react operations.

20 Q And do you have any training in health physics?

21 A Yes, I have had quite a bit of training in health  
22 physics.

23 Q Where was that?

24 A Savannah River Plant.

25 Q Can you briefly outline what you feel are the most

1 important aspects of the Bureau of Radiological Health's role in  
2 the event of a major accident at the V. C. Summer Plant?

3 A. Well, our primary responsibility is to, in the case  
4 of a radiological incident occurring around a nuclear facility  
5 is to evaluate and assess the radiological aspects, to  
6 recommend any protective action, or protective guides that  
7 need to be implemented to state and local governments.

8 Q. Mr. Shealy, we have heard a lot today and yesterday  
9 and the day before it seems that a lot of people are counting  
10 on you for advice in many different agencies and do you have  
11 some training program that you supervise for these people to  
12 help impart this knowledge that they are looking for?

13 A. You are asking do we have a training program on the  
14 state groups or counties?

15 Q. Yes, sir.

16 A. We do a limited amount of training based on the  
17 resources we have. This training is done basically on a  
18 request kind of thing.

19 Q. Where would you be in the event of a PWR-1 event  
20 at the V. C. Summer plant?

21 A. I would be at the forward EOC with General Wise and  
22 other state agents.

23 Q. And you would be responsible for giving General Wise  
24 the figures of what the nature and amount of the releases?

25 A. We would, of course our plan is a technical assessment

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1 Plan. We would recommend to General Wise what steps that we  
2 recommend should be taken with respect to protection of the  
3 public.

4 Q And your training, are you able to give General Wise  
5 more than numbers? I mean you can read a number off a  
6 calibration device and tell General Wise that--what I am  
7 asking is can you infer that particular number of the particular  
8 isotope or release what that means in somatic or genetic  
9 impacts?

10 A Yes, our assessment would give results that could  
11 be related to General Wise based on our protective action  
12 guides as spelled out in our plan.

13 Q And so are you familiar with the Applicant's  
14 Final Environmental Statement, this yellow book here (indica-  
15 ting)?

16 A Yes, I have seen that particular document. I am  
17 not completely familiar with it but I am aware of it.

18 MR. KNOTTS: Correction, NCR Staff's Final Environ-  
19 mental Statement.

20 MR. BURSEY: It is the Nuclear Regulatory Commission  
21 document and it is the Final Environmental Statement.

22 THE WITNESS: I have seen that, uh-huh.

23 BY MR. BURSEY:

24 Q Do you understand what the worst event that this book  
25 postulates, a hypothetical accident at the V. C. Summer plant?



1 A Do I understand what a--I am not sure of your  
2 question. Ask your question again, please?

3 Q What the worst hypothetical incident at the V. C.  
4 Summer plant?

5 A I assume it would be at least a core melt down or  
6 partial core melt down--

7 Q Do you know what that partial core melt could result  
8 in the release of?

9 A Well, it certainly--

10 MR. WILSON: Mr. Chairman, if there is a certain  
11 portion of that document that he would like Mr. Shealy to take  
12 a look at, it might be better than everybody just standing in  
13 the dark.

14 MR. BURSEY: Do you have a copy that you could let  
15 Mr. Shealy look at, the FES, page 6-9

16 MR. WILSON: The staff has a copy and can provide  
17 one.

18 THE WITNESS: Okay, I believe I have that.  
19 You are looking at Table 6.2.

20 MR. BURSEY: Yes, sir.

21 BY MR. BURSEY:

22 Q And at the top of the page there, there's a PWR-1.

23 A That's a pressurized water reactor.

24 Q And I believe that is the designation for the worst  
25 hypothetical event, and I am wondering if you know--let's take

1 an isotope, let's say cesium, the percentage of the core then  
2 is postulated here to be released.

3 A. What is your question, I see the graph.

4 Q. Yes, sir, I am asking you what percentage of cesium  
5 would be released in a PWR-1?

6 A. It tells you right here .4. You are referring to  
7 pressurized water reactor 1?

8 Q. Yes, sir.

9 Can you tell me what amount of curies that would be  
10 that would be released in the event of that PWR-1, how many  
11 curies of cesium that would be?

12 On the next page, Table 6.3.

13 A. Yes.

14 Q. (Continuing) We see that there is 4.1 million curies.

15 A. Right.

16 Q. Of Cesium 137 in the core and a release of 40 percent  
17 of the inventory would release 1.6 million curies of cesium.  
18 Can you advise the people in the forward operation control what  
19 that means in terms of physical effects on the population in the  
20 affected area?

21 A. Well, this would certainly--a release such as you are  
22 talking about here would necessitate the protective action guide is  
23 calling for certain evacuations of the populus

24 Evidently you are talking about a more serious kind  
25 of accident here. The release of basically, well, we will say

1 half the inventory here of cesium in the core.

2 Q Yes, sir, would you turn to page 620 and look at  
3 table 6.4?

4 The last, well second to last line across that chart  
5 that begins, the second figure is 60,000 persons exposed over  
6 200 rems. Are those figures the figures that you are familiar  
7 with in regards to the impact to the people living within the  
8 50 mile area around the V. C. Summer Plant? If we had a PWR-1?

9 A I don't really understand your question. Do I  
10 agree with this or disagree?

11 Q Yes, sir.

12 A Well, I certainly would have to agree.

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1 Q And so then I could infer from that that you would,  
2 that you agree that PWR 1 at the V. C. Summer plant could, accord-  
3 ing to these figures, cause two thousand acute fatalitites?

4 A That's what it says.

5 Q Five thousand, three hundred to five thousand, nine  
6 hundred latent cancers?

7 MR. GOLDBERG: Objection. I'm going to object unless  
8 there's some showing of the relevancy this has to the contention  
9 which, even though we've been quite indulgent in listening  
10 to all of the state and local officials, I don't think it's  
11 really necessary or within this individual's responsibility to  
12 be familiar with the health efrects of accidents that are postu-  
13 lated for informational value in keeping with the Commission's  
14 policy statement to do so.

15 The individual indicated that if he had an accident  
16 of the magnitude that Mr. Bursey referred to, that he would  
17 be a candidate for evacuation. I think that to speculate what  
18 would happen in the absence of evacuation really doesn't serve  
19 the record well and I really don't see the relationship.

20 JUDGE GROSSMAN: Well, Mr. Goldberg, I don't think  
21 you've been very indulgent. I think Mr. Bursey is going to connect  
22 it up. He has just started questioning on this and we'll give  
23 him some leeway on that.

24 MR. BURSEY: Thank you, Judge Grossman. I am hoping  
25 that everyone else has said they don't know what's in here and

1 this is our last chance for someone to state they know what  
2 the FES says.

3 MR. JOHN WILSON: Mr. Chairman, isn't the concern  
4 with monitoring the situation as it actually is at any point  
5 in time and reacting to act, not attempting to speculate what  
6 might occur and what might happen if something did occur? Isn't  
7 it more important to determine the effectiveness of the State's  
8 ability to analyze and react?

9 JUDGE GROSSMAN: I assume Mr. Bursey is directing his  
10 questions to whether the State is aware of the seriousness of  
11 the problem and has taken measures to cope with that. And this  
12 seems to me to be within that area and I don't see anything  
13 improper. He hasn't really had a chance to belabor the point  
14 so there's nothing repetitious there and we'll just let him  
15 develop this.

16 You may proceed, Mr. Bursey. Is there a pending  
17 question?

18 MR. BURSEY: Well, Mr Shealy was beeping. I was going  
19 to give him a minute. Are you all right.

20 MR. SHEALY: I'm all right.

21 BY MR. BURSEY:

22 Q The figures in Table 6.4 are--indicate a significant  
23 impact on the population, do you agree?

24 A. Yes.

25 Q Now, I don't know if you were present during the

1 examination of the county Office of Emergency Preparedness and  
2 some of the other state agencies, but no one had direct knowledge,  
3 that I was able to solicit, as to what a terrible accident at  
4 the V. c. Summer plant could cause in terms of lives lost and  
5 exposure to the environment.

6 Now, are you familiar with this information?

7 A. The information, the fact that the counties do not  
8 understand this?

9 Q. No, sir, the information that we just went over?

10 A. Yes, I have a feel for this, yes.

11 Q. Now, I'm trying to understand why no one else does.  
12 Now, is there something that--some procedure that you have in  
13 the Bureau of Radiological Health for educating people like  
14 the Directors of the Office of Emergency Preparedness about what  
15 to expect in the event of an accident?

16 A. There's no planned mechanism to do this. However,  
17 we do field questions from county directors that they have concerns  
18 about, different aspects of responding, but we have no planned  
19 program for doing that?

20 Q. Well, given that you're the lead agency and you're  
21 the Director of that Bureau of Radiological Health, can you  
22 tell me what these two thousand three hundred people that it  
23 says acute fatali+v within the fifty-mile zone, what would happen  
24 to them? #mean I assume acute fatality means death, but are  
25 they dead right off or--?



1 A. I would think some would be, yes.

2 Q. And the larger number, up to fifty-nine hundred latent  
3 cancers, what does that mean?

4 A. Well, it means that they could possibly develop cancer  
5 later in life, and I use the word possibly, possibility of  
6 developing cancer.

7 Q. Does the Bureau of Radiological Health have--I'm sure  
8 that the main thrust of your job is to mitigate this happening.  
9 Now, I assume evacuation is the prime means of mitigation, is  
10 that correct?

11 A. In this instance, the instance here, it would be, yes.

12 Q. What happens to those people that unfortunately get  
13 contaminated? Can you tell me what your office, what your idea  
14 is of decontamination? What can be done to help these people that  
15 have been irradiated?

16 A. Well, they would certainly have to evacuate to a Reception  
17 Center somewhere, predesignated in the State Plan. Here they  
18 would be received--they would be surveyed. They would be required  
19 to shower, perhaps using soap and water, and we would more or  
20 less advise with respect to what they would have to do at the  
21 Reception Center.

22 Q. Are there other things that they could do to decon-  
23 taminate themselves other than the shower?

24 A. Well, it depends on the particular material involved.  
25 It may be that you would want to do other things such as bio-

1 assay samples from individuals, doing more or less routine health  
2 physical type work. And this would have to be based on the  
3 situation you're dealing with.

4 Q Well, could we assume that someone came in that had  
5 external radiation. Might they have internal?

6 A You mean external contamination?

7 Q Yes, sir.

8 A Well, they would have to decontaminate themselves.  
9 There's various agents you could use. Soap and water would  
10 be one way to start anyway.

11 Q No, we're talking now about internal contamination.

12 A Oh, internal.

13 Q After you do the bio-assay, the urine sample and a  
14 nose-wipe and they're contaminated, is there something you can  
15 do to uncontaminate them?

16 A Well, you should be a little more specific in what  
17 isotope are you dealing with here. You know, it's virtually--  
18 you know, are you dealing with short half-life, long half-life?

19 Q Well, we were walking through this scenario using  
20 cesium.

21 A Oh, okay. Well, it would deposit in certain parts  
22 of the body and, you know, it would have to decay and remain  
23 in some parts of the body during its half-life.

24 Q And what's the half life of cesium?

25 A Let's see. I think it's--cesium-137, we'd say

1 just to use round numbers.

2 Q So then the decontaminaton we've been talking about  
3 today, what isotope does that deal with?

4 A That we've been talking about?

5 Q Let me rephrase that. That decontamination would  
6 wash off external radiation. And then with regards to internal  
7 contamination, what are the mitigating measures that can be  
8 taken to prevent internal contamination?

9 A Well, if they were in an area that was, you know,  
10 in the plume area and received--there's really, unless you had  
11 some respiratory equipment--of course cesium, here you're dealing  
12 a particulate and not a gaseous contaminant. And they would  
13 have to get this internal contamination through the hands and  
14 eating products and such as that.

15 Q Do your plans call for any type of emergency respiratory  
16 devices to be suggested to the public?

17 A No.

18 Q Would you advise that the applicant could include  
19 in their emergency brochure some type of mention of respiratory  
20 devices, even if it was a wet handkerchief?

21 A Well, I think that may be effective in dealing with  
22 things like I-131 perhaps, you know, if you're going to remain  
23 indoors, that you perhaps could use a wet towel to breathe through  
24 and this would help remove some of the contaminants. Certainly  
25 that's a possibility. It would be a good thing to advise.

1 Q Now, the potassium iodide, what is the purpose of  
2 that?

3 A That is to block the thyroid gland from taking up  
4 radioactive I-131.

5 Q What percentage of Iodine 131 is that postulated to  
6 be effective in inhibiting?

7 A Well, it certainly depends on the time that you take  
8 the drug, but I believe it's about ninety percent effective  
9 based on a short period of time that you become exposed to the  
10 I-131. And of course as the time extends here the effectiveness  
11 drops off.

12 Q The effectiveness of the potassium iodide?

13 A Yes.

14 Q Okay. How long can you take it?

15 p Well, you can take it, you know--I think ten days  
16 would certainly be reasonable time. It would depend on, you  
17 know, the length of the release and, you know, there's a lot  
18 of variables here.

19 Q So then the protective measures that I've heard discussed  
20 for the last two days now go to Iodine-131 using potassium iodide  
21 and any external particulate radiation that would be washed  
22 off in the shower? Does that--is that--does that protect the  
23 public, or are there other things that we have problems with?

24 A Well, when you talk about protecting the public you  
25 can certainly recommend staying indoors and things like we've

1 just discussed.

2 Q Well, I'm referring to after contamination.

3 A After contamination? After contamination, certainly  
4 washing, decontaminating would be a mechanism. And you're recom-  
5 mending taking KI after the fact here?

6 Q I'll put that as a question to you. Does that help?

7 A I would--i would not recommend administering KI to  
8 the general public.

9 Q In the State FNF plan it says that you're supposed  
10 to be prepared to provide, supervise administration of potassium  
11 iodide to radiological emergency workers and the population.  
12 Now, is it then--can we conclude that you're the one that make  
13 that decision and that you don't advise that the populatin take  
14 it?

15 A Well, I think what you mean here, population is perhaps  
16 segment of the population that could not be readily evacuated  
17 from a certain zone that you're concerned with.

18 Q Well, I don't mean anything; I'm just reading from  
19 the plan that just says "and population." Is that what you refer  
20 to?

21 A Yes.

22 Q And who would that be that couldn't be readily evacuated?

23 A Well, you could look at perhaps hospital personnel,  
24 people who are in nursing homes, health care centers, maybe prison  
25 inmates, you know the people that would have to take special

1 attention to get out of a particular area.

2 MR. JOHN WILSON: Mr. Chairman, if I may, I believe  
3 Mr. Bursey has been reading from the older plan. It's my under-  
4 standing that subsequent to the exercise held at the Summer  
5 plant that recommendations were made by FEMA and that modifica-  
6 tions to the SCOREP have been made and submitted to FEMA that  
7 changed some of the language. And I think Mr. Bursey's relying  
8 on some of the older language.

9 MR. BURSEY: The document I'm using is March 1981.  
10 Has there been a subsequent update?

11 MR. JOHN WILSON: It's my understanding that there's  
12 has been--there either has been or is in the process of being  
13 modified as of May 1981.

14 BY MR. BURSEY:

15 Q Mr. Shealy, does what Mr. Wilson just said have some  
16 bearing on the question of potassium iodide administered to  
17 the general public?

18 A Well, I would like to hear what the new version states.

19 JUDGE GROSSMAN: Could you show him the new version?

20 MR. JOHN WILSON: If I may, and it's my understanding  
21 that General Wise has copies of the amended proposals. The  
22 have been submitted to FEMA, but they've yet to get to the agency.  
23 Specifically, on page eleven, under the Department  
24 of Health and Environmental Control, number ten says: "Supervise  
25 and issue potassium iodide to radiological emergency workers,"



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period.

JUDGE GROSSMAN: We are laboring under some handicap here and that is the time element. Some of these plans as we noted aren't finalized yet. We're nevertheless at the hearing stage and we just have to do the best we can. If Mr. Wilson or anyone else finds something that requires update, please notify us immediately.

MR. BURSEY: What I have is all that I've been served with. It says March 1981.

BY MR. BURSEY:

Q Mr. Shealy, can you tell us why the general public has been excluded from the administration of potassium iodide?

A Well, this is a policy that developed in my department through various technical groups, that KI be provided only for emergency workers and other that could not be readily evacuated from a particular zone. And I believe there's draft FDA report that recently came out that indicates that the feeling is here that it's only needed for emergency.

Q Are contraindications of this drug that significant that we should be afraid of administering them to the general public?

A I do not feel that that was really the reason that it was felt that, you know, it just wasn't necessary, needed to have this available to every one of the public. That was a policy that DHEC came out with.

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Q In 0654 Nureg, it states that the State is responsible primarily for the ingestion zone, the fifty-mile zone. Now, back to this hypothetical release we've been following through and if there were a significant core melt and a large release of radiation in the millions of curies, we could anticipate a lot of land contaminated. What is the procedure in dealing with contaminated land lots that may be exposed to significant amounts of radiation?

A. Dealing with contaminated food product, land, we would certainly call in assistance from other agencies, like Food & Drug Administration, Environmental Protection Agency-- and I'm talking about federal agencies.

We would also call in assistance under the IRAP plan and SMRAP plan for assistance in evaluating and assessing the situation that we had. And we would make recommendations as to what would be done with contaminated food products and contaminated land.

Q Can you tell us what IRAP and SMRAP are?

A. IRAP is Interagency Radiological Assistance Plan.

Q Is that a federal program?

A. Yes. Our primary assistance would come from the DOE's Savannah River plant if we had need of it.

Q And SMRAP?

A. Southern Mutual Radiological Assistance Plan, where I would call my counterparts in other states in the Southeast

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for assistance.

Q Okay. Now, we've got the assistance. What do we  
do with the thousands of acres of land that's irradiated above  
habitable level?

A Well, it would certainly--as far as this food products  
thing, there would have to be some decision made by this group  
I've spoken of, what to do with the products. We would certainly  
use the FDA guides in determining contamination levels, the release  
level, the re-entry level. Exactly what would be done with  
contaminated soil, you know, I feel that you would certainly  
have to restrict the use of particular areas that were contam-  
inated.

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1 Q Do you have any idea how long an area that was contam-  
2 inated as a result of a PWR 1, how long we would have to stay  
3 out of that area?

4 A Are you still dealing with the Cesium 137?

5 Q Yes, sir. Well if we were dealing with a PWR 1, in  
6 that instance we wouldn't have just Cesium.

7 A Sure.

8 Q Let's just be more general.

9 A You would of course have a lot of other things, Strontium  
10 and these kinds of things. Well the land use would have to be  
11 restricted and there would have to be some attempt made to  
12 decontaminate or remove contaminated soil to the burial ground,  
13 you know, where it's controlled.

14 Q But can you postulate a time that I can expect to have  
15 to be away from home?

16 A I really wouldn't want to do that. It would certainly  
17 be timely to do something like that.

18 Q Are we talking about weeks, years?

19 A Certainly weeks and perhaps months.

20 Q And that short period of time, weeks, is in the case of  
21 us being able to clean it all up, is that right?

22 A Well you would certainly have to clean it up to a certain  
23 level, yes.

24 Q Are you familiar with a date that Wash 1400 states of  
25 10 years staying out of a zone that --

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1 A. That's certainly a possibility.

2 Q. You mentioned that you would call in federal agencies  
3 to assist in determining the impoundment of crops. Is your agency  
4 not empowered to make that decision?

5 A. Well I think here you're certainly talking about a  
6 joint decision, certainly NRC and the company, the utility would  
7 be involved in this.

8 Q. We heard earlier that the Clemson Extension Service  
9 would work with you in telling people when the levels of their  
10 crops were above a certain level and they should be impounded  
11 if the melt was above a certain level, they should be seized. Now  
12 do you feel confident and competent that your department can make  
13 those quick decisions without relying say on the Federal Drug  
14 Administration -- Food and Drug Administration?

15 A. Well we would, I think here you would make joint  
16 evaluations, joint decisions and we would -- and I say we, the  
17 Department of Health and Environmental Control, would certainly  
18 advise Clemson University as to what steps are necessary to be  
19 taken and this would be done after a joint decision is made as  
20 to steps that we're going to proceed, you know.

21 Q. Were you present when the gentleman from Clemson said  
22 that they could provide not much more than just a list of the  
23 farms and perhaps some few people to help, that they're not in a  
24 position, an educated position or a technical position to do much  
25 more than that?

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1 A I did not hear that.

2 Q The ball again comes back to your office.

3 A Yes. We would make the final determination, but like  
4 I say again, it would be a joint discussion and a joint sampling  
5 program. We certainly do not have the personnel to venture into  
6 an accident like you're talking about here. We would have to call  
7 for assistance.

8 Q There was a gentleman yesterday that testified, he's  
9 a dairy farmer, and he's collecting 6,000 pounds of milk a day,  
10 living at the edge of the ten-mile zone at Fairfield County. In  
11 the event of a major release where there's a question about the  
12 safety of his milk, how long would it take for you to get to him  
13 and other dairy producers in the area to see that that milk was  
14 kept off the market?

15 A How long would it take us?

16 Q Yes, sir.

17 A Well I think you're talking about an area that's fairly  
18 close. We perhaps could do it in one day.

19 Q Now if we were talking about the fifty-mile ingestion  
20 zone, have you had discussions with other agencies about the  
21 magnitude of that task of identifying and seizing crops and  
22 agricultural products that might be contaminated?

23 A Well I think certainly you're talking about products  
24 that perhaps would have to be destroyed or not used and I think  
25 that they do have a feel for what could happen, you know, in a worst



M4pw

1 case accident.

2 Q I'm sorry, "they have a feel"?

3 A I feel that most of them do, yes.

4 Q Most who, sir?

5 A Other agencies like Clemson Extension that we would be  
6 dealing with.

7 Q I wish you'd been here for the last two days because  
8 I'm not sure I could infer that from the testimony.

9 Do you have any agreement or disagreement or observation  
10 with the costs that are in this book on Table 6.4 for this accident,  
11 this PWR-1, the cost of off-site mitigating action, \$4 billion?

12 A That's 6-4?

13 JUDGE GROSSMAN: No, it's page 6-20, Figure 6.4. Is  
14 that right?

15 MR. BURSEY: Yes, sir, Table 6.4 page 6-20.

16 THE WITNESS: I've got it.

17 BY MR. BURSEY:

18 Q The bottom right hand figure there lists a \$4 billion  
19 amount for mitigating actions within that 50-mile ingestion zone  
20 we've been referring to. Is that about right?

21 A I would not want to differ with these figures, I'm not  
22 prepared to differ with those.

23 Q Do you know where that \$4 billion would come from?

24 A I guess, of course, the company under the Price-Anderson  
25 Act, I assume would have some coverage in this respect. I'm not

M5pw 1 that familiar with liability insurance, that's a little bit out  
2 of my field.

3 Q Well what is in your field, sir, is the question of  
4 mitigating the accident impacts in this 50-mile zone and if Price-  
5 Anderson covers the first \$560 million, we're still falling a  
6 little bit short, about three and a half billion dollars.

7 A Yes.

8 Q And I'm wondering if you're going to be able to mitigate  
9 the accident.

10 A Well I certainly couldn't tell you --

11 MR. J. WILSON: Mr. Chairman, I object. I don't believe  
12 this witness is qualified to speak about cost responsibilities.  
13 He's here with respect to health matters on a responsive basis,  
14 not budgetary matters.

15 JUDGE GROSSMAN: I think this is a cost of mitigating  
16 actions and I think he can offer his opinion on that, it's not the  
17 cost of damage.

18 MR. KNOTTS: Judge Grossman.

19 JUDGE GROSSMAN: Yes?

20 MR. KNOTTS: Excuse me, I read that as being an estimate  
21 of damage. I read it as being in the liability realm under the  
22 Turkey Point decision. Price Anderson matters are not to be  
23 considered in licensing proceedings. I have not --

24 JUDGE GROSSMAN: Well if I were agreed that this was a  
25 cost of damage, I would sustain the objection, but that's not what

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1 the column seems to say to me. Mr. Goldberg, do you have some  
2 explanation?

3 MR. GOLDBERG: Judge, I am advised that in fact it is  
4 the cost of damage, but let me confirm that please with my  
5 project manager.

6 (Mr. Goldberg and Mr. Kane confer.)

7 MR. GOLDBERG: Judge, I believe a breakdown in the cost  
8 figures provided in that table are contained at the top of page  
9 6-19 and probably to read it with any meaning you might want to  
10 start on page 6-14 before the several figures beginning with  
11 Section 6.144, but the forwarded items on page 6-19 do comprise  
12 costs that are considered in that table.

13 JUDGE GROSSMAN: Unfortunately it includes both and  
14 so we'll allow the question for whatever it's worth, but it  
15 looks like evacuation costs, costs of decontamination of  
16 property where practical, at least those do concern costs of  
17 mitigating the action and the others appear to be costs of damages  
18 and so we'll allow the question for whatever it's worth in the  
19 absence of any great damage.

20 MR. KNOTTS: Judge Grossman, I won't belabor the point,  
21 I respectfully differ, I think what we're here to discuss is  
22 emergency plans and not what the liability costs for any aspect  
23 following evacuation would be.

24 JUDGE GROSSMAN: Well it's unfortunately not only directed  
25 towards costs following evacuation, but it includes evacuation costs

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M7pw 1 and I really don't see how we could rule out a question involving  
2 that.

3 MR. J. WILSON: Mr. Chairman, there's nothing in the  
4 plan that puts any responsibility, as I understand it, on this  
5 agency with respect to those costs that you're referring to and  
6 I don't see the relevance of asking this witness about costs of  
7 mitigation.

8 MR. BURSEY: May I respond?

9 JUDGE GROSSMAN: Certainly.

10 MR. BURSEY: May I educate Mr. Wilson to the fact that  
11 this agency, Bureau of Radiological Health, is charged with the  
12 decontamination.

13 MR. J. WILSON: There's no question about that.

14 MR. BURSEY: This agency is charged with the 50-mile  
15 zone. Now if --

16 JUDGE GROSSMAN: That's the fourth item, Mr. Wilson.

17 MR. GOLDBERG: Judge, if I might, unfortunately there  
18 is no breakdown as to what extent evacuation costs contribute to  
19 that figure. I think it might be more meaningful if we can get  
20 this witness' expert opinion on in fact what those evacuation  
21 costs are rather than speculate from a figure in a table which  
22 unfortunately we're not prepared to break down into its component  
23 parts.

24 JUDGE GROSSMAN: Well we're going to have to do the  
25 best we can, Mr. Goldberg. I don't think it's Mr. Bursey's fault

1 that there isn't any breakdown in the table, and so I will over-  
2 rule the objection and let him phrase his questions.

3 MR. BURSEY: Thank you, sir.

4 BY MR. BURSEY:

5 Q Mr. Shealy, I've been wondering what you do with  
6 contaminated food stocks after they are impounded, if you've got  
7 some corn that's close to the reactor that might be pretty  
8 radioactive, what do you do with it?

9 A It would have to be contained in an appropriate container  
10 and buried as radioactive waste. It could not be used.

11 Q Now water such as water supplies that are drawn from  
12 open areas like rivers, like the Broad River I believe is  
13 Columbia's water supply, is it not?

14 A Yes.

15 Q The contamination of those areas, is that your  
16 responsibility to ascertain if a water source is contaminated?

17 A We do monitor the water supply, yes.

18 Q So your agency would be the one that would tell Columbia  
19 to quit drawing down water out of the Broad River and drinking it,  
20 if it was contaminated?

21 A Yes.

22 Q And in the event of something like a standing body of  
23 water like Lake Monticello, were it to become significantly  
24 contaminated, is there anything that could be done to decontaminate  
25 it?

M9pw

1 A. The river itself, no, I do not know of any mechanism  
2 that you could decontaminate a large impoundment of water.

3 Q So it would continue for some extended period of time  
4 to pose a threat?

5 A. As far as I know, that's true.

6 MR. KNOTTS: Judge Grossman, I must respectfully  
7 intercede again. I cannot for the life of me fathom, given the  
8 broadest possible reading of Mr. Bursey's contention, what in  
9 the world this has to do with emergency planning as set -- in  
10 accordance with the factors set forth in 51.47, Appendix E or  
11 0654, NUREG 0654. I just don't see it, I don't think it's  
12 relevant and I object.

13 JUDGE GROSSMAN: Mr. Bursey?

14 MR. BURSEY: I think that the ability of state agencies  
15 to meet the water resources of the people is certainly related to  
16 the contention, it's certainly the matter at hand, and I'm moving  
17 off of that right now if it makes Mr. Knotts feel any easier.

18 BY MR. BURSEY:

19 Q Sir, are there special protective measures that the  
20 various agencies that are under your direction are given in regards  
21 to pregnant women and children, do they have a priority evacuation?

22 A. Yes, I think you would certainly consider women and  
23 children as far as putting them on alert, maybe even evacuating  
24 or remaining indoors, you know, these kinds of things.

25 Q It would be conceivable that there might be an order



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1 for pregnant women and children to fall back first?

2 A. Sure, that's certainly reasonable.

3 Q. And do you have some guidelines that your agency uses  
4 to determine that level of incremental hazard?

5 A. Well I think here you would use a certain amount of  
6 professionalism in making these determinations. It would depend  
7 on the particular situation you were dealing with and I think there  
8 would have to be some professional judgements made. To answer  
9 your question directly, we do not have any specific guides that  
10 breaks this down.

11 Q. Would these be your professional judgments, sir?

12 A. Well it would be my and my staff's judgments, yes.  
13 And the Department with Dr. Jackson involved.

14 Q. Have you studied, I think it was even called "Lessons  
15 Learned at TMI", have you studied the things that the nuclear  
16 industry and bureaus like yours learned from the emergency problems  
17 at TMI?

18 A. I have read some of the lessons learned, I may not be  
19 familiar with every one of them, but I have seen them.

20 Q. And do you feel that we're going to be able to avoid  
21 say the problem that they've had with conflicting decisions about  
22 evacuation?

23 A. I think that speaking for the state, that we are better  
24 prepared than the State of Pennsylvania is.

25 Q. Well Mr. Shealy, this scenario that we went through,

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1 is a bit unlikely and I would consider it pretty catastrophic.

2 A. That's correct.

3 Q. And I think that what I've heard in the last two days  
4 from the Offices of Emergency Preparedness, they can handle most  
5 things. Would you agree with me that if we had a PWR-1 with a  
6 massive loss of core and the type of millions of curies pouring  
7 out of a reactor that we've just gone over, that the Offices of  
8 Emergency Preparedness in the courcies around the plant may be  
9 overwhelmed?

10 A. Well it would certainly take, I would consider, a  
11 substantial amount of state resources to cope with a situation  
12 like that, with federal assistance, that would certainly be  
13 necessary.

14 Q. But I mean, is there in your mind, looking at this,  
15 this book here, this licensing of this reactor I believe is one  
16 of the first ones to consider in it, this PWR-1, this massive  
17 core melt. is there a point down the road that might happen at  
18 that reactor where all we could do is fall back and pray?

19 A. I guess you're right.

20 MR. BURSEY: Thank you, Mr. Shealy, I'll let the other  
21 parties -- answer any questions that they might have for you,  
22 please sir.

23 JUDGE GROSSMAN: Mr. Knotts?

24 MR. KNOTTS: Judge Grossman, I would like to use time  
25 as efficiently as I can. I would like to add Dr. Shealy to the

M12pw 1 panel that I'm going to call, or Mr. Shealy, to the panel that  
2 I'm going to call on direct, consisting of General Wise and his  
3 associates and Mr. Shealy. I do want to ask some questions in  
4 the nature of cross examination, but I think it can be done  
5 faster if I do it all at once, but I will do whatever the Board  
6 wants me to do.

7 JUDGE GROSSMAN: I think it would be cleaner if we  
8 just handled the cross examination now and had Mr. Shealy come  
9 back as your witness.

10 MR. KNOTTS: All right, could the reporter please read  
11 back the last question and the last response of Mr. Bursey's  
12 interrogation of Mr. Shealy?

13 (The reporter read back the last question as  
14 follows: "Q But I mean, is there in your mind, looking  
15 at this, this book here, this licensing of this reactor  
16 I believe is one of the first ones to consider in it,  
17 this PWR-1, this massive core melt, is there a point  
18 down the road that might happen at that reactor where all  
19 we could do is fall back and pray?

20 A I guess you're right.")

21 CROSS EXAMINATION

22 BY MR. KNOTTS:

23 Q Mr. Shealy, with respect to the question and your  
24 response, I wanted to ask you whether you were agreeing at some  
25 probability level that is finite and even expected that the state

1 is going to be in the position of falling back and praying?

2 MR. BURSEY: I would object to Mr. Shealy dealing with  
3 the question of nuclear physics. We were talking about health  
4 and releases that are in the book and now if we're talking  
5 about probabilities I don't think Mr. Shealy is adequately trained  
6 to deal with probabilities of accidents.

7 JUDGE GROSSMAN: Well I'll allow the question, I don't  
8 really think the witness is going to be able to answer it anyway,  
9 but you may proceed.

10 MR. KNOTTS: I didn't ask the witness for a probability,  
11 I said was he expecting that there was going, with some probability,  
12 I didn't ask him to specify a probability, that an accident is  
13 going to occur where all that the state can do is sit back and  
14 pray. Is that what he really means to tell the court.

15 A. I'm not expecting an accident that we would have to do  
16 that, if that's the answer to the question.

17 BY MR. KNOTTS:

18 Q. As a matter of fact, it's true, isn't it Mr. Shealy,  
19 that it's 6:45 at night.

20 A. Yes.

21 Q. Kind of the end of a long day.

22 MR. KNOTTS: I'm going to pass the witness. I'm going  
23 to recall him on direct if I may.

24 JUDGE GROSSMAN: Mr. Goldberg?

25 BY MR. GOLDBERG:

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1 Q Yes, Mr. Shealy, if you would return to Table 6.2 in  
2 this staff FES, page 6-9, Table 6.2.

3 A Okay, I believe I have that.

4 Q Is it fair to say, Mr. Shealy, that that table represents  
5 a spectrum of hypothetical severe accident releases which, as  
6 characterized in the accompanying text are commonly referred to as  
7 Class 9 accidents?

8 A No.

9 Q No, it is not?

10 A No, it is not.

11 Q It is not fair to assume -- let me ask the question, what  
12 do you understand to be represented in that table?

13 A Well not having read the material up to this, what  
14 we're talking about here is a summary of atmospheric release  
15 categories representing hypothetical accidents at a PWR, and I'm  
16 just looking at this one particular page.

17 Q Let me refer you then please to the text at page 6-8,  
18 and I can read it or I would ask you to read the introductory  
19 paragraph to Section 6.1.4.2.

20 A Okay. We're talking about a greater severity than the  
21 design basis accident discussed in the previous section.

22 Q Isn't it also in the middle of the first paragraph  
23 indicated that these severe accidents heretofore frequently called  
24 Class 9 accidents?

25 A Well here again you're talking about, this particular

M15pw 1 paragraph talks about very, you know, they consider less likely  
2 to occur and --

3 Q Well my question is, the nine PWR release categories  
4 represented in that table, do in fact represent severe accidents,  
5 which as indicated, were frequently called Class 9 accidents,  
6 I'm just asking you if that is your understanding of what you  
7 can read in the textual material in that section.

8 JUDGE GROSSMAN: Mr. Goldberg, I believe the witness  
9 already answered that, ther material stands for itself.

10 MR. GOLDBERG: The material will stand for itself. I  
11 would just like to point out one other section, and if I may  
12 read from the second paragraph in that section, the middle line,  
13 "The same set of nine release categories designated PWR-1 through  
14 9 have also been used to represent the spectrum of severe accident  
15 releases that are hypothesized for the Summer facility."

16 BY MR. GOLDBERG:

17 Q Now again, looking at that Table 6.2, is not PWR-1 the  
18 most severe of the accidents hypothesized?

19 A Isn't that the most severe?

20 Q Of those represented in the table.

21 A Okay, it looks like you're correct.

22 Q Okay, and do you see alongside the heading release  
23 figure, do you also see a probability figure given for that incident?

24 A Yes.

25 Q And what is that probability?



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1 A. 5.1 times 10 to the minus 8.  
 2 Q. And is that a very low probability?  
 3 A. That is a very low probability. I think this was  
 4 understood with me during the examination, very low probability.

5 Q. Do you agree that an accident of the type contained  
 6 and described as PWR-1 in that table is rather catastrophic?

7 A. Yes.

8 Q. Wouldn't you expect, in the event of an accident at the  
 9 Summer station of that magnitude, that you would expect the  
 10 assistance of the federal, at the federal level?

11 A. Yes, I would.

12 Q. What kind of assistance would you feel it logical to  
 13 expect?

14 A. Well from my standpoint I would certainly ask for  
 15 monitoring assistance to, you know, assess the situation in the  
 16 environment.

17 Q. Apart from that, do you believe that you have adequate  
 18 state resources even to handle an emergency of that magnitude?

19 A. We could initially, but for long term we would have to  
 20 have assistance.

21 MR. GOLDBERG: Okay, I have no questions.

22 JUDGE GROSSMAN: Mr. Wilson?

23 BY MR. R. WILSON:

24 Q. Mr. Shealy, when you just said you would seek monitoring  
 25 assistance from the federal facilities, what kind of monitoring are

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1 you talking about, you're not talking about these CDV-700's that  
2 are out in the field, are you? You're talking about something  
3 more sophisticated?

4 A. Sure, I'm talking about laboratory analysis, laboratory  
5 assistance in analyzing sample needs.

6 Q. Do you know whether or not they have also available  
7 remote control equipment to enter hot areas and obtain monitoring  
8 samples?

9 A. Yes, that would be made available to us.

10 Q. All right, sir. I take it then you have access to the  
11 full gamut of federal equipment?

12 A. Yes.

13 Q. All right, sir. Would you also expect to obtain the  
14 assistance of health physicists and also aerial experts as far  
15 as supplemental federal monitoring that you were speaking of a  
16 minute ago?

17 A. Yes, there is other mechanisms to gain assistance.

18 Q. But as far as the federal assistance goes, is your  
19 decision to call for it based on a determination that the state  
20 people are incompetent or is this a matter of equipment and  
21 logistics or manpower or what?

22 A. It's manpower primarily because we've been discussing  
23 the worst possible accident, and we could cope with that situation  
24 initially but for long term carrying on, we would have to have  
25 assistance, technical assistance.

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1 Q All right, sir. And would, what's then -- well let  
 2 me back up a little bit and ask another question on this subject  
 3 before I move along. Would the request for federal assistance,  
 4 would that require the worst accident to cause you to send out the  
 5 alarm for help to the federal facilities or is there a lesser  
 6 degree that you might decide that it would be prudent to seek  
 7 federal assistance?

8 A We may would seek federal assistance on lesser type  
 9 accidents, but it would certainly not be of the magnitude that  
 10 we have been discussing here.

11 Q All right, sir. Now in a normal, if I can use that  
 12 term loosely, in a normal emergency situation, what's the most  
 13 likely type of release that is expected to occur? What types  
 14 of radionuclides are you talking about being released in a  
 15 postulated accident?

16 A Well your predominant isotope here would be I-131  
 17 which is in a gaseous form, and we would, we could deal with a  
 18 situation like that and I think it would fall into a site  
 19 emergency or unusual, a general emergency type situation.

20 Q Would noble gas releases also be expected?

21 A Noble gases would be included in this, yes.

22 Q And as far as decontamination efforts go, what if any-  
 23 thing can you do when someone has been contaminated with iodine  
 24 or noble gases?

25 A There's really not a lot, but here again you're dealing

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1 with gaseous releases and there's not a whole lot you can do  
2 with respect to decontamination. You have to get into a  
3 particulate contamination.

4 Q Does it depend to any degree on what a person is,  
5 which nobile gas a person has been exposed to as to whether or  
6 not decontamination is even necessary?

7 A No.

8 Q There would be some impact that would remain?

9 A Yes.

10 Q Okay. I had a question earlier as far as potassium  
11 iodide, we were talking about, and its administration goes, is  
12 there -- would the administration of potassium iodide after the  
13 fact do any good?

14 A It would do perhaps some good but certainly your time  
15 factor here is critical.

16 Q And what do you mean by time factor, you mean how soon  
17 after someone has been contaminated?

18 A Someone has been exposed, yes, because of the uptake  
19 of the I-131 into your thyroid glands and certainly within several  
20 days would be reasonable to take the KI.

21 Q All right, sir, are you familiar with the DHEC protective  
22 action guide regarding -- excuse me, the policy regarding the  
23 administration of KI? (Pause.) Are you familiar with a policy?

24 A Yes, I am familiar with that policy.

25 Q I show you from the technical plan, technical radiological

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1 emergency response plan, on page I-5 of the protective action  
2 guide, and ask if you can identify that.

3 A. Yes, I can identify that.

4 Q. And what is it?

5 A. It's the DHEC policy on potassium iodide as a thyroid  
6 blocking agent.

7 Q. And as far as persons to whom this agent is to be  
8 administered under certain circumstances, are those people  
9 identified?

10 A. I would say that they are, yes.

11 Q. And who is identified, just general members of the  
12 public in unaffected areas or possibly affected areas or are  
13 we confining it to workers or what?

14 A. We're confining it to emergency workers and persons  
15 that are unable to readily evacuate a particular zone.

16 Q. And is that consistent with what you testified earlier?

17 A. That is correct.

18 Q. Earlier Mr. Shealy we were talking about scaled  
19 evacuations, if you will, those that are less than the entire  
20 population from a given area. For instance, in the case of  
21 pregnant women and children, are there protective action guide  
22 levels that are incorporated in this plan which address those  
23 types of scaled evacuations?

24 A. I believe the protective action guides do address at  
25 least children as far as evacuation, and women I believe is included

M21pw

1 in this.

2 Q All right, sir, I show you again from the same  
3 publication, the technical radiological emergency response plan,  
4 page I-1, a protective action guide, and ask you to identify that.

5 A This is a protective action guide that we would use  
6 in implementing whatever actions we thought appropriate.

7 Q And what is the projected situation that would trigger  
8 an action that would generate a scaled response, scaled evacuation  
9 response?

10 A You would like to know the levels that we're talking  
11 about?

12 Q Yes.

13 A Well in the thyroid it would be in an area of 5 to less  
14 than 25 rem, we would consider evacuation, and as is spelled out  
15 here, evacuate children if release is iodine unless constraints  
16 make it impractical. And I would like to, you know, I mentioned  
17 awhile ago, women also, pregnant women in particular would be  
18 considered.

19 Q All right. When it says "unless constraints make it  
20 impractical", is there some particular meaning to that? What  
21 does that mean?

22 A Well I think you have to look at such things as weather  
23 conditions, time of day, perhaps the injuries that you would cause  
24 from implementing the evacuation. It would have to be a  
25 professional judgment.



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1 Q All right, sir. Mr. Shealy, as far as your overall  
2 assessment of the state emergency response plan and the tangential  
3 plans of the counties, are you comfortable or confident, if you  
4 will, of the mechanisms being in place to permit you to adequately  
5 respond to a radiological emergency at the V. C. Summer Plant?

6 A I think the mechanisms are in place to respond to a  
7 nuclear occurrence at that particular fixed nuclear facility.

8 Q And have you in fact participated in an exercise of those  
9 plans and procedures?

10 A We have participated.

11 Q And after that exercise, do you still maintain that  
12 same confidence?

13 A Yes, I do.

14 MR. R. WILSON: All right, sir, thank you. Thank you,  
15 Mr. Chairman.

16 JUDGE GROSSMAN: Mr. Shealy, you said that you believe  
17 the state and local people could adequately cope with one of  
18 these severe accidents initially. Do you mean after the core  
19 melted and after the containment was breached?

20 THE WITNESS: I'm not sure that I follow your question,  
21 Mr. Chairman, are you saying that I said that state and local  
22 government could respond?

23 JUDGE GROSSMAN: Adequately initially, yes you did, sir.  
24 I'm saying, when you said "initially", did you mean before the  
25 core melted and before the containment was breached or did you

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1 also include a situation after the core melted and after the  
2 breaching of the containment?

3 THE WITNESS: I was referring to before this happened.

4 JUDGE GROSSMAN: All right, thank you.

5 JUDGE LINENBERGER: Mr. Shealy, are you familiar with  
6 a joint NRC-FEMA document given the designation NUREG 0654?

7 THE WITNESS: Yes, sir.

8 JUDGE LINENBERGER: Okay, I don't happen to recall the  
9 exact title so I can't quote it, but you're familiar with the  
10 document and it is one that has been referred to numerous times  
11 the last few days.

12 THE WITNESS: Yes.

13 JUDGE LINENBERGER: Briefly, what do you recall to be  
14 the intent of that or purpose of that document?

15 THE WITNESS: Well we used this document to revise and  
16 amend our radiological emergency plan, our technical radiological  
17 emergency plan. This is what we go by to write our plan, amend  
18 our plan.

19 JUDGE LINENBERGER: Correct me if I'm misstating it, but  
20 to put it in my words, would it be correct to say that that document  
21 represents sort of the standard or Bible against which you  
22 prepare your plan to determine whether it is adequate so far as  
23 government standards are concerned?

24 THE WITNESS: That is correct.

25 JUDGE LINENBERGER: All right, sir. Now there has been

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1 a great deal of discussion about the ability, the capability as  
 2 well as the desirability of people such as yourself and people  
 3 at the county level being able to discuss with the public and  
 4 with the people who work for them what kind of health effects might  
 5 be anticipated from an accident of some sort in a nuclear power  
 6 plant and Mr. Bursey, I believe, was expressing a question as to  
 7 why you seem to be able to talk about these things and many other  
 8 people who have appeared here as witnesses have not talked about  
 9 them. Well I wanted to come down to one thing, can you tell me  
 10 whether NUREG 0654 in setting up the standards and guidelines  
 11 for establishing an acceptable emergency response plan, requires  
 12 a consideration in said plan of whether the health effects of  
 13 an accident at a nuclear plant, does it require that the plan  
 14 somehow take account of the quantitative health impacts resulting  
 15 from an accident at a nuclear power plant?

16 THE WITNESS: Quantitative health effects?

17 JUDGE LINENBERGER: Yes.

18 THE WITNESS: No, sir, I don't believe that's in the  
 19 plan.

End M.

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1 JUDGE LINENBERGER: Does NUREG 0654 ask the state  
 2 or the county organizations to activate anticipated fatalities,  
 3 latent cancers, or these kinds of things?

4 MR. SHEALY: No, sir, I do not recall that.

5 JUDGE LINENBERGER: In other words, so far as formu-  
 6 lating and implementing an acceptable emergency response plan  
 7 in accordance with requirements of NUREG 0654, there is no  
 8 need for state, county and local officials to be able to  
 9 evaluate quantitatively the health impacts of an accident in  
 10 a nuclear power plant, is that correct?

11 MR. SHEALY: Yes sir.

12 JUDGE LINENBERGER: All right, sir, that is all I  
 13 have.

14 EXAMINATION

15 BY JUDGE HOOPER:

16 Q Mr. Shealy, are you - have you had training in  
 17 medicine?

18 A No, sir, I have not.

19 Q What is the extent of your former education in  
 20 Health Physics?

21 A Well, I worked at the Savannah River Plant from 1954  
 22 until 1961 in protecting occupational workers from radiation  
 23 exposure, evaluating different radiation levels, determination  
 24 levels and areas associated with the operation of the Atomic  
 25 Energy Plant at that time.

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1 Q You still haven't told what your formal training was.  
2 Is this in-shop training you had at Savannah River?

3 A Yes, that was formal training courses I went to at  
4 the Savannah River Plant.

5 Q What was the extent of your education, your formal  
6 education?

7 A I have a BS degree in Science.

8 Q From where?

9 A Newberry College.

10 Q Before you--a second thing, what is the extent of  
11 your staff, your technical staff and you are the Chief of  
12 the Burea of Rad Health, is that correct?

13 A That is correct.

14 Q What do you have in the way of a staff?

15 A I have 17 professional people on my staff.

16 Q What is the range of their expertise?

17 A Their expertise goes from a Ph.D, MS to a BS and  
18 some Radiological Health.

19 Q I am not interested in their degrees. I am interested  
20 in their area of specialization.

21 A Okay, I have Civil Engineers, I have Health Physicists,  
22 I have Chemists in my radiological health program.

23 Q Do you have anybody that has ever had any courses  
24 in nuclear medicine?

25 A Yes, we do license nuclear medicine users in the

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state of South Carolina under an agreement state program.

Q Do you have any M.D.'s in your unit?

A I have MD's that serve as advisors to me in my activities.

Q Before you came to testify here today, had you read any part of this yellow document in front of you?

A I had seen this document and was aware of it. I had not read it in detail.

Q You were not aware that the Commission using this plant as a test run on Class 9 accidents?

A I was, had read that in some other publications that I get.

Q But you had not looked at table 6.2 or 6.4?

A No, I had not.

Q Had you had any of your staff look at these before you came here?

A We had not made any particular effort to review this complete document before this hearing.

Q And it was your feeling that this was not necessary in order to give proper testimony about an emergency plan?

A Well, we were more concerned about the applicant's emergency plan and had reviewed that and familiar with that plan.

Q But as a Rad Health Specialist, you are not particularly concerned with the types of accidents that were possible at this plant?



1 A. Well, I have reviewed other safety analysis reports  
2 of other operating reactors in the state. We consider this to  
3 be similar to the PWR's that were already operating in the  
4 state.

5 MR. HOOPER: I guess that is all.

6 JUDGE GROSSMAN: Mr. Bursey, redirect?

7 REDIRECT EXAMINATION

8 BY MR. BURSEY:

9 Q Mr. Shealy, on page 6.8 of the FES at the bottom of  
10 the page, there are two asterisks. I just wanted you to take  
11 note and the record to note that what Mr. Goldberg had you  
12 read about this probabilities over here that related to the  
13 PWR accidents, that this footnote is in there, could you read  
14 that footnote for us?

15 JUDGE GROSSMAN: Which one Mr. Bursey?

16 MR. BURSEY: The double asterisk.

17 THE WITNESS: "Because this report has been the  
18 subject of considerable controversy, a discussion of  
19 the uncertainties surrounding it is provided in  
20 Section 6.1.4.7."

21 BY MR. BURSEY:

22 Q Yes, sir, so you do understand that these probability  
23 figures are even amongst the experts a matter of debate.

24 A. (Witness nods.)

25 Q You mentioned, Mr. Wilson asked you about the

1 competency of the state people to respond, I want to raise with  
2 you that I did not--there are many areas if not most areas  
3 of postulated problems at the V. C. Summer plant where  
4 competency is more than likely not in question; what we are  
5 talking about right now when we are talking about these PWR's  
6 is not so much a matter of competency in my mind but a  
7 question of capability, just--no matter how competent you are,  
8 and I am wondering in this PWR-1, where we have literally  
9 billions of curies of radiation dumped out; would you agree  
10 that this table here postulates scenarios that no one can be  
11 capable of mitigating and dealing with?

12 A. I am not sure I understand your line of questioning  
13 here.

14 Q. This PWR-1 accident where we are talking about a  
15 massive loss of the core, I am not questioning Mr. Longshore's  
16 competency in regards to PWR-1. That's another question.  
17 The question is mere capability, other than falling back,  
18 is there anything that can be done to mitigate that?

19 A. Well, I think first the plant is constructed to  
20 mitigate an accident like this, certainly engineered.

21 Q. I would not argue that point right now, but we are  
22 talking about the hypothetical.

23 A. Yes.

24 Q. Containment beyond desired basis.

25 A. Yes.

1 Q So that given that hypothetical beyond design basis  
2 the PWR-1, there is not much that can be done, is there?

3 A I guess this information stands on itself. That is  
4 all I can say. It is here and I would have no other comments  
5 to make on that.

6 JUDGE GROSSMAN: Well, sir, the question I think  
7 really is even with federal assistance, is there anything that  
8 the state and local people can do when it comes to an accident  
9 that results in a core melt and a breach of containment?

10 THE WITNESS: I visualize nothing at this time.

11 JUDGE GROSSMAN: Mr. Bursey, any further questions.

12 MR. BURSEY: Mr. Shealy's last response I couldn't  
13 understand, sir.

14 THE WITNESS: I do not visualize anything at this  
15 time. Anything additional being done.

16 MR. BURSEY: I am sorry, I can't connect that  
17 response up to any given question, but I have one more question  
18 for you.

19 Judge Linenberger asked you about anything in 0654  
20 calling for state emergency people to be able to quantify or  
21 qualify--I am not sure--but measure the health effects.

22 Now you stated that there was nothing in 0654 that  
23 stipulated that state agencies have to be able to measure,  
24 a state person like the adjutant general's office or the office  
25 of emergency preparedness of Fairfield County, that these offices

1 don't have to be able to tell the public what somatic damage  
2 they are going to experience, is that correct?

3 THE WITNESS: That is correct.

4 BY MR. BURSEY:

5 Q Is it a separate consideration in terms of the  
6 emergency personnel like I just mentioned, understanding at  
7 least the parameters of somatic effects.

8 I mean there is a difference between thinking you are  
9 going to burn you r finger and you are going to lose your  
10 arm.

11 A Are you talking about--could you expound on that  
12 somewhat?

13 Q Yes.

14 A You are talking about parameters of health effects,  
15 I am not...

16 Q I guess what I have been trying to develop all along  
17 here is that it seems to me important that the state agencies  
18 that are charged with implementing the emergency plan, that the  
19 directors of these state agencies and county agencies have  
20 some inkling of what could happen at the V. C. Summer Plant.  
21 Now, we heard from Judge Linenberger that they don't need  
22 to be able to quality somatic effects, but that still doesn't  
23 quite touch the point of the adequacy and effectiveness of a  
24 plan being implemented by people that have absolutely no idea  
25 what to expect. So, I am asking you, would it be a productive

1 thing for us to educate our county and state agencies who are  
2 charged with developing and implementing a safe and effective  
3 plan, educating them to the tables in here and to the possible  
4 effects of anything, any contingencies that they could expect  
5 at the V. C. Summer plant?

6 A. I certainly see no harm in doing that, no.

7 MR. BURSEY: Thank you, Mr. Shealy. That is all I  
8 have, Judge Grossman.

9 JUDGE GROSSMAN: Recross? Mr. Knotts?

10 MR. KNOTTS: None.

11 JUDGE GROSSMAN: Mr. Goldberg?

12 MR. GOLDBERG: No, Judge.

13 JUDGE GROSSMAN: Mr. Wilson?

14 MR. WILSON: No questions.

15 JUDGE GROSSMAN: Thank you, Mr. Shealy, you are  
16 excused. If you want to remain there, I think Mr. Knotts  
17 prefers to question you and some others. Should we take a  
18 recess now or just continue along?

19 Mr. Knotts, since you are opening, do you want to  
20 take a recess or do you want to just continue questioning?

21 MR. KNOTTS: I will continue along if that's agreeable  
22 and I hope it won't take us very long at all. I appreciate  
23 everybody's indulgence in remaining here.

24 General Wise, would you mind going up and sitting by  
25 Mr. Shealy?

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And, do you have any members of your staff with you today, General?

MR. WISE: Yes, I have three of them I would like to call up.

MR. KNOTTS: All right, who are they?

MR. WISE: Mr. Lunsford, Ms. Neal and Mr. Beckham.

JUDGE GROSSMAN: Would you mind remaining standing and would you raise your right hands?

Whereupon,

GEORGE R. WISE - HEYWARD SHEALY [Recalled]  
PAUL LUNSFORD  
PAMELA NEAL  
TOM BECKHAM

were called as witnesses by and on behalf of the Applicant and, being first duly sworn, was examined and testified as follows:

JUDGE GROSSMAN: Please be seaced and would you state your names and spell them for the court reporter, please?

Starting on my left.

MR. LUNSFORD: I am Paul Lunsford. (Spelling) L-u-n-s-f-o-r-d. I am with the State Emergency Preparedness Division.

MS. NEAL: Pamela Neal (Spelling) N-e-a-l, South Carolina Emergency Preparedness Division.

MR. BECKHAM: Tom Beckham (Spelling) B-e-c-k-h-a-m, State Emergency Preparedness.

DIRECT EXAMINATION

MR. KNOTTS: I would like to ask any member of the



1 panel who cares to respond whether they can shed any light  
2 on the role of the involvement of the State Fire Marshal in  
3 emergency planning?

4 MR. BECKHAM: Let me comment on that.

5 We just learned recently that the Fire Marshal was  
6 put under the Budget and Control Board. Prior planning had  
7 been under the Division of General Services.

8 Before I make any comments on this role, I would  
9 like to re-evaluate them under Budget and Control Board  
10 because I feel like they may be written out of our plans  
11 completely, but as the plans state now, their role is to  
12 assist DHEC in decontamination. They also are responsible  
13 to train their inter-office people and that is basically  
14 their role that is in the plan now.

15 MR. KNOTTS: Would you characterize it, Mr. Beckham,  
16 as a major role or a minor role?

17 MR. BECKHAM: Very minor role as it is written now.

18 MR. KNOTTS: And was it essentially a manpower resource  
19 role, a place to get additional help which was needed?

20 MR. BECKHAM: Correct. It was a supportive role  
21 to DHEC and as I said under the Budget and Control Board, I  
22 think we are losing a lot of the resources, resource support  
23 that we probably had under General Services.

24 MR. KNOTTS: I would now like to ask those members  
25 of the panel who were here for the discussion earlier today

1 and yesterday about the selection of groups, do any of you  
2 have anything to do with the selection of the evaluation  
3 group?

4 MR. LUNSFORD: May I address that?

5 That was being accomplished when I came on board  
6 at the Emergency Preparedness Division.

7 JUDGE GROSSMAN: Your name is?

8 MR. LUNSFORD: Lunsford--last fall. It is the  
9 responsibility of the county authority to select and administer  
10 the evacuation within the 10-mile EPZ. To the best of my  
11 knowledge, the routes within the 10-mile EPZ have been selected  
12 by the county authorities.

13 The traffic control points and the direction that  
14 would be furnished during evacuation will be accomplished by  
15 the local authorities insofar as they are capable of doing that.

16 If they are incapable--meaning they need additional  
17 help--they will make their requests through the Emergency  
18 Operations Center at the state, whether it is the State Emergency  
19 Operations Center or the Forward Emergency Operations Center,  
20 that request will be submitted through SLED and the additional  
21 help will be furnished.

22 The purpose in having the State Highway Patrol at the  
23 2-mile perimeter is so that they can be alerted in the event of  
24 an accident or a potential accident, so that they can position  
25 their people so that at the moment it is necessary that area can

1 be blocked off. That is the extent of the State Highway Patrol  
2 involvement inside the 10-mile EPZ.

3           Until they are requested to furnish additional  
4 support.

5           Now, the edge of the 10-mile EPZ, we begin the  
6 state evacuation routes. Those are controlled by the State  
7 Highway Patrol. I had nothing to do with the selection of  
8 the routes but the best of my knowledge, I believe that is  
9 the way the scenario developed, how we got to where we are  
10 today.

11           MR. KNOTTS: Thank you.

12           I am forgetting myself at this late hour. Starting  
13 with Mr. Lunsford, would you tell us a little bit, sir, about  
14 what your duties are, your job title is, and what is your  
15 educational background?

16           MR. LUNSFORD: I am an Emergency Preparedness  
17 Coordinator and I am at the next to the lowest professional  
18 level you can be in state government. (Laughter.)

19           But, I enjoy doing what I am doing. My education  
20 is I have bachelors and masters degrees and I have a 30-year  
21 career in the Army, a lot of which was involved in crisis  
22 management. Two periods particularly highlighted to me, I  
23 was a combat arms officer in the service of team leader in the  
24 Korean war and a parachute batallion commander in the Viet Nam  
25 war.

1 I have been through the gamut of the Army school  
2 system and spent eight years on the faculty of the Army War  
3 College and ended my service there as chief of staff.

4 I have learned a great deal about some types of  
5 planning which I haven't done before, although I have done  
6 a great deal of logistical and operational planning in my  
7 duties in the Army including that with multi-national  
8 headquarters where there were other languages spoken and one  
9 of my assignments required the use of foreign language.  
10 That is getting far afield from what I am doing now.

11 I am a planner.

12 MR. KNOTTS: And is it Miss or Mrs. Neal?

13 MS. NEAL: Ms. Neal.

14 MR. KNOTTS: Would you tell us a little bit about  
15 your job title and what you do and your educational background?

16 JUDGE LINENBERGER: Would you pull the microphone  
17 closer, please, ma'am?

18 MS. NEAL: I am also Emergency Preparedness Coordinator  
19 and I came with the Agency in February of 1980. Prior to that  
20 date, I had recently graduated from Murray University with a  
21 BA in English.

22 Since my involvement in February, I was the lead  
23 planner for the H. B. Robinson facility and the updating of  
24 SCOREP and site specific for that facility, and in recent  
25 months I have prepared the updated version of SCOREP which

1 will be submitted to FEMA national and regional regs, the  
2 update of that.

3 MR. KNOTTS: Mr. Beckham.

4 MR. BECKHAM: I have been employed with the State of  
5 South Carolina for thirteen years. Of the 13 years, I have been  
6 in the planning and technical field 10 of the 13 years.

7 Of the 10 years in the planning field, nine of that  
8 has been in the nuclear field, most of which has been dealing  
9 in planning for the big bomb that we hope never comes.

10 MR. KNOTTS: Can you tell us a little bit about  
11 your educational background?

12 MR. BECKHAM: I can't brag too much on my education.  
13 I am a high school graduate. I have attended one year of a  
14 two-year business college school.

15 MR. KNOTTS: Did each of you hear Judge Linenberger's  
16 question earlier to Mr. Shealy regarding a document called  
17 NUREG 0654?

18 (Witnesses nodding.)

19 Are each of you familiar with that document?

20 (Witnesses nodding affirmatively.)

21 And were each of you involved in the preparation of  
22 the - I beg your pardon, Mr. Shealy, this question is not  
23 directed to you, this is directed to the four people from the  
24 Emergency Preparedness Division--was each of you involved in  
25 some way in the preparation of V.C. Summer's fixed nuclear  
facility site specific radiological emergency response plan

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1 which I guess is a part of the South Carolina operational  
2 radiological emergency response plan to which reference was  
3 made, or SCOREP?

4 MR. LUNSFORD: I was principally responsible for  
5 that, its revision.

6 MR. KNOTTS: You were the one?

7 MR. LUNSFORD: Yes.

8 MR. KNOTTS: Have you had an opportunity, Mr.  
9 Lunsford, to examine the copy that Mr. Mahan has been able  
10 to provide to you? Or, General Wise, perhaps, I am sorry,  
11 General Wise.

12 MR. WISE: What?

13 MR. KNOTTS: Of the plan. I simply at this point,  
14 sir, want to --

15 MR. WISE: You are talking about the update?

16 MR. KNOTTS: Yes, sir. I wanted to be sure that  
17 the copy we had was completely up to date or we could obtain  
18 an up to date copy from you and submit it for the record.

19 Is that agreeable? Do we have--may we get an up  
20 to date copy here and submit it for the record?

21 MR. WISE: Yes, sir, you may.

22 MR. KNCTTS: Thank you, sir. If we can have the  
23 same agreement as previously, Judge Grossman, and the parties  
24 I would appreciate it so that we can have this part of the plan  
25 in the record as well.

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JUDGE GROSSMAN: Any objection, Mr. Goldberg?

MR. GOLDBERG: No, sir, no objection.

JUDGE GROSSMAN: Mr. Bursey?

MR. BURSEY: No, sir.

JUDGE GROSSMAN: Mr. Wilson?

MR. WILSON: No objection.

MR. KNOTTS: Mr. Shealy, I don't believe we had an opportunity while you were on the stand to show you the Technical Radiological Emergency Response Plan document which we had previously designated as pre-filed exhibit and I wonder if we could make the same arrangement with you, sir? If you will just assure the copy we are given is fully up to date and current as of today, we will supply it for the record and if it is agreeable to the Board and the parties, will make the Technical Plan which is the DHEC portion of the plan, DHEC portion of the plan as I understand it, a portion of the record as well.

JUDGE GROSSMAN: Mr. Bursey?

MR. BURSEY: No objection.

JUDGE GROSSMAN: Mr. Goldberg?

MR. GOLDBERG: No objection.

JUDGE GROSSMAN: Mr. Wilson?

MR. WILSON: No objection.

JUDGE GROSSMAN: Fine.

MR. KNOTTS: Now did any members of the panel

1 participate in addition to what has already been indicated,  
2 I am not asking for people to repeat answers which they have  
3 already given, did any of you participate in the exercise which  
4 was held at the Virgil C. Summer station on May 1, could you  
5 indicate orally, Mr. Beckham?

6 MR. BECKHAM: Yes, sir, I did.

7 MS. NEAL: Yes, sir, I did.

8 MR. KNOTTS: And, Mr. Shealy, I believe you have  
9 already answered that question?

10 MR. SHEALY: Yes, sir. I did.

11 MR. KNOTTS: All right and for those of you who have  
12 not previously responded to this question which I take it would  
13 be Mr. Lunsford and I believe Ms. Neal and Mr. Beckham; what  
14 was your overall appraisal of how the plan went, how the  
15 exercise went?

16 MR. LUNSFORD: Starting with me?

17 MR. KNOTTS: Yes, sir.

18 MR. LUNSFORD: I saw this exercise from a different  
19 standpoint than I had the one previously that I participated  
20 in and I also participated in the H. B. Robinson exercise,  
21 but I was with one of the county directors at the time...  
22 I worked in the operations portion of the Forward Emergency  
23 Operations Center and insofar as my small scope there was  
24 concerned, I thought the exercise was successful. Ms. Neal  
25 was my counterpart. We dealt, each of us, with two counties

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1 specifically passing information and making recommendations  
2 and I considered that portion of it very successful.

3 MR. KNOTTS: Ms. Neal?

4 MS. NEAL: During the H. B. Robinson exercise, I  
5 was stationed at the C-OP, so this exercise for V. C. Summer  
6 gave me an opportunity to see the activities at the C-OP  
7 which was in Winnsboro.

8 As Mr. Lunsford just stated, we dealt directly  
9 with the county in giving them information that we had  
10 available, technical information as well as trying to  
11 coordinate resource support that they requested.

12 I had not had the opportunity to handle that  
13 situation in the earlier exercise and I felt that it went  
14 quite well.

15 MR. KNOTTS: Mr. Beckham?

16 MR. BECKHAM: In both occasions, I worked at the  
17 C-OP in the operations room. H. B. Robinson and V. C. Summer  
18 showed me one thing that stands out among all the others that  
19 we have a very close relationship with state agencies and  
20 also the local governments and this includes people from your  
21 individual fire chiefs on up to your collected appointed  
22 officials.

23 MR. KNOTTS: General Wise, I believe you previously  
24 addressed that question but if there was anything you have not  
25 already covered or that you want to add now, I want to give you

1 an opportunity to do so.

2 MR. WISE: And that is about the exercise?

3 MR. KNOTTS: Yes, sir, about your overall assessment  
4 of the exercise.

5 MR. WISE: I directed both exercises. Technically  
6 the Adjutant General was the exercise director, however, I  
7 directed both exercises and we showed quite a bit of improvement  
8 over the Robinson plant exercise at the V. C. Summer plant.

9 We made some mistakes and like Mr. Burseay keeps  
10 referring to, training. That is what exercise is for, training.  
11 We learned a lot during the Robinson plant exercise and we  
12 put those changes into effect when we ran the Summer exercise  
13 and I think it was one of the--it was the best that we had  
14 run.

15 MR. KNOTTS: All right. Mr. Shealy, do you have  
16 anything to add here to your previous comments on that  
17 subject?

18 MR. SHEALY: No, I wouldn't.

19 MR. KNOTTS: Have you received any comments from  
20 the Federal Emergency Management Agency on the two state  
21 plans for their technical plan and the operational plan?

22 MR. WISE: Yes, sir, we have. From Region 4, I have  
23 the comments right here on the V. C. Summer plant. I don't  
24 have the H. B. Robinson comments with me. This was the  
25 comments that--well this is the answer really to the comments.

1 The last portion of that report stated by the  
2 RAC committee is that the state and county were capable of  
3 handling a fixed nuclear accident at the V. C. Summer plant.

4 MR. KNOTTS: Very well, sir, and is the status of  
5 matters now that you are proceeding to make whatever improve-  
6 ments you have concluded may be warranted as an ongoing  
7 exercise?

8 MR. WISE: Right.

9 MR. KNOTTS: Strike the word "exercise", it would  
10 be confusing in this context.

11 MR. WISE: I will let Mr. Lunsford answer that.  
12 He is working on that.

13 MR. LUNSFORD: We received after submission of the  
14 plans, FEMA, Region 4 reviewed them, made comments on the  
15 plans, the corrections have been made and we are on the eve  
16 of resubmission of the plans including the correction. We  
17 submitted individual pages previously that needed to be  
18 corrected and now we are submitting clean copies of the plan  
19 including county and all state levels.

20 MR. KNOTTS: Very well, and the status, Mr. Shealy,  
21 of the DHEC portion of the technical plan, are there any  
22 revision work ongoing in that area as a result of comments  
23 by FEMA or anyone else?

24 MR. SHEALY: Yes, there have been some minor changes  
25 in the plan and they have been incorporated in the plan and  
you will receive an updated copy of that.

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MR. KNOTTS: Very well, sir.

(Brief pause.)

MR. KNOTTS: I would like to ask the members of the panel if they have additional comments on the matter of education and/or planning with respect to the ingestion pathway of the 50-mile zone?

JUDGE GROSSMAN: Mr. Knotts, wasn't this covered in the examination by Mr. Bursey?

MR. BURSEY: I don't think it was covered as to Mr. Lunsford or Mr. Beckham or Ms. Neal. I should have been careful to ask the question in that fashion.

MR. LUNSFORD: I will pass to Ms. Neal, who has done some work in this area.

MR. KNOTTS: All right.

MS. NEAL: If I am not mistaken, in earlier testimony we heard from the Clemson representative that he had not been involved in preliminary or the pre-planning stages.

I have a letter here dated April 18, 1980 signed by the Associate Dean and Director of the Clemson College of Cooperative Extension Service whose name is Mr. Wayne T. Odell.

This letter consists of this statement, he was sent a draft copy of the operational plan and this is his response.

"Dear Mr. Wise:



"The drafts State Operational Radiological Emergency Response Plan has been distributed to our County Extension leaders for any possible comments they may have. I have also reviewed this plan and find it satisfactory as it relates to Cooperative Extension Services role."

I also have several letters from County Extension Agents, the three that I have are Newberry, one in Oconee and also from another county that is not designated, which show us that indeed Dr. Odell sent copies of SCOREP and the responsibilities of the Clemson Extension Agencies to these county agents and they were familiar with what was expected of them.

There seems to have been earlier testimony that, or confusion about what Clemson Extension's responsibility would be to DHEC for the ingestion pathway, and if I can I want to read a paragraph C from page 23 of SCOREP, the amended SCOREP date of 1981.

"Because every county in South Carolina is within the 50-mile EPZ of the commercial or federal FNF, Fixed Nuclear Facility, DHEC is incapable of maintaining statistical data for the numerous ingestion pathway EPZ's. Clemson University Extension Service has agreed to provide DHEC with the current agricultural information for each of the affected counties as it is needed. This data will consist of the vulnerable agricultural crops, dairies, types and amount of livestock and the food processing plants that could be contami-

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nated from an FNF accident. Information will be updated on a continual basis by county Clemson Extension Agents."

From this paragraph, you can conclude that Clemson Extension Agency's involvement would be one of information to DHEC concerning an ingestion pathway and as noted in this paragraph, reference the letter signed by Dr. Odell.

JUDGE LINENBERGER: Ms. Neal, would you please again identify the document that you just read the paragraph from?

MS. NEAL: Yes, sir, this is on page 23, paragraph C of SCOREP.

JUDGE LINENBERGER: And what does that acronym stand for?

MS. NEAL: I am sorry. The South Carolina Operational Radiological and Emergency Response Plan, and this edition is dated May , 1981.

JUDGE LINENBERGER: Thank you.

MR. KNOTTS: I have no further questions on direct for this panel.

JUDGE GROSSMAN: Mr. Bursey, despite the late hour, you are entitled to full cross examination. If you have lengthy cross examination in mind, we can take a recess now.

(Brief pause.)

MR. BURSEY: No, sir, let's press on.

Well, wait, hold that last observation.

1 What happens after this?

2 Will we be finished because if we are not going to  
3 be finished I will take that break.

4 JUDGE GROSSMAN: Mr. Goldberg is entitled to cross  
5 examination and Mr. Wilson is. The Board is entitled to  
6 questions and Mr. Knotts can redirect, on this.

7 MR. BURSEY: Let's proceed.

8 CROSS EXAMINATION

9 MR. BURSEY: Mr. Lunsford, you are a planner, right?

10 MR. LUNSFORD: My correct title is Coordinator.

11 MR. BURSEY: But I believe that you mentioned you were  
12 a planner?

13 MR. LUNSFORD: I made a mistake because I do not  
14 make policy. I do amend and write plans and my title is  
15 Emergency Preparedness Coordinator.

16 MR. BURSEY: You are familiar with the development  
17 of the evacuation routes?

18 MR. LUNSFORD: I don't know what degree you are  
19 speaking of. As I said, when I came on board last October,  
20 I saw some coordination being done then and I have been made  
21 aware of some more that has been done in the counties, and  
22 have been involved informationally, yes, I have received  
23 information from that.

24 MR. BURSEY: Are you familiar with the applicant's  
25 emergency brochure that gives their evacuation route?

1           The applicant lists in their brochure a route.  
2           I have heard from other planners such as the Highway Patrol,  
3           other people that are involved on the state side, that it  
4           might not even be--that it might be a bad idea to have a  
5           singular route distributed to the public, and that may be the  
6           only one they hear and they followed that route that takes  
7           them directly into the plume zone; would you concur with  
8           that, that it might be overplanning or might be a bad idea  
9           to have a specific route suggested for public consumption?

10           MR. LUNSFORD: No. I would not say that it would  
11           be a bad idea to have a--one specific route pointed out to  
12           people who are residents of a certain area, for them to be  
13           sure that there is at least one route that they can exit  
14           that area if there is an emergency.

15           I am sure you are aware of the excellent road  
16           system that exists within the 10-mile EPZ. The Wilbur  
17           Smith and Associates evaluated this area as all paved roads  
18           having a capacity of a thousand vehicles an hour, and  
19           although I don't have the figures in front of me, I think the  
20           maximum load at any one time would be 163 vehicles after an  
21           evacuation notice was given, so the amount of population  
22           in there would indicate that it is easy to get in and out of  
23           the area.

24           Directly answering your question, no, I don't think  
25           it is wrong to have one route pointed out to a group of people

1 who live in a certain area to assure them that that is a route  
2 that they can make egress.

3 MR. BURSEY: Regardless of let's say the wind  
4 direction or the nature of the accident, if this was all the  
5 information that I had that was in the applicant's emergency  
6 route that I had at home when I evacuated, then I would still  
7 be all right, is that what you're saying?

8 Even if I took the wrong route?

9 MR. LUNSFORD: It is my opinion, yes, you would be  
10 all right, because I believe based on what I have learned in  
11 the short time that I have been in the Emergency Preparedness  
12 Division that no citizen is going to be put in any kind of  
13 danger. There will even be pre-emptive evacuation well safe  
14 sided if there is any potential at all of any serious accident.  
15 And I am familiar with some of the people, I know some of the  
16 people that are involved in carrying out these plans and I  
17 have yet to see one that is not very dedicated to what he is  
18 doing and experienced. He usually is working in an area that  
19 he lives in or close by, performs his emergency function usually  
20 on a routine basis, speaking of fire, ambulance personnel.

21 MR. BURSEY: Yes, sir, there was a spokes person  
22 for the Highway Patrol that observed that it might be a bad  
23 idea to have a plan out that pre-advised a route irregardless  
24 of weather conditions.

25 Ms. Neal, you mentioned the letter from Dr. Odell,

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1 and then you mentioned a response to that letter. Do you know  
2 how many counties there are in the ingestion zone?

3 MS. NEAL: Which facility?

4 MR. BURSEY: The V. C. Summer Nuclear Facility.

5 MR. LUNSFORD: I believe there are 29.

6 MR. BURSEY: And there are three responses?

7 MS. NEAL: The responses that I have do not  
8 necessarily concern V. C. Summer plant. The responses I have  
9 one is from Newberry County. One is from Oconee County, and  
10 another one is from a county that is not identified other  
11 than the person who signed the letter.

12 These letters stipulate that Dr. Odell sent them  
13 material on SCOREP, and so, it would not be implausible to  
14 assume that Dr. Odell sent the same type of material to every  
15 county agent if he sent it to these three.

16 MR. BURSEY: Can we infer from that that Clemson  
17 is discharging its delegated role in making a comprehensive  
18 list of agricultural producers, dairy producers and water  
19 sources?

20 MS. NEAL: What I can say is that Dr. Odell has  
21 stated that he has reviewed the plan and he finds it satis-  
22 factory and that he can accomplish the responsibilities that  
23 were listed.

24 MR. BURSEY: General Wise, do you have a nuclear  
25 physicist on your staff?



1 MR. WISE: No, it is not required.

2 I don't have a need for one really.

3 MR. BURSEY: There was some mention of availability  
4 of a nuclear physicist. Mr. Shealy, do you have physicists  
5 on your staff?

6 MR. SHEALY: That is correct.

7 MR. BURSEY: How many?

8 MR. SHEALY: You will just have to give me a minute  
9 to--I believe I have seven health physicists on my staff.

10 MR. BURSEY: Now is that nuclear health physicists?

11 MR. SHEALY: No health physicists.

12 MR. BURSEY: Health physicists in general. How  
13 many people that specialize in nuclear?

14 MR. SHEALY: Well we have--there is two people that  
15 specialize in nuclear.

16 JUDGE GROSSMAN: Excuse me, Mr. Bursey, are you  
17 asking whether he has nuclear physicists on the staff or  
18 health physicists?

19 MR. BURSEY: My question was nuclear physicists.  
20 He responded health physicists and I said how many nuclear.

21 JUDGE GROSSMAN: He is asking about nuclear  
22 physicists, not health physicists that specialize in nuclear.

23 MR. SHEALY: I have two individuals on my staff  
24 including myself that have nuclear experience. I do not have  
25 any classification of nuclear physicist.

1 MR. BURSEY: I believe that is all the questions I  
2 have for the panel, thank you.

3 JUDGE GROSSMAN: Mr. Goldberg?

4 MR. GOLDBERG: No questions.

5 JUDGE GROSSMAN: Mr. Wilson?

6 MR. WILSON: Just really one question I guess for  
7 the panel in general or General Wise or whoever cares to  
8 answer it, but as far as the state's emergency, radiation  
9 emergency plans go, is there anything final about any of these  
10 plans? Is this an ongoing effort or is it terminable at  
11 some point in the future?

12 MR. WISE: Well, I'll tell you, you know, there is  
13 one thing constant with the federal government and that is  
14 change. We drafted this thing about fifteen times and it is  
15 going to continue to change and we are going to continue to  
16 update and we are going to continue to run tests and exercises,  
17 and we are going to run an exercise at the Oconee Plant next  
18 March, and we are going to run another exercise at the V. C.  
19 Summer plant again next spring; and we are going to learn new  
20 things every time we do it. Now these have not been approved  
21 by FEMA national as yet, so we will wait and see what FEMA  
22 national says, but any plan has to be continually tested and  
23 continually updated and that is what we will be doing.

24 MR. WILSON; Thank you, sir. THAT is all I have.

25 JUDGE GROSSMAN: I don't know if I have questions.  
Could I see those letters, Ms. Neal?

(Brief pause.)

1 JUDGE GROSSMAN: Ms. Neal, just looking at these letters,  
2 there's nothing specific in any of them that relates to Summer,  
3 is there?

4 MS. NEAL: What these plans relate to is that initially  
5 Clemson University Extension received a copy of SCOREP, the  
6 operational plan, in its last stages. I think they had earlier  
7 testified that they were unaware of any type of coordination  
8 with the agency. That letter shows that we indeed did contact  
9 them and they wrote a letter of approval back to us.

10 The operational plan relates to all facilities, all  
11 nine facilities that we have in this state so I would think,  
12 yes, it does have direct bearing on the V. C. Summer case.

13 JUDGE GROSSMAN: We have no further questions. Mr.  
14 Bursey, do you have any recross? I'm sorry, Mr. Knotts, do  
15 you ha direct?

16 MR. KNOTTS: I do not.

17 JUDGE GROSSMAN: Mr. Bursey, do you have any recorss?

18 MR. BURSEY: No, sir.

19 JUDGE GROSSMAN: Mr. Goldberg?

20 MR. GOLDBERG: No, sir.

21 JUDGE GROSSMAN: Mr. Wilson?

22 MR. RICHARD WILSON: No, sir.

23 JUDGE GROSSMAN: Thank you very much panel. Why don't  
24 we adjourn until tomorrow at nine o'clock.

25 [Whereupon, the above-entitled proceedings was

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1 adjourned at 7:55 o'clock, p.m., to reconvene at 2:00 o'clock,  
2 a.m., the following day in the same place.]

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end take 4

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This is to certify that the attached proceedings before the

NUCLEAR REGULATORY COMMISSION

in the matter of: South Carolina Electric & Gas Company

Date of Proceeding: July 1, 1981

Docket Number: 50-395-OL

Place of Proceeding: Columbia, S. C.

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Peggy J. Warren

Official Reporter (Typed)

Peggy J. Warren

Official Reporter (Signature)