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be made
on p. 26
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(FROM BOX 5)

POOR ORIGINAL

MISSION

SMITH

Place - King of Prussia, Pennsylvania

Date - Thursday, October 11, 1979

Pages 1 - 72

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UNITED STATES OF AMERICA

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 BEFORE: :
 :
 NUCLEAR REGULATORY COMMISSION :
 THREE MILE ISLAND :
 SPECIAL INQUIRY GROUP :
 :
 ----- X

Oral Deposition of GEORGE H. SMITH

APPEARANCES:

GEORGE W. RIVENBARK
 NRC - Special Inquiry Group for Three Mile Island.

PETER SICILIA, JR.
 NRC - Special Inquiry Group for Three Mile Island.

TAKEN AT:

631 Park Avenue Thursday,
 King of Prussia, Penna. October 11, 1979.

I N D E XWITNESS:EXAMINED BY:PAGE NUMBER

George H. Smith

Mr. Rivenbark

3

Mr. Sicilia

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Mr. Rivenbark

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Mr. Sicilia

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Mr. Rivenbark

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E X H I B I T SMarked

G.H. Smith A-5163 - Resume

5

G.H. Smith B-5164 - Letter dated October 4,
1979.

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P R O C E E D I N G S

1
2 GEORGE H. SMITH, sworn

3 MR. RIVENBARK: This is a deposition being
4 conducted by the U.S. Nuclear Regulatory Commission's
5 Special Inquiry Group on Three Mile Island of Mr. George H.
6 Smith, Chief of the fuel facility and material safety
7 branch in Region 1 of the NRC at King of Prussia,
8 Pennsylvania, on October 11, 1979.

9 Present in addition to Mr. Smith are Peter
10 Sicilia and George Rivenbark of the Special Inquiry Group.
11 BY MR. RIVENBARK:

12 Q Mr. Smith, you received a two-page letter dated
13 October 4, 1979 from Mr. Rogovin which described the
14 nature of our interview and the possibility of its becoming
15 public, is that right?

16 A Yes.

17 Q Here is a copy of a letter addressed to you
18 from Mr. Rogovin marked G.H. Smith Exhibit B. Would you
19 look at this letter and see if it is a copy of the letter
20 that you received from Mr. Rogovin?

21 (Whereupon, the reporter marked the two-page
22 letter dated October 4, 1979, as G.H. Smith Exhibit B-5164.)

23 THE WITNESS: Yes, it is.

24 BY MR. RIVENBARK:

25 Q Have you read it and do you understand it?

1 A Yes, I have read it and I do understand it.

2 MR. RIVENBARK: Mr. Smith, you should be aware
3 that the testimony that you give has the same force and
4 effect as if you were testifying in a court of law.

5 My questions and your responses are being taken
6 down and they will later be transcribed. You will be given
7 the opportunity to look at that transcript and make changes
8 as you deem necessary.

9 However, to the extent that your subsequent
10 changes are significant, those changes may be viewed as
11 affecting your credibility so please be as complete and
12 accurate as you can be in responding to my questions.

13 If you at any point during the deposition don't
14 understand a question, please feel free to stop and
15 indicate that and we will make the clarification at that
16 time.

17 Let me ask you to follow two basic ground rules
18 in replying to my questions. One is that you permit me
19 to finish my questions before you give your response even
20 if you know what the question is going to be because the
21 reporter cannot take down both of us speaking at the same
22 time.

23 The second is that you respond audibly. Motions
24 such as nodding your head cannot be taken down by the
25 reporter.

1 BY MR. RIVENBARK:

2 Q Mr. Smith, I have here a two-page document which
3 appears to be a summary of your professional experience
4 and educational background. It is headed with the words
5 "George H. Smith" and we have marked this as G.H. Smith
6 Exhibit A. Would you look at this and see if this is indeed
7 your professional resume and if it accurately summarizes
8 your educational and employment background.

9 (Whereupon, the reporter marked the resume as
10 G. H. Smith Exhibit A-5163.)

11 THE WITNESS: Yes, this is a summary of my
12 educational and employment background and is accurate,
13 to the best of my knowledge.

14 BY MR. RIVENBARK:

15 Q Mr. Smith, it is my understanding that you were
16 one of the first people in the Region 1 headquarters office
17 at the Region 1 office here in King of Prussia to be
18 informed of the events at TMI on March 28, 1979?

19 A That is correct.

20 Q I understand that shortly after you were
21 informed of the event that you selected Don Neeley,
22 Carl Plumlee, Ron Nimitz and Chick Gallian to go to the
23 site as members of the initial on site inspection team, is
24 that correct?

25 A That is correct. Chick Gallian is actually Dr.

1 Charles O. Gallian.

2 Q I understand that Jim Higgins, who also went
3 in the first group, was selected by Mr. Keimig?

4 A He went in the first group. Someone from the
5 operations branch sent him.

6 Q Can you explain, briefly, the basis for the
7 selection of each of the individuals that you selected to
8 go?

9 A Within my branch there is the radiation support
10 section which are basically the reactor health-physicist.
11 The seniormost of the reactor health-physicists in the
12 RSS is Mr. Neeley, that is why he was selected. He is
13 the seniormost health-physicist.

14 Carl Plumlee was selected because of his knowledge
15 of the facility. He was assigned as the inspector to
16 the Three Mile Island facility.

17 Mr. Nimitz was selected because he is young,
18 he has got good legs and he has a good background. He is
19 actually an intern.

20 Dr. Gallian was an investigator, who also -- well,
21 in addition to being an investigator I know that Dr.
22 Gallian is a health-physicist so I requested that he be
23 an investigator in the first group.

24 Q Am I correct in saying that you designated Mr.
25 Neeley to be the team leader?

1 A I did.

2 Q Can you tell me the basis for selecting him as
3 the team leader?

4 A It was apparently a health-physics problem. He
5 was the senior health-physicist.

6 I have great faith and confidence in Mr. Neeley
7 and I preferred that he be the team leader.

8 Q Did you personally give any instructions to the
9 team members before they left for the site as to what they
10 should do?

11 A I am sure I did, yes.

12 Q Do you recall what that might have been?

13 A I am sure the routine instructions would be to
14 start taking radiation readings to determine what kind of
15 releases, if any, were taking place.

16 I told them that at least one of them should get
17 into the control room where they could see the health-
18 physics incident instrumentation and also determine what
19 the licensee and the state were doing.

20 I don't recall, but I am sure I would have given
21 them those exact instructions.

22 Q A short while later two more team members were
23 sent to the site, a Mr. Ray Smith and a Mr. Walter Baunack.
24 Did you select either of them?

25 A I did not.

1 Q Do you know who did?

2 A Mr. Smith is another investigator. That would
3 probably be Mr. Grier who would make that selection.

4 Mr. Baunack is an operations instructor and I am
5 sure that would be done by the operations branch, L.
6 Brunner's people, perhaps Mr. Keimig.

7 Q I understand that Mr. Smith also has a health-
8 physics background. Are you aware of that?

9 A I have vaguely been aware of that, but I have
10 known him for a number of years and he has always been an
11 investigator.

12 Q That is the reason I asked you the question.
13 I wondered if his health-physics background was instrumental
14 in sending him.

15 A I think I became aware that he has a health-
16 physics background after. As I say, in my years of knowing
17 him at headquarters in Region 4 I have always thought of
18 him as an investigator.

19 Q After having selected the team members for the
20 initial on site inspection team and having these people
21 leave for the site, can you tell me what you then did on
22 Wednesday?

23 A I know one of the first things we did is that
24 we contacted our mobile laboratory which was, at that time,
25 at Millstone Point and requested them to turn around and

1 return to Region 1 on their way to Three Mile Island but
2 to stop at Region 1 for instructions.

3 This they did and they arrived here some time
4 in the late afternoon, and I believe it was at approximately
5 7:00 p.m. that they arrived at Three Mile Island.

6 Q There were two people involved there, one of them
7 was Mr. Phil Stohr?

8 A Mr. Phil Stohr who was, at that time, the chief
9 of our environmental and special project section. Mr. Jim
10 Kottan, who was the health-physicist, who was assigned the
11 principal responsibility for the mobile laboratory who
12 worked for Mr. Stohr at that time.

13 Q Is that spelled K-o-t-t-a-n?

14 A K-o-t-t-a-n, yes.

15 Q Aside from that what did you do that day?

16 A We were determining the readings and what the
17 licensee was getting. What the readings in the environment
18 were and if there were any releases. We were busy
19 informing headquarters of what we knew. We also were
20 after additional instrumentation. I know we asked for some
21 high range instruments from Brookhaven.

22 Q You are saying, "We were doing this."

23 Would you do two things for me. One of them is,
24 can you describe for me your specific personal responsibili-
25 ties in the response, and then describe for me who the "we"

1 is that you are describing here.

2 A I very often as a figure of speech refer to
3 myself in the plural. I am referring to myself when I
4 say "we." I was.

5 Q How would you describe your specific responsibili-
6 ties in the response?

7 A My responsibilities as I saw them were for the
8 radiological protection, the environmental protection and
9 the activation or actuation of the emergency plan at the
10 facility. Those are the three areas which come under my
11 privy.

12 Q Did you spend all of Wednesday after you arrived
13 at work in the morning at the Region response center?

14 A I did.

15 Q Can you describe for me as best you recall,
16 how the communications to the site were handled on
17 Wednesday? Specifically, how you specifically were
18 involved in the communications; whether or not you talked
19 personally to Gallian or to Neeley or to other people at
20 the site and then I will ask you to tell me something
21 more general about this.

22 A My first involvement with the communications
23 would be the actual call that came in on my phone. Mr.
24 Brunner came into my office and informed me that we had
25 an incident at Three Mile Island and they were trying to

1 report it and he asked that it be transferred to my
2 phone.

3 We then opened my phone, the speaker phone,
4 received the initial report. We requested that that line
5 remain open.

6 I started activating the center and Mr. Brunner
7 remained getting information in my office.

8 Eventually and shortly once our center was
9 activated that line was transferred up to the center and
10 placed on a speaker phone in our emergency response center.

11 It was then opened -- intermittently we would
12 lose the connection. It was then opened for the rest of
13 the time that I was in the center which was Friday going
14 home on occasion. It was opened on an open speaker phone.
15 That was after our people arrived, which was at approximate-
16 ly 10:00 o'clock in the morning. Some time after that we
17 opened a line to Chick Gallian in the Unit 1 control
18 room and this line was then manned by people from my
19 branch, my health-physicists and we essentially received
20 health-physics information over that line and gave directions
21 and asked questions of the health-physicist over that
22 line.

23 However, I was constantly aware of what was
24 coming in on the other open line and we also talked over
25 that line on occasion.

1 Your question, did I talk directly to Dr.
2 Gallian, Neeley, Plumlee? Yes, I did talk directly to
3 all of them on Wednesday. I can't remember if I ever
4 talked directly to Ron Nimitz but the other three I definite-
5 ly did.

6 Q Can you tell me the nature of your communications,
7 whether it was in the form of questions or giving instruc-
8 tions how to proceed?

9 A Both.

10 Q Both?

11 A Yes. Asking questions and taking information
12 that they were volunteering. Asking them to do specific
13 things, such as -- I recall asking Carl Plumlee to go out
14 and make specific surveys outside the facility.

15 Q These instructions that you were given from
16 time to time were questions that you were given, were
17 these independent or personal instructions and questions,
18 or were these things that you were relaying from head-
19 quarters?

20 A Both.

21 Q Both?

22 A Yes.

23 Q Now, I have seen that there are a variety of
24 message forms in the record. Some of them -- the letter
25 C is the first letter, No. C1, C2, C3 and so forth. There

1 are others that are prefixed by the letter R. There is
2 still another prefix, a B. Do you see some of these
3 examples?

4 A Yes. You are showing me one prefix with R
5 and one prefix with B.

6 Q Here is a book full of them prefixed with C.

7 A Right.

8 Q One of the things that I was curious about was
9 how were these prepared. The ones prefixed R appear to be
10 radiological information.

11 A That is correct.

12 Q Were these prepared by people in the region in
13 manning the open lines?

14 A These were prepared by people in the region
15 manning the open line to Dr. Gallian. This is the radiologi-
16 cal line (indicating), not the open line from the Unit 2
17 control room. This here (indicating) was from Unit 1.

18 Q The other one that I have here with a B prefix
19 seems to be information from the helicopter.

20 A What those are is information that was obtained
21 by Dr. Bores.

22 Q B-o-r-e-s?

23 A B-o-r-e-s, yes. He was in Mr. Stohr's section --
24 is in Mr. Stohr's section, the environmental and special
25 projects section with Mr. Stohr with the mobile van, and

1 I&E at Three Mile Island. Dr. Bores then becomes active.
2 He is the second senior or the most senior member of that
3 section when Mr. Stohr is gone. He then was preparing
4 these.

5 Basically what he was doing, he was coordinating
6 with the state, with the other federal agencies and this
7 became -- even to this day, this is one of Dr. Bores'
8 principal functions, doing this coordination thing.

9 Q He was handling this by telephone?

10 A He was handling this by telephone.

11 Q Still another line that we haven't mentioned
12 before?

13 A If he did not have open lines he would actually
14 have to place independent calls. He was working out of --
15 not the incident response center but he was working out of
16 either his own office or an office that is close to the
17 incident response center.

18 Q One of the things that I have noticed in
19 looking through these sets of papers, and I have not
20 checked the R numbers or the B numbers except to note
21 that these copies exist. I was looking through the C's
22 and I see that there is an identical note in the C sheets
23 as this one in the R sheets --

24 A That is very interesting. It doesn't surprise
25 me.

1 This could have been written down by the health-
2 physicist who was listening to the open lines because it
3 is health-physics information.

4 Q That is what I was going to ask you. I wanted
5 to clarify how that would come to pass with respect to
6 the communications.

7 A Even though information -- this open line was
8 going also directly into headquarters. This is the major
9 open line from Unit 2.

10 Q That is the one that is on the speaker phone
11 in the response center here in the region?

12 A Right.

13 The health-physicist had an open line to our
14 counterparts, the FFMS division headquarters which are also
15 the health-physics groups. We were feeding this information
16 to them not only over the open line where they are hearing
17 the same report that we hear, but we would also feed
18 information that we would pick up over that line
19 independently to the health-physics people down there.
20 That is why you may very well find similar data.

21 Q I want to ask you one more specific point on this.

22 I guess at this point then I don't understand
23 how the people who are on the speaker phone will be able
24 to pick up what was going on in the HP area. I am not
25 sure that is what was happening but it appears that on this

1 C9 message form which was at about 11:30 on Wednesday
2 that the information was transmitted --

3 A I am not sure that this wouldn't go the other
4 way.

5 Q -- from the region headquarters back to the site.

6 A No. From my people perhaps getting it directly
7 from Gallian and leaving it over here and having it
8 entered over there. I think, originally, there is a
9 possibility that they were shooting for a complete record
10 under the C's and we then split.

11 MR. SICILIA: Off the record.

12 (Discussion had off the record.)

13 MR. RIVENBARK: While we were off the record, we
14 had a discussion and drew a little sketch of the communica-
15 tions hook-ups between Unit 1 and Unit 2 at the site and
16 the communicators in the region response center. Mr.
17 Sicilia has a copy of this sketch.

18 BY MR. RIVENBARK:

19 Q Sometime in the afternoon on Wednesday, Mr.
20 Neeley, I believe, called you from the Unit 2 control room
21 regarding a request that had been made that he go with
22 Mr. Gallian and Mr. Higgins to the Governor's office.

23 I believe the gist of his conversation was that
24 he didn't believe he should go. Is that about the way that
25 it happened?

1 A What happened, I got a request from headquarters
2 that we were to send two people to the Governor's office.
3 I instructed Mr. Neeley and Mr. Higgins to go as the
4 senior people.

5 Q This was on Wednesday?

6 A Yes, this was on Wednesday.

7 Q Do you recall who from headquarters that came
8 from?

9 A I believe from Mr. Sneezik (phonetic spelling).
10 He gave me the names of the people in the Governor's office
11 that I was to contact and I can't recall those names.

12 Mr. Neeley questioned whether I felt he should
13 go. My reaction, as I recall, was, I am to send my senior
14 people and you are my senior man.

15 As it turned out later, Don Neeley got some
16 contamination and had to be decontaminated and Dr. Gallian
17 went in his stead. That is how Dr. Gallian went.

18 Q Then I was incorrect in assuming that originally
19 the three, Gallian, Neeley and Mr. Higgins were to go?

20 A You were incorrect on that, yes.

21 Q Then that explains my next question which was
22 going to be: How were you going to assure that the HP
23 aspect of things was being covered at the site while the
24 two people, both Mr. Gallian and Mr. Neeley, were away
25 at the Governor's office?

1 A Dr. Gallian did not act in the capacity nor is
2 he presently assigned in the capacity as a health-physicist.
3 Dr. Gallian opted to become an investigator approximately
4 three years ago -- four years ago, before I ever came to
5 Region 1. It had to do with grade and such.

6 Dr. Gallian, who was well founded in health-
7 physics, was not one of my assigned health-physicists. He
8 eventually ended up speaking as a spokesman for the health-
9 physics group but this was through the accident in which
10 Don Neeley became contaminated.

11 Q Did he not also end up directing the health-
12 physicists at the site who were not inside the Unit 2
13 control room in some of their activities? For instance,
14 when Mr. Neeley was inside the Unit 2 control room, which
15 is where he was for the major part of the afternoon on
16 Wednesday, and Mr. Plumlee and Mr. Nimitz were on the
17 outside, who was directing Mr. Plumlee and Mr. Nimitz's
18 activities, if anyone, or was it necessary?

19 A I was telling them what they should do. Whether
20 Dr. Gallian was suggesting to them what they should do --
21 I would imagine he was.

22 Formally and officially I directed them when
23 Mr. Neeley was inside.

24 Q So you were communicating with them either over
25 the line to Unit 1 or over other telephone lines that they

1 had access to?

2 A Yes.

3 At one time I can recall instructing Mr. Plumlee
4 to go out into the environment and take some readings. He
5 telephoned us and was telling me what the readings were.
6 I asked him where he was, and he said something about,
7 "I have to go outside and see." He was in a phone booth
8 and he had to tell me that he was at the corner of such and
9 such streets, but yes.

10 Q Were you generally aware of the reactor's status
11 and some of the operational status on Wednesday?

12 A I was generally aware, yes.

13 Q Did you ever get any reports or have conversations
14 with your HP people regarding the reactor's status on
15 Wednesday? What I am looking for, Mr. Smith, is, I am
16 trying to track down whether or not information on certain
17 kinds of events was available to anyone at the site
18 including whether it was available to HP's, who possibly
19 weren't focusing on the operational aspect, but who were
20 aware of an event or a status of some kind.

21 A I believe the status of the reactor, and I am
22 sure Don Neeley being in the Unit 2 control room, people
23 were not saying, "Do not look at the control board." I
24 am sure Don was aware of that. Don is familiar enough
25 and has been around enough that he can look at instruments

1 and tell.

2 However, I am also aware or probably quite sure
3 that Don was so concerned with his part of the action.
4 We were more or less an integrated team. Health-physics
5 is one discipline, operations is another discipline. We
6 would fully expect, and in my feelings here at the regional
7 office, and I am sure that Don in the reactor, if there
8 were things we had to know about the reactor's status, the
9 first people you are going to tell, I am sure, are the
10 health-physicists because even the operations people rely
11 on us to protect their health and safety.

12 Yes, I am sure we were aware of the general
13 status. I was aware of it because I was in the control
14 room. I was privy to everything.

15 Q You mean in the response center?

16 A Here in the response center, yes.

17 I was here in the response center and was privy
18 to everything that came over the open line. I didn't
19 necessarily hear it all but it was there.

20 Occasionally I would hear something because it
21 had an effect on health-physics on the condition of the
22 reactor.

23 Q Do you recall hearing any conversations on
24 Wednesday regarding the fact or possibility that someone
25 was discussing superheated steam in the reactor, the

1 possibility that the core was uncovered or remained
2 uncovered on Wednesday?

3 A I don't recall if it was Wednesday or Thursday.
4 I don't recall what led me to that conclusion either. It
5 was things I was hearing, things that I was seeing. I
6 can recall very well, it is one of the vivid recollections,
7 having sitting next to Boyes Grier and saying to him, "Is
8 that damn core uncovered?"

9 Q But you don't know what day that was?

10 A It was either Wednesday or Thursday.

11 Q Were you aware possibly on Wednesday that someone
12 in headquarters had spoken to Mr. Hitz at Met-Ed and
13 suggested that they consider whether or not the core was
14 uncovered? Does my reference to a message from head-
15 quarters to Mr. Hitz, does that add anything at all to
16 your memory?

17 A To be very frank with you, I don't know who Mr.
18 Hitz is.

19 Q Mr. Hitz is a Met-Ed employee. I believe he was
20 a shift supervisor and I don't recall in which unit. He
21 was actively involved, from time to time, in communications
22 on the status of certain things.

23 MR. SICILIA: Shift supervisor in operations.

24 THE WITNESS: I could have even heard such a
25 conversation, but that wouldn't necessarily mean too much

1 to me.

2 BY MR. RIVENBARK:

3 Q Did anybody tell you on Wednesday that they had
4 overheard or had been told by someone from Met-Ed that
5 there had been a pressure spike in the containment on
6 Wednesday?

7 A No, but I am since aware of a purported pressure
8 spike but I was not aware of it on Wednesday.

9 Q Someone from Met-Ed has said that they told an
10 NRC person on Wednesday that there was a pressure spike,
11 and then that person made a notation of it on a pad.

12 We have talked to a number of people from the
13 NRC who were there and so far we haven't found one of them
14 who remembers being told that on Wednesday so we keep
15 asking the next person we talk to if he knew about this
16 and I was wondering if possibly some of your health-physics
17 people had encountered someone and they had been told that.
18 The Met-Ed people not knowing what the NRC people's roles
19 were and possibly that person, since they communicated
20 with you, mentioning what they had said.

21 A To the best of my knowledge, no one told me
22 about a pressure spike. I am sure if one of my health-
23 physicists did I would have asked them what the hell that
24 meant. Was it me they said they told that to?

25 Q No. They didn't know who they told. They said

1 an NRC person.

2 Were you involved in any way in the taking of
3 samples at the site?

4 A I was involved in that samples were sometimes
5 collected and generally were analyzed by people who called
6 into my crew.

7 Once the mobile laboratory arrived, our mobile
8 laboratory, I have been informed that we were the only
9 operating analytical facility for the next 24 to 48 hours.
10 We were analyzing almost all the samples.

11 Q Being more specific, the reactor coolant samples
12 or the containment atmosphere samples, were you involved
13 in either one of those in any way?

14 A By involved --

15 Q Did you request that they be taken? Were you
16 informed and express some view concerning the taking of
17 the samples or the result from the sample, involved in
18 the request for the analysis in some kind of way?

19 I really would like to know what you know
20 about the samples, the taking of the samples? What were
21 the problems with the taking of the samples? What
22 conclusions did the NRC staff draw from the information
23 that they had coming back from the samples?

24 A How much of this I knew at the time and how much
25 I have since learned, I can't really separate it. I was

1 aware that the primary coolant sample was taken. I am
2 aware that some people received --

3 Q Are you aware of only one primary coolant
4 sample?

5 A Right, on Wednesday. I guess there was more
6 than one.

7 Q There was a sample on Thursday that was very hot.

8 A Very hot?

9 Very hot.

10 Q Very hot.

11 A Yes.

12 Q Are you aware of another sample earlier that
13 wasn't so hot?

14 A I don't remember. It is the very hot samples,
15 I guess, I am aware of.

16 When people were overexposed or received
17 exposures in excess of three Rem during the collection of
18 the samples. It has since been determined to have received
19 some extremity exposures in excess of three Rem as a
20 result of collecting the samples.

21 I am aware that the samples were very hot, very
22 high levels. I am not sure if that was on Wednesday or
23 Thursday. It just kind of smears together. I just have
24 no memory at this time.

25 Q Our NRC facility, our van, at the site, was that

1 used in any way for the reactor coolant sample?

2 A No.

3 Q Was it used for the containment air sample?

4 A It was used for the filters. However, the initial
5 filter has never, to my knowledge, been found.

6 Q These are the stack filters?

7 A Yes. Did we take a containment air sample?

8 Q There was a containment atmosphere sample taken,
9 and I don't know who took it but these were being taken,
10 whether one, two, three I don't know offhand at this
11 moment but they were being taken.

12 A How were they being taken?

13 Q How?

14 A Yes.

15 Q I don't know.

16 A Well, I am not fully aware of them now being
17 taken.

18 Q They were tracking the hydrogen. They wanted to
19 see the percentage of hydrogen in the containment.

20 A I know they were aware of the percentage of
21 hydrogen. I never actually questioned how they were
22 getting that.

23 Q But you don't recall those samples or those
24 containment atmosphere samples?

25 A No.

1 Q Who was in charge at the site in your view
2 for radiological matters on Wednesday night?

3 A In my view Don Neeley was still in charge in the
4 plant. Once Phil Stohr arrived he was in charge in the
5 environmental out of plant activities.

6 Q Did Don Neeley remain in charge in plant after
7 Phil Stohr arrived?

8 A Yes.

9 Q That is your assumption?

10 A That would be my assumption, yes. I don't think
11 the question ever really came up. That would be their
12 assumption, too.

13 Q If Mr. Neeley's presence was required in the Unit
14 2 control room on Wednesday afternoon, why wouldn't it
15 be required on Wednesday evening?

16 A You are asking me now about who went down to
17 talk to the Governor?

18 Q No. I am really wondering why if a person's
19 presence or why if an HP's presence is needed in the Unit
20 2 control room on Wednesday afternoon, why it wouldn't be
21 needed on Wednesday night or Thursday morning or Thursday
22 afternoon? I am not sure that there was an HP person
23 assigned to the control room on Thursday. I recall that
24 Mr. [REDACTED] after he left the Unit 2 control room and on
25 his way to the Governor, came back because he found his

1 pants had been -- his trousers had been contaminated and
2 he came back to Unit 1 where he, I believe, remained
3 manning that Unit 1 telephone that Mr. Gallian had left
4 to go to the Governor's office.

5 The question is: Was there a need for someone
6 to be in Unit 2, an HP to be in Unit 2?

7 A It is desirous. Are you aware of our role as
8 defined in an emergency situation at the time of Three
9 Mile Island?

10 Q I am sure that I don't have an adequate awareness.

11 A Very generally, we were expected to be present
12 in the control room, someone from IE or NRC, to observe
13 the actions of the licensee, to take notes and to just
14 generally be prepared to investigate; take investigative
15 notes on what they were doing.

16 Q An HP person?

17 A Not necessarily, an NRC representative.

18 We, in my view, far overresponded to these
19 initial instructions that we have lived under for the past
20 20 years.

21 We did not have adequate people there initially
22 to man the control room with health-physicists, to man as a
23 talker on the telephone, to obtain environmental readings
24 and environmental samples on an around-the-clock basis.

25 I would perhaps say I am at fault for assuming

1 that we operated or were to operate and continue to
2 operate in a classical mode.

3 I think we overresponded to what we had been
4 instructed.

5 Let me put it this way: If we have Four Mile
6 Island tomorrow our initial response will be on the order
7 of what happened on Friday.

8 Q Did we have HP coverage in the Unit 2 control room
9 on Friday?

10 A Yes, we had people in there. We had people in
11 there on Thursday, too. I am sure Don Neeley was in there
12 Thursday. Was he?

13 Q I don't know.

14 A I am sure he was in the Unit 2 control room on
15 Thursday.

16 Friday evening we went to full shift coverage
17 where we are talking three or four health-physicists in
18 plant around the clock. This was the full response which
19 we entered into on Friday. As I said before, we were
20 observers and not doers.

21 Q Moving on to Thursday now.

22 I believe I have previously read somewhere that
23 you had indicated that you really didn't recall how long
24 you were in the response center on Wednesday night. Do
25 you recall that now?

1 A No. I wasn't home very long, I know that.

2 Q If you did go home, do you recall when you came
3 back on Thursday?

4 A I know I went home.

5 Q Do you recall when you came back on Thursday?

6 A Early in the morning, 5:00 or 6:00 o'clock.

7 Q Do you recall how long you were here on Thursday?
8 What time did you go home on Thursday?

9 A Very late Thursday night.

10 Q In the order of midnight?

11 A Something like that.

12 Q When you came to the response center on Thursday,
13 when you came or shortly after you came, did you hear about
14 releases from the makeup tank or the waste gas decay tank
15 on Thursday?

16 A I heard about that on Friday morning. I don't
17 recall hearing it on Thursday morning.

18 Q There were releases on Thursday. There is
19 something in the records and I am just wondering if you
20 recall.

21 A I vividly remember the ones on Friday morning.

22 Q I was really wondering if you had remembered a
23 1200 MR release on Thursday morning.

24 A I have no recollection at all of hearing about
25 that 1200 MR. I do recall a 3,000 MR release on Thursday.

1 There was a 3,000 MR release above the stack.

2 Q Was that from the makeup or waste --

3 A It was a gaseous release out of the stack. The
4 source of it I can't tell you.

5 Q Do you remember what the region was told at
6 the time?

7 A Yes. We were told 3,000 MR's per hour. I have
8 since looked into this. I do recall that it was several
9 hundred MR's per hour.

10 Q Was there an off site reading in conjunction with
11 that?

12 A There was an off site reading. I don't recall if
13 it was taken at the same time or not, but there were a
14 number of continuous -- we were getting off site readings
15 on Thursday.

16 When I look back on this, and when you are
17 talking about health-physic coverage on Unit 2, I am
18 wondering because even though we may not have had a health-
19 physicist in there through the night I believe we had
20 the phone man and we were getting health-physic data
21 through the night on Wednesday night.

22 Q The phone in Unit 1 or Unit 2?

23 A You see, in Unit 1 they were capable of going
24 over to Unit 2 control room and determine what was
25 happening and get updates. Even though there was someone

1 not constantly in there, there was NRC health-physics
2 presence on site.

3 Q Do you recall what kind of data you got out of
4 Unit 2 as opposed to Unit 1?

5 A Generally, out of Unit 2 was the operations,
6 that is generally what we would get over that line. When
7 people would go over into Unit 2 --

8 Q The health-physics data is what I am asking about.

9 A One of the continuous things that we were being
10 asked about was what is the dome monitor reading. That is
11 something you would have to go over to Unit 2 and get and
12 come back and report that. Readings on the monitors inside
13 of the containment is generally information you would get
14 on Unit 2. That is specifically one of the things I
15 remember we were being asked for.

16 Q Do you recall anything else of significance on
17 Thursday?

18 A When did the liquid start?

19 Q That was on Thursday.

20 A I recall that very well.

21 Q You are referring now to the industrial waste
22 discharge to the Susquehanna River?

23 A Yes. Do you want details on that?

24 Q Inasmuch as we have mentioned it briefly, maybe
25 a real brief summary.

1 A We received a call some time early Thursday
2 from the site, from our HP's at the site, requesting the
3 MPC's for dissolved gases in the liquid waste.

4 Q The MPC's are the maximum permissible concentra-
5 tions?

6 A Yes. Actually, part 20 does not speak to that
7 because part 20 was written in the days when your noble
8 gases were considered as never tying up with water.

9 Q That is part 20 of Title 10?

10 A Yes, the Code of Federal Regulations.

11 We obtained these numbers, the numbers that are
12 used, for dissolved gases, transmitted it back to the
13 site and determined that the site was having water problems.
14 They had to discharge this industrial waste. It had
15 dissolved gases in it which were less than the concentrations
16 we gave them.

17 If they did not discharge it through the routine
18 path it was going to go over the side anyway, because the
19 sumps were going to overflow.

20 They then started discharging. I have been asked,
21 "Did you give them permission --" did somebody say, "Can
22 we discharge?" and we said, "Yes."

23 The concentrations were within the limit in
24 part 20. I did not say, "You better not dump that." They
25 were dumping it Thursday night and all of a sudden we got

1 word from headquarters and informed the licensee that
2 they were to immediately stop.

3 I asked specifically, "Do you realize what will
4 happen if we do stop it? It is going to go anyway under
5 an uncontrolled release." They said that was of no
6 consequences and they were to stop. The release was stopped
7 for four or five hours and then they restarted it.

8 Q Do you recall who you were talking to?

9 A No. It came over the open line. I am not really
10 sure. I can generally recognize all the voices, having
11 been in headquarters a number of years. Who this was I am
12 not absolutely sure. Nobody has come forward and said,
13 "I am the one that you cussed up." I don't know who gave
14 this. Do you know?

15 Q No.

16 A I would like to know. I was curious. They say
17 the EMT had given the order.

18 Q I recall that the EMT had been --

19 A Blamed?

20 Q No, had been pointed to as being the source of
21 the order. The EMT would be the only group that would be
22 authorized to make an order.

23 A Right.

24 Q Let's move on to Friday.

25 I guess by this time you were on some sort of a

1 routine schedule for coming and going home, or were you?
2 Do you recall what time you arrived here at the region
3 response center on Friday?

4 A Exact time, no. Probably about 6:00.

5 Q Again, approximately the same time you arrived
6 on Thursday?

7 A Who could go home and sleep?

8 Q As you are aware now, Friday morning was the time
9 when there were releases from the makeup tank or the waste
10 gas decay tank at the site that resulted in headquarters
11 recommending to the State of Pennsylvania an evacuation.

12 At that time on Wednesday morning after you came
13 here, did you know then that there were releases taking
14 place from either the makeup tank or the gas decay tanks?

15 A Yes, I did. I was informed when I came in when
16 I was being told what was happening. They told me that
17 they had been having these releases. I asked for specific
18 details. They told me they were 15 seconds, generally,
19 in duration. They told me exactly how many of them there
20 had been. They told me what the readings were and such
21 things. They told me that they had started very early in
22 the morning, 1:30, 2:00 o'clock, something like that.

23 Q Were you made aware of any specifics like Met-Ed
24 has intentionally vented the tank, the makeup tank. Met-Ed
25 has notified the state that it is venting this tank.

1 Met-Ed has a helicopter up to measure the --

2 A We had the helicopter up.

3 Q From the tapes that we had transcribed, I read a
4 telephone call from Mr. Higgenboth to a Mr. Smith.

5 A I think it can be assumed that it was me, yes,
6 sir.

7 Q The gist of that conversation was -- the words
8 from Higgenboth were, "Do you know about the releases?"
9 The gist of the response from Mr. Smith was, "We are on
10 top of it."

11 The questioner didn't say where the releases were
12 from. It just said, "Are you aware of the releases," and
13 the other one said, "We are on top of it."

14 Then the questioner said, "Is the ARMS aircraft
15 up?" The response was, "It isn't up, but it is going up
16 right now."

17 Then the requester said, "Could we have a ground
18 measurement at the same location as the air measurement?"
19 The responder said, "That will take a certain amount of
20 time to do. It will be something in the order of a couple
21 of hours to get the information back."

22 Mr. Higgenboth said, "Okay," or as much as that.

23 Do you believe that you are the Smith that we
24 are talking about? The reason I ask that is because there
25 is a Smith, and I don't know whether he was at the site at

1 that time, but there was a Ray Smith but he was in Unit 2
2 from time to time as a communicator.

3 A Higgenboth had called me. I don't recall that
4 exact conversation. But what I say that I was the Smith
5 he was talking to, absolutely.

6 Q The time of this call was very close to 9:00
7 o'clock. As I recall, it was a few minutes after 9:00.
8 It was before the evacuation recommendation call was actually
9 made to the state by headquarters; not a long time before,
10 but before.

11 Do you know whether or not in that conversation
12 anybody asked you to track down the source of the 1200
13 MR per hour reading?

14 A I had never heard the 1200 MR per hour reading.
15 I am not going to be at all surprised though if you tell
16 me on the tapes somebody said 1200 MR per hour.

17 Q I have no knowledge of anybody asking about the
18 1200 MR.

19 A I have been asked and we have gone through our
20 records on that particular area. I have personally never
21 seen the 1200 MR per hour reading. Would I have, if
22 questioned, recommended evacuation based upon a 1200 MR
23 reading at the stack, I would not have if it is a short
24 term release.

25 Q Did someone from headquarters try to verify

1 something that was specifically going on at the site
2 related to the releases and in conjunction with their
3 evaluation of whether to recommend evacuation?

4 By the time of the conversation, as I recall from
5 the tapes, if that had been the thrust of the conversation
6 it would have been an attempt to verify what was going on
7 at the site.

8 I don't have a record that tells me that is what
9 it was for. I don't have a lead that tells me that is what
10 it is for, but I am asking another person --

11 A If somebody was calling me in an attempt to
12 verify what was happening, they were hiding it in such a
13 manner, or they were so obtuse that I did not know that
14 they were contemplating or trying to verify information
15 prior to recommending an evacuation.

MR. RIVENBARK: Incidentally, Mr. Higgenboth
17 has not indicated that he was trying to verify that
18 release.

19 BY MR. RIVENBARK:

20 Q Besides knowing that it had released for 15
21 second intervals on Friday morning, had you had any
22 discussions about the status of the gas decay tanks at
23 that time with anybody at the site?

24 A I am sure in the description that they were
25 giving me of why it was releasing from the header...we had

1 discussed at some length the condition of the tanks, why
2 this was happening. It was almost a predictable thing as
3 I recall.

4 In other words, at one time I was talking to the
5 site about it and they were telling me that there would be
6 another 15 second release in such and such a period. I
7 would imagine, when I think about it, when you say I was
8 telling Higgenboth that the chopper was getting ready to
9 go out, we had probably been told that there was going to be
10 a release within a certain period of time and that is why
11 we were getting them up.

12 Q When I jump over to the helicopter that we had
13 going up, I had moved to that point from talking about
14 what the Met-Ed person had said about having the helicopter
15 going up.

16 Were you aware that Met-Ed had helicopters going
17 up and taking measurements?

18 A Yes, I was.

19 Q But you weren't aware that Met-Ed had a helicopter
20 up and had notified the state that they were venting and
21 wanted to know if the state was prepared to evacuate if
22 necessary?

23 A I absolutely was not aware of the latter state-
24 ment. You say that they were intentionally venting their
25 waste gas tanks? I was not aware of that. I was aware

1 that as the waste gas tanks were filling up something was
2 happening that you would get a lifting of a valve and a
3 15 second vent. Before now I was not aware that they were
4 intentionally venting the waste gas tanks. Were they?

5 Q I don't know whether they were or not. I do know
6 that a Met-Ed person has testified that they were.

7 A This is the first time I am aware of it.

8 Q It was Mr. Floyd, and he testified that he
9 intentionally vented the tank and knowing he was doing
10 that, that he had asked the helicopter to go up to measure
11 what was going on and he had called the state to ask them
12 if they were prepared to evacuate.

13 He has explained that not in terms that he was
14 asking them to evacuate, but in the event that his valve
15 didn't close when he wanted it to that he wanted to make
16 sure that they had some alternatives.

17 A I was aware that what they were doing was
18 causing the valve to lift. As I say, we could, almost at
19 times, predict, or as I was being told, the valve would
20 lift and we will have a burp. I had not thought of that
21 as an intentional release or an intentional vent.

22 I guess you could say that the action they were
23 taking -- the action that they had to take that was
24 causing this means they didn't discontinue the action.
25 Perhaps you would have to say this is an intentional burp.

1 I never thought of it that way before.

2 Q The NRC people at the site didn't report back
3 to the region, to your knowledge, that Met-Ed was taking
4 this action?

5 A They reported back that we were getting these
6 15 second lifts of a valve and they would get the burp
7 and then the thing would settle back down.

8 I know that I was asking why this happened and
9 it was explained to me. I can't recall the exact explanation
10 now, but it was essentially about balancing the two tanks.

11 Q Did you believe on Wednesday morning that both
12 of the gas decay tanks were full?

13 A At the present time I couldn't tell you what the
14 status of the gas decay tanks were on Wednesday morning.

15 Q You don't remember what you believed on
16 Wednesday morning?

17 A It is very possible I knew the status of the
18 gas decay tank. I do know the initial report on Wednesday
19 morning was that there was no release off site.

20 Q The initial report?

21 A Yes, because I specifically asked the question.

22 Q There is a report at 8:45 a.m. on message form
23 C56 that alludes to the waste gas decay tank as being
24 full.

25 Were HP people following the waste gas system?

41
1 If they were, what was their involvement in it, the HP
2 people at the site?

3 A I guess that is who I received the information
4 from on the status on Friday morning of what was happening.

5 I am sure through discussions with people,
6 through looking at various recorders and such things is
7 how they would be obtaining the information that was
8 happening in the system.

9 Q Do you recall anything else that happened of
10 significance on Friday morning?

11 A You mean other than the order to evacuate?

12 Q Yes.

13 A I recall just before we heard the order to
14 evacuate that Chick Gallian called and was rather unstrung
15 and wanted to know what in the hell we were thinking about,
16 ordering an evacuation. I can recall trying to calm him
17 down and get him back on the track and definitely
18 convincing him that nobody had ordered an evacuation.
19 At which time I heard it go over the radio behind me, I
20 can recall that very well.

21 Q Did you call headquarters and ask them about that?

22 A I believe I did. I think I called them and
23 instructed -- told someone that they should issue an
24 immediate release withdrawing this. I was quite disturbed
25 when I heard it.

1 Q Did they verify that they had issued such an
2 order?

3 A They did. They told me it was from someone far
4 above them.

5 Q I understand you went to the site later on in the
6 afternoon, but between the activities associated with the
7 evacuation recommendation and the time that you went to the
8 site, what did you do along in that period of time?

9 A That is kind of in the way of general. I know
10 we were supposed to leave almost immediately for the site.
11 We didn't leave until close to 3:00 o'clock, 4:00 o'clock.
12 It was later on in the afternoon. I believe the initial
13 plan was that Boyes and I would leave at 12:30, 1:00 o'clock.

14 Basically preparing to go down and try and find
15 out what was happening. Again keeping track of what we
16 were seeing in the environment.

17 Q You learned early in the afternoon that you were
18 going to go to the site. When you did, were you given a
19 reason for going? Did someone tell you why you should go?

20 A Not really, no.

21 I think it was very obvious with all the health-
22 physicists that were flying in from the other regional
23 offices; someone had to go down and head a rather large
24 health-physics organization.

25 I think it was very obvious for health-physics

1 and operations that there had to be someone there from
2 regional management.

3 Q Do you recall when the decision was made to go to
4 the site?

5 A Probably about noon on Friday. That is about
6 the best I can recall.

7 That is interesting, but I don't recall anybody
8 ever really sitting down and saying that, "This is the
9 situation and we have to make a decision on it." It was
10 just all of a sudden that Boyes and I were going to the
11 site.

12 Q I was wondering if someone from headquarters
13 had called up and said, "You folks have to go to the site,"
14 that morning and take over the management of the IE people
15 down there.

16 A They may have told Boyes that. I don't recall
17 receiving such an instruction. I do recall being told
18 that they were sending in so many HP's from region 2 and
19 so many HP's from region 3 and there was no question about
20 my being there.

21 Q Were these HP's that were coming in -- this was
22 to man the IE activities in the HP area on a around-the-
23 clock basis, is that why you had to have a lot of them,
24 or was it because you wanted to expand other areas that
25 you hadn't gotten into?

1 A I have no idea. I was not privy to any of the
2 decisions. I was not privy to nothing other than the
3 fact that they were coming aboard.

4 Q Who called them up and asked them to come?

5 A I haven't the slightest idea. To be frank with
6 you, I don't know.

7 Q You don't know whether it was headquarters or
8 region --

9 A I am sure it came out of headquarters. It was
10 not Region 1 because I do know when we first heard that
11 there were X number of them flying out of Region 3 on a
12 charter flight my first comment was, "Who in the hell
13 ordered them?" Everybody went, "Who knows."

14 Q Did you feel, at that time, that they weren't
15 needed?

16 A Twenty years of training old dogs at NRC and
17 prior to that AEC dies a little hard.

18 Under our previous directions I felt that we
19 were adequate -- more than adequately covered. I had not
20 even considered going down there with that force of people
21 and setting up the action that we did set up. I started
22 thinking about what we were going to do, how we were going
23 to use it and what this meant on Friday afternoon.

24 Q In addition to the HP's that were coming in from
25 the other regions, I understand that the NRC was requesting

1 HP's from Argonne Laboratory, Oak Ridge Laboratory and
2 asking for them on a rush basis to get them down to the
3 site.

4 A I wasn't aware of that. They must have had
5 great faith in us.

6 (Laughter.)

7 BY MR. RIVENBARK:

8 Q Were you aware that we did have HP's down from
9 those areas?

10 A And worked for NRC?

11 Q Yes.

12 A Not to my knowledge. Who was there?

13 Q I don't know.

14 A Do you mean RAT teams out of Brookhaven and
15 Oak Ridge?

16 Q I mean HP assistants from Oak Ridge National
17 Laboratory and from Argonne National Laboratory.

18 A These were the environmental monitoring teams
19 that were brought in by DOE? To my knowledge there was
20 inplant health-physic assistants supplied by any
21 national laboratory.

22 DOE responded and DOE teams that were cloud
23 chasing teams were augmenting our environmental monitoring
24 teams.

25 Q Mr. Smith, what I have is an impression that I

1 have derived from reading the transcript of tapes of
2 communications between headquarters and DOE. They were
3 conversations asking DOE to expedite the getting of HP's
4 from Argonne, Oak Ridge and possibly other places, to come
5 in and assist in some kind of an operation at the site.

6 Whether those were to assist the licensee or
7 whether they were to assist NRC I do not know. I was
8 aiming to see if you were aware of that and to see if
9 there were still additional HP's, particularly in the
10 light of the conversation we just had about a lot of HP's
11 coming in from the NRC and from the regions. Your view
12 at that time, was it possibly that you didn't need all
13 those HP's at that moment? Here I was thinking of well,
14 I know of another conversation where we were getting even
15 more HP's in and I was trying to see how that general
16 subject matter was being coordinated.

17 A There were Oak Ridge people and Argonne people
18 there who were part of the cloud chase or the environmental
19 monitoring teams. They were coordinated. We had a
20 coordinator in our office -- in our trailer at all times.

21 Q Are they the same as the RAP?

22 A Kind of yes. Actually, the initial PAP or RAT,
23 as I prefer to call them, were called out of Brookhaven
24 by the state. They and us had very little coordination.
25 They were called by the state; therefore, they reported to

1 the state. We had very little to do with them.

2 DOE brought in these additional people who, I
3 believe, they brought in under RAT also, but they worked
4 very closely with this out monitoring the environment.

5 Q Would you describe the correct title for RAT
6 and RAP?

7 A I refer to RAT as radiological assistance team.
8 It is the same as RAP.

9 Q And RAP is radiological assistance program?

10 A Correct.

11 For some reason many years ago they were radio-
12 logical assistant teams and it sounds better just to call
13 them RATS.

14 MR. SICILIA: George, may I put this in the right
15 time.

16 MR. RIVENBARK: Surely.

17 BY MR. SICILIA:

18 Q When you had HP sitting in the trailer to coordinate
19 this effort, can you tell us about when that started?

20 A We went down Friday. We had a large number of
21 health-physicists from other regions standing waiting for
22 instructions on what to do.

23 We established a two -- I established a two prong
24 health-physics operation. One was environmental and the
25 other was in plant health-physics.

1 The environmental groups consisted of people
2 who were out taking environmental samples, making measure-
3 ments, we would know that the wind was blowing in a
4 certain direction. We would know if we were having a
5 zeon release. They would be out with hand-held instruments
6 trying to find a cloud exactly what it was reading on the
7 ground. (sic)

8 Because it is a big area, outside of any point
9 source 360 degrees is a lot of miles. DOE provided us
10 with a -- the teams from Oak Ridge and Argonne who worked
11 one side of the river and we worked the other side of the
12 river.

13 There was two fellows from DOE who would stand
14 12 hour watches in our trailer where we directed essentially
15 all of the activities in plant and in environmental.

16 Whenever we knew there was going to be a release
17 or whatever it was, these people would get in touch with
18 their people and tell them where to go; much as we would
19 do the same thing with the NRC people.

20 They would then feedback information to us as
21 to what they were seeing and we would get it to the
22 appropriate people.

23 Q That was for the environmental group?

24 A Right.

25 Q Did you also say you had DOE people in plant?

1 A We had absolutely no DOE people. No Oak Ridge
2 people. No Argonne people.

3 To the best of my knowledge in plant, this was
4 all NRC HP's. They were Met-Ed HP's. They were Met-Ed
5 contractor people, Met-Ed consultants.

6 I know of no federal health-physicists inside
7 of the fence who were other than NRC people. That is a
8 pretty broad statement. There may have been some in for
9 some reason, consulting or talking to somebody from NRC
10 but for the actual working health-physics groups that were
11 under my basic supervision they were all NRC health-
12 physicists.

13 BY MR. RIVENBARK:

14 Q Your conversation about the flow of information
15 from the DOE teams leads me to ask you a question about
16 another instance that comes to mind.

17 At one point, and I believe it was as late as
18 Friday, someone from the region or the site, but from NRC,
19 said over the tapes to headquarters, "We are not getting
20 any ground information, we are only getting the aerial
21 information."

22 Do you recall that as a problem?

23 A Yes.

24 The problem was: We requested the helicopters
25 for their assistance. Therefore, the DOE helicopters when

1 they came in were working under our direction and our
2 request giving us the information.

3 The RAT teams out of Brookhaven were actually
4 requested by the state, much to our surprise -- I was
5 surprised. I found that they would not give us the
6 information we had to get. We had to get it through the
7 state because they felt they were in there as a state
8 organization. So yes, we were having problems because
9 they would not feed us direct information.

10 Q Do you recall how we rectified that situation?
11 What did we do to get the information?

12 A Further on into the event post-Friday when we
13 were all down there Friday and Saturday, when all of the
14 federal agencies descended upon the area, all of the
15 federal agencies except the NRC were headquartered at the
16 Crystal City Airport (sic). All of their information they
17 were cross-feeding. They had periodic updates and briefs.

18 Dr. Bores, of my staff, was assigned to Crystal
19 City (sic). His specific job was to obtain other agencies
20 information and feed it to us; feed the information that
21 we had into this other agency pool. That is how we corrected
22 the situation.

23 Q At that point, is it fair to say that you did
24 get the Brookhaven RAP information?

25 A Yes, we were getting everyone's information.

1 Q Directly, not through the state?

2 A Directly, yes. I think Brookhaven RAP went
3 home.

4 BY MR. SICILIA:

5 Q You would say that was probably on Saturday when
6 that technique started?

7 A Saturday or Sunday, in there. It was after
8 Friday. I don't think, actually, the other agencies really
9 started coming in till Saturday and Sunday.

10 BY MR. RIVENBARK:

11 Q I believe the meeting with all the agencies
12 out at the Capital City Airport was held Friday night.

13 A Were they all in?

14 Q A lot of them. I don't know if all of them were
15 there, but Friday night, I believe, was the time at which
16 they got together and decided that they had to organize
17 this thing and they selected a group to be the lead --
18 a particular DOE unit to be the lead for coordinating all
19 of it. I assume then that we fed our information into that
20 group and extracting information from whoever had the
21 lead.

22 A Dr. Bores can best tell you exactly who he
23 talked to.

24 BY MR. SICILIA:

25 Q Can you reconstruct the situation when you say

1 that the RAP team would not give us the information that
2 we had to go through the state? How did you find that
3 out?

4 A Here again Bob Bores was calling them and saying
5 would you please give us such and such a reading or would
6 you please go and take readings...I don't recall exactly,
7 but I would imagine that is how this happened.

8 Here again, Bob Bores was my contact back here.

9 Q After you went to the site on Friday, how did
10 you coordinate with the NRR team? I am not asking just
11 how did you personally coordinate with them, because I
12 don't know whether you did or not, but how did IE manage-
13 ment at the site, which you were a principal part,
14 coordinate with the NRR people? How was the operation
15 run from an IE perspective and how do you think it was
16 run from an overall NRC perspective after you were at the
17 site?

18 A Our trailers were essentially side by side.
19 Not quite, but we were right together.

20 Initially and when Mr. Grier was aboard, he was
21 the senior IE representative. He would attend meetings
22 with Mr. Denton, who would have been appointed the senior
23 NRC person, Mr. Stello, their staff that were there.

24 Mr. Grier was not in the Harrisburg area. I
25 was the senior IE representative and I would attend these

1 meetings. I would receive instructions. I would feed
2 information into Mr. Denton and Mr. Denton's staff.

3 I know that it must have started perhaps on
4 Sunday, perhaps even on Saturday. I had a briefing on
5 environmental and general health-physics that was prepared
6 and presented to Mr. Denton by 9:00 o'clock, I believe,
7 every day.

8 I would not necessarily give him this briefing.
9 We would write it up. In other words, a written format.
10 Generally, Mr. Grier would give it to him at the meeting
11 if Mr. Grier was aboard. If he was not aboard I would
12 give it to him. That is basically how we coordinated.

13 Q With respect to the teams that were set up to
14 coordinate the evaluation or procedures that the utility
15 was preparing, did the HP people participate as team
16 members in those evaluations?

17 A Did my HP people?

18 Q Yes.

19 A Generally not. There were also NRR HP people
20 aboard who were participating in these types of evaluations.
21 My health-physicists were basically working health-
22 physicists. They were participating in the actual surveying;
23 assuring that proper surveys were taken.

24 Q We are talking in plant now?

25 A In plant, yes. Isn't that what you are asking?

1 Q Right.

2 A On Friday I instructed all of the HP's that we
3 were changing our mode of operation. We were going out of
4 what we refer to as the compliance mode or the inspection
5 mode and going into a health and safety mode and that
6 their prime responsibility was protecting the health and
7 safety of the workers in plant and the general public out
8 of plant.

9 Q At that particular point then your in plant HP
10 people were --

11 A They went from observers to directors.

12 Q Were they also augmenting the licensee's HP
13 staff and acting as members of the HP staff for plant
14 operations the same as the licensee's HP people or were
15 they merely -- merely is not the correct word -- were they
16 overseeing those activities to see that the licensee's
17 HP people were taking proper action?

18 A They were overseeing. To a larger extent although --
19 let me give you an example.

20 At one stage some people were instructed to go
21 down into a room and turn a valve and this was early Friday,
22 Saturday, Sunday sometime. They gave them some survey
23 data which had been done previously and were told these
24 were the levels and that they were to stay in for a certain
25 period of time. This was by the licensee's health-physicists

1 or their contractor.

2 The senior health-physicists that was over there
3 from IE did not feel this was adequate. In this case he
4 went down himself and performed surveys and monitored
5 the entry into the area. Fortunately he did, because the
6 readings were considerably higher than had been observed
7 previously.

8 In another instance we had one of our health-
9 physicists stop work because of serious deficiencies in
10 respiratory protection equipment. They were overseeing.
11 They were also doing. They were principally acting as
12 supervisor-health-physicists.

13 (Short recess.)

14 MR. RIVENBARK: While we were off the record,
15 we had an interesting discussion about why the IE manage-
16 ment went to the site on Wednesday. I believe that you
17 indicated in that conversation Mr. Smith, that you had
18 already planned to go to the site prior to knowing that
19 the Denton and NRR team was going to the site. Is that
20 a fair statement?

21 THE WITNESS: Yes. To the best of my knowledge
22 these were parallel actions of the IE response and the
23 Denton response.

24 BY MR. RIVENBARK:

25 Q And I believe that we mentioned in that off the

1 record conversation that one of the reasons for going
2 was because you had a large contingent of IE people at
3 or coming into the site and you needed to be there to
4 manage that.

5 A That is correct, yes.

6 Q We talked a little bit previously about our
7 coordination with DOE.

8 Can you describe for me what the regions
9 coordination role was with respect to or how it dealt
10 with the State of Pennsylvania and the other federal
11 agencies?

12 A In our trailer we had an open line to the State of
13 Pennsylvania's offices, the DER offices downtown. We had
14 that manned 24 hours a day by NRC health-physicists and
15 we were able at any time to pick up the phone and talk to
16 the state and conversely, any time they wanted to ask us
17 a question they were able to pick up the phone and it would
18 ring in our trailer.

19 Q We had an NRC man at the state office?

20 A Yes. These were both offices of state programs
21 people. One was Joel Lubeneau and the other was John
22 Vaden. They were working 12 hour shifts in the state
23 offices. Additionally we had a Mr. Dornsife. Mr. Dornsife
24 was from the state health department -- not the health
25 department, but with the group that handled radiological

1 protection.

2 He was not with us for 24 hours but he was in
3 and out of our trailer rather continuously through the
4 entire operation.

5 He was privy to everything we did. We told him
6 everything that was happening. Anything he wanted to know
7 we gave it to him. I have been asked, "Did you give him
8 written communications?" No, we did not. We didn't have
9 time to write things down. He was privy to all information
10 and decisions that we were making.

11 Q Do you think maybe they were also in contact
12 with the NRR group at the same time?

13 A He was in and out of their trailer, also.

14 Mr. Dornsife was given free run of the NRC
15 facilities. I know he was included in any meetings that
16 he wanted to go to. He was informed of all meetings. I
17 informed him of all meetings.

18 Q Before the IE management group went to the site,
19 before we had our trailer set up at the site, how did we
20 deal with the State of Pennsylvania?

21 A Well, I know that Dr. Bores communicated with
22 them by telephone very frequently. This is not unusual.
23 It is that section which generally does all the
24 communications with the various state agencies within
25 Region 1.

1 Q Were there others from the region office that
2 were dealing with the state at the same time?

3 A I know that the office of state programs --
4 the man who was assigned to Region 1 was at Harrisburg.
5 I am sure he was talking to the state people at all times.
6 I know that our PAO, our Public Affairs Office, was
7 in Harrisburg and was dealing with the state and with most
8 everybody from early after the accident on. The names of
9 those -- the state programs man is Tom Elsasser. The
10 Public Affairs officer is Carl Abraham.

11 Q What about how we dealt with other federal
12 agencies?

13 A Here again this would be Dr. Bores, the
14 environmental special projects section. Prior to the
15 establishment of the Crystal City Airport (sic) facilities,
16 this would have been done by telephone.

17 Dr. Bores had various contacts within EPA and
18 DOE. Here again, this is the section that handles this
19 type of activity.

20 Q Did we have some kind of a uniform or standard
21 procedure for when we dealt with them and how we dealt
22 with them?

23 A No, I would say not.

24 Such things as the helicopter, we requested the
25 helicopter. That is done in a standard way. Once we

1 started talking to the helicopter we would get hold of
2 them at a certain telephone number and ask them to get
3 airborne and they would call back the results of their
4 monitoring from their flight.

5 Q Before you went to the site, how did you deal
6 with the helicopter?

7 A That is how, by telephone.

8 Q From where?

9 A From here.

10 Q From here?

11 A Yes.

12 Q From IE headquarters talking to the helicopter at
13 the Capital City Airport?

14 A No, IE Region 1.

15 Q IE Region 1?

16 A Talking to the helicopter pilot or the scientist.
17 As I recall, they gave us a telephone number and I think
18 it was in a motel room. We would call there -- it was
19 either a motel room or the airport. We would keep trying
20 the number until one of them was there.

21 Q How did you coordinate the helicopter flights
22 with the activities that were going on at the plant?

23 A As best we could predict what was going to
24 happen; that is when we would ask them to get up -- that
25 is where I was discussing that Friday morning where I said

1 the helicopter was getting ready to go up. I think we
2 were predicting then when these burps would take place
3 and we knew one was going to happen within a certain
4 period of time, and so we wanted the helicopter up when
5 this took place.

6 Q When you went to the site, these helicopter
7 flights were coordinated from where?

8 A Eventually we got to the point where we could
9 talk to them on our service radios. Giving them a small
10 hand-held walkie-talkie type situation. We had our small
11 hand-held walkie-talkies that Force Service was supplying
12 us that we could talk back and forth.

13 Q Who was doing the talking from IE at that point?
14 Anybody in the field that needed to talk to them?

15 A Well, basically we were set up such that at the
16 trailer we had an environmental coordinator that was
17 the senior environmental man on duty. He would have people
18 out in the field who he was directing. He would also ask
19 the helicopter or instruct the helicopter to do things.

20 The entire environmental group that had the
21 analytical capabilities were under Phil Stohr, who was
22 section chief of environmental and special project.

23 I did not, at that time, have a section chief
24 for my radiological support section. We first used the
25 section chief of RSS from Region 3, Bill Fisher. He was

1 called away. I then used for a short time L. Gibson who
2 is the section chief for this section from Region 2.

3 There were times when I acted in his capacity
4 in the in plant health-physics. I was the coordinator.
5 Herb Brooke came in, who was a branch chief for Region 5
6 and supervised the in plant health-physics groups at
7 times.

8 Q You referred to the off site radiological
9 work as environmental work and the in plant work as health-
10 physics --

11 A Not really, no --

12 Q I was trying to ascertain what the difference
13 between the radiological people and the environmental
14 people was, the difference in their activities.

15 A The in plant people are handling in plant
16 health-physics, observing the in plant health-physicists,
17 the monitoring activities, the jobs and such things,
18 affluent control.

19 The off site or the environmental people are
20 doing environmental surveys. They are out cloud chasing,
21 collecting samples, making measurements of the environmental...
22 Here is an example. I think this is one of our very,
23 very early, if not our first, organization. (Indicating)

24 Q You are showing me a chart of the IE group at
25 the site?

1 A Yes. If it wasn't Saturday it occurred very
2 shortly thereafter.

3 As you can see, we had quite a few people there,
4 that is why it was necessary to have organization.

5 Q You had this organized under environmental
6 analysis, operation support and in plant health-physicists?

7 A Right.

8 The operation support were people who are
9 specialists, who were reporting directly to me. They are
10 not operations inspectors. They are specialist type
11 health-physicists. They were given specific special
12 assignments.

13 MR. SICILIA: Off the record.

14 (Discussion had off the record.)

15 MR. RIVENBARK: I think what we will do with
16 respect to this organizational chart, and I see that you
17 have one or two more organizational charts here, I believe
18 that we will simply try to get copies of these from you
19 later on. We will not mark them as exhibits.

20 THE WITNESS: Fine.

21 Here is a third one. Notice, this is not dated
22 but it must have been very early because that is where the
23 agency coordinator was sent out, Dr. Bores.

24 BY MR. RIVENBARK:

25 Q How did you decide when you needed to call HEW

1 or some branch or part of HEW from the region when you
2 had business with them associated with this activity?

3 I understand that HEW offices -- probably the
4 FDA offices were contacted by the region. I believe an
5 office in Philadelphia was contacted.

6 A In our emergency plans we have a definite
7 procedure of all other agencies who are notified of an
8 emergency. This is our interoffice emergency type plan.
9 This is how we would determine where we would call them
10 initially. I don't recall us ever calling them during
11 the incident, this is specifically HEW, and requesting
12 assistance during the initial part of the accident.

13 Q What about EPA?

14 A They are the same. We would have notified them
15 of what was happening. I do not recall us requesting
16 assistance.

17 Q Moving to another subject now, can you tell me
18 briefly what your involvement has been in developing the
19 regional response plan?

20 A The development of the regional response plan
21 initially fell under my particular branch. My personal
22 involvement, none. I came aboard here on October 1, 1978.
23 I didn't know if you were aware of that or not.

24 Q No, I was not.

25 What is your view of what the role of the

1 inspectors in the field should be in response?

2 A This is in the future?

3 Q Yes.

4 A We have not, as of yet, received a contrary
5 definition of NRC's role in the event of an emergency.

6 However, as I indicated before, if we had Four
7 Mile Island tomorrow and we responded, our initial response
8 would be, if it were my decision, much as the response
9 was on Friday.

10 We would go immediately into a health and safety
11 mode. We would not worry about the fact that we have
12 been instructed but we have absolutely no jurisdiction,
13 and this is prior to Three Mile Island instructions. We
14 have no jurisdiction. Any business outside of the fence --
15 we would be working outside of the fence.

16 As an example, we set up an emergency dosimetry
17 system around Three Mile Island. This was one of the many
18 decisions we made and things we did following Friday
19 evening.

20 Right now we are tasked, and by "we" I mean
21 Region 1 in this case, where we are setting up a 50
22 station dosimetry system around every operating reactor
23 in the country. We have our own thermoluminescent dosimeter
24 readers and this will be our responsibility.

25 Q At the time of the occurrence of the Three Mile

1 Island incident, what did you believe that the role of
2 the inspectors in the field was supposed to be?

3 A As I have indicated before, we were to go into
4 the control room and observe what was happening, take
5 notes, prepare an investigative report of what the licensee
6 was doing.

7 With respect to outside the fence, we could make
8 recommendations as to whether we felt, say, an evacuation
9 was necessary, but that this was strictly a state
10 responsibility.

11 My feeling was, and we were so instructed, that
12 environmental monitoring outside the fence was solely
13 the responsibility of the Environmental Protection Agency.

14 Q Was it your opinion that the inspectors were
15 supposed to evaluate as well as take down and transmit
16 information back to the headquarters?

17 A Yes.

18 Q Approximately what day in the TMI incident
19 did you come to the conclusion that the role should be
20 different?

21 A On Friday when I suddenly realized that somebody
22 was pouring all of these people in there I felt they were
23 telling me, "George, you better change your way of
24 living," and we did.

25 As I say, nobody ever said you will do this.

1 Nobody has ever said since that you will or will not do
2 that.

3 There must have been a reason for whoever sent
4 all those people down there and what their thinking was.

5 Q At the time of the TMI incident, what did you
6 believe the role of the region office should be in the
7 incident?

8 A To direct the people in the field. To assimilate
9 the data that they were transmitting. Evaluate it and
10 pass it on to headquarters.

11 Q Do you now feel that role should be different or
12 is different?

13 A I will be very frank with you, I am confused as
14 far as that role goes. Some of this confusion is brought
15 about by changes in the telephone systems, the changes
16 in the way notifications take place.

17 One of the crying needs that we have today is
18 a definition of roles. What is our role? I don't know.
19 At the present time I think we would do what we thought
20 was necessary and what was needed to protect the health
21 and safety of the people. Let the chips fall where they
22 be.

23 Q At the time of the incident what did you believe
24 the headquarters' role should be, specifically that part
25 of it called the emergency management team?

1 A I felt the emergency management team was the
2 NRC senior management people who would receive information
3 from their Irack, which is the people that are receiving
4 the information from the field. This information would be
5 developed, given to the EMT and they would make decisions
6 as to recommendations plus, they would also keep the
7 commissioners, the other people in government right up to
8 the President, if he was so interested on being informed
9 of what was happening. They would make recommendations
10 based on the information and input they would be getting
11 from their staffs to the state.

12 As an example, I think that definitely we should
13 make recommendations based on staff findings and staff
14 analysis for such things as evacuation.

15 Q Did you feel that the headquarters Irack group
16 had a role that was similar or overlap that of the region
17 office here?

18 A I felt it was overlapping. That definitely they
19 had, to my feeling, and I was at one time a member of the
20 Irack staff, was that the information had to come into
21 their region and was then disseminated to the people at
22 headquarters, and that there had to be a definite logic
23 to this. It had to go through certain...

24 Q Did you believe that the region office had a
25 responsibility to assimilate the information and evaluate

1 it and then pass it on to the Irack or that they only
2 had to pass data -- raw data on to headquarters?

3 A I think they had to pass raw data on but they
4 also had to assimilate and evaluate the information.

5 Q Do you think that is what the region did?

6 A Yes, I believe that is what the region did.

7 Q Do you believe headquarters Irack evaluated
8 the information and made recommendations on to EMT?
9 Do you think they fulfilled the role as you envisioned
10 them as having?

11 A Not having been there I have no idea. I am not
12 even going to hazard a guess on that one.

13 Q Getting down to the wrap up area, how would you
14 characterize the IE, NRR working relationships at the
15 site? Would you characterize them as one of mutual
16 competence in one another, a unified team approach or
17 as two separate organizations working at cross purposes
18 or do you believe that the roles were adequately defined?
19 Would you like to take that as one overall set of
20 questions?

21 A I think NRR and IE at the site during the
22 incident are two separate organizations with a certain
23 amount of distrust for each other -- which are distressed
24 of each other, which individuals within the organizations
25 are able to work together. Basically, I think one of our

1 biggest problems is that we don't play well as an NRC
2 team.

3 Q Do you have any ideas as to why that is that
4 way?

5 A No. It is a historical situation. It is not
6 just something that happened at Three Mile Island. I have
7 been with this organization and its predecessors for almost
8 20 years now, and I don't think that the field components
9 or the inspection and enforcement components,
10 irrespectable of what we will call it, have ever truly
11 trusted licensee, nor has the licensee component truly
12 trusted the inspection and enforcement component. We
13 have always been at somewhat of an adversary relationship.

14 Q Is there any reason that the NRC is that way?

15 A I think we are structured that we are designed
16 to be that way. I am not saying that I think it is bad.
17 I don't believe that the inspection and enforcement
18 function should be done by people who do the licensing.
19 I think that perhaps one of the problems that happen is
20 the inspectors go out and they find some questionable
21 licensing, let's say tech specs or license commissions,
22 and in our very subtle way we have transmitted these back
23 to licensing. By the same mode inspectors go out and
24 make some strange statements or do some strange things
25 from an enforcement standpoint and from licensing's very

1 subtle way they tell us over the years that it builds
2 up a true adversary relationship.

3 What is the old saying? "They think we slobber
4 when we talk and we know they do."

5 Q Do you have any suggestions as to how you
6 might improve that situation and change it? I know you
7 have already indicated you are not really sure whether the
8 adversary situation is good or bad.

9 A It is all bad.

10 Q It would seem that lack of confidence or
11 distrust couldn't be good by itself.

12 A However, there is also a lot of confidence and
13 trust in each other, let me say that.

14 I think that in situations where we have the
15 sharp -- the dissolution of the license where we become
16 an NRC group, we should have very sharp and distinct
17 definitions of who does what to who and who has the various
18 lines of responsibility. Because you take a number of
19 managers and all of a sudden you throw them together into
20 one pot and say this guy is in charge and what is your
21 line of responsibility and what is your line of
22 responsibility. I think this should be sharply defined.

23 Q Sharply defined in the emergency response
24 role?

25 A Yes, that is what I am talking about, and

1 especially in the field role because all of a sudden
2 you are mixing two groups of people and throwing them into
3 a very foreign situation. TMI is very foreign in that
4 those NRR and IE are acting totally different than they
5 have ever acted before and you should have a very, sharp
6 line of responsibility; a very sharp definition of the
7 responsibility of the various people.

8 MR. RIVENBARK: I have no further questions for
9 you.

10 Before we close, are there any other important
11 matters that I haven't mentioned that you think I should
12 bring up or that you would like to bring up at this time?

13 THE WITNESS: I am sure I will think of 10 or
14 12 of them when I walk out of here. Right now I can't think
15 of any.

16 MR. RIVENBARK: Mr. Sicilia, do you have anything
17 to add?

18 MR. SICILIA: I have no questions of this witness.

19 MR. RIVENBARK: In wrapping up today's session,
20 let me say that this is an ongoing investigation. Although
21 I have completed the questions I have for you today, we
22 may need to bring you back for further depositions.

23 We will, however, make every effort to avoid
24 doing so.

25 I will now recess this deposition rather than

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terminate it.

I would like to thank you for your time and your candidness in the discussions with us today.

(Whereupon, the deposition was concluded at 3:45 p.m.)

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CERTIFICATE

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the above cause, and that this copy is a correct transcript of the same.

Joseph C. Spontarelli
Joseph C. Spontarelli, Reporter
Notary Public in and for the
Commonwealth of Pennsylvania

MONICK STENOGRAPHIC SERVICE

My commission expires
July 20, 1981.