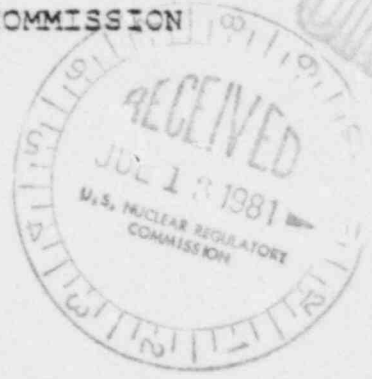


ASLBP Docket Room Copy

NUCLEAR REGULATORY COMMISSION



In the Matter of:

METROPOLITAN EDISON COMPANY)
) DOCKET NO. 50-289
 (Three Mile Island Unit 1) (Restart)

DATE: July 8, 1981 PAGES: 22,740 - 22,958

AT: Harrisburg, Pennsylvania

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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In the matter of: :
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METROPOLITAN EDISON COMPANY :
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(Three Mile Island Unit 1) :
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Docket No. 50-289
(Restart)

25 North Court Street,
Harrisburg, Pennsylvania

Wednesday, July 8, 1981

Evidentiary hearing in the above-entitled
matter was resumed, pursuant to adjournment, at 9:00 a.m.

BEFORE:

IVAN W. SMITH, Esq., Chairman,
Atomic Safety and Licensing Board

DR. WALTER H. JORDAN, Member

DR. LINDA W. LITTLE, Member

Also present on behalf of the Board:

MS. DORIS MORAN,
Clerk to the Board

LAWRENCE BRENNER, Esq.
Legal Advisor to the Board

1 APPEARANCES:

2 On behalf of the Licensee, Metropolitan Edison
3 Company:

4 ERNEST BLAKE, Esq.
5 ROBERT ZAHLER, Esq.
6 DELISSA A. RIDGWAY, Esq.
7 Shaw, Pittman, Potts and Trowbridge,
8 1800 M Street, N.W.,
9 Washington, D. C.

10 On behalf of the Commonwealth of Pennsylvania:

11 ROBERT ADLER, Esq.
12 MICHELE STRAUBE, Esq.
13 Assistant Attorney General,
14 505 Executive House,
15 Harrisburg, Pennsylvania
16 WILLIAM DORNSIFE,
17 Nuclear Engineer

18 On behalf of Anti-Nuclear Group
19 Representing York:

20 GAIL BRADFORD

21 On behalf of Three Mile Island Alert:

22 LOUISE BRADFORD

23 On behalf of the Regulatory Staff:

24 JAMES TOURTELLOTTE, Esq.
25 Office of Executive Legal Director,
United States Nuclear Regulatory Commission,
Washington, D. C.

C O N T E N T S

WITNESS:

DIRECT CROSS REDIRECT RECROSS BOARD CROSS
ON BOARD

Thomas E. Hardy,
Bruce J. Swiren,
and
Vernon Adler (Resumed)
By Ms. Straube
By Mr. Zahler
By Ms. Gail Bradford

22,746
22,801
22,802

AFTERNOON SESSION .. page 22,829

Thomas E. Hardy,
Bruce J. Swiren
and
Vernon Adler (Resumed)
By Ms. Gail Bradford

22,836

Ralph J. Hippert
By Chairman Smith

22,876

Steven Chesnut (Recalled)
By Mr. Tourtellotte
By Ms. Gail Bradford
By Ms. Straube
By Mr. Zahler

22,877
22,887
22,914
22,928

E X H I B I T S

NUMBER

IDENTIFIED

IN EVIDENCE

Staff # 23

22,879

22,879

Licensee's # 38

22,934

22,934

NRC Staff position on emergency preparedness for TMI-1.....pg 22,881

300 7TH STREET, S.W., REPORTERS BUILDING, WASHINGTON, D.C. 20024 (202) 554-2345

P R O C E E D I N G S

1

2

(9:02 a.m.)

3

4 business?

5

MR. ZAHLER: Yes, Mr. Chairman. I have handed out 6 to the parties and the Board a copy of Section 109 of Public 7 Law 96-295, which is the NRC Authorization Act for fiscal 8 year 1980. It is the provision to which I referred 9 yesterday. I would just like to make a brief statement with 10 respect to it.

11 Section 109(a) of the NRC Authorization Act for 12 fiscal year 1980, Public Law 96-295, contains language which 13 requires the NRC to find that state or local emergency plans 14 exist which provide for responding to accidents at a nuclear 15 facility and comply with the NRC's guidelines for such plans 16 or, in the absence of such a plan, there exists a state, 17 local or utility plan which provides reasonable assurance 18 that public health and safety is not endangered by operation 19 of the facility.

20 In the current Congress, Section 302 of Senate 21 Bill S. 1207, dealing with NRC appropriation authorization 22 for fiscal years 1982 and 1983, contains similar language. 23 There is a Senate report that accompanies Bill S. 1207. I 24 do not have a copy of that with me. The report is S. Report 25 97-113, issued on May 15th, 1981.

1 At page 18 of that report it explains that the
2 provision seeks "to underscore the intent of Congress, as
3 evidenced by Section 109 of Public Law 96-295, that the NRC,
4 in the absence of an approved state or local emergency
5 preparedness plan, issue an operating license for a nuclear
6 plant if it determines that a state, local or utility
7 emergency preparedness plan or some integration of these
8 plans provides reasonable assurance that public health and
9 safety is not endangered by operation of the plant."

10 CHAIRMAN SMITH: The language of Public Law
11 96-295, after the language you have quoted, goes on to say:
12 "A determination by the Commission under paragraph 1" --
13 which was quoted by Mr. Zahler -- "may be made only in
14 consultation with the Director of the Federal Emergency
15 Management Agency." And it continues, "further discussion
16 of emergency preparedness."

17 Is there anything further preliminarily.

18 MR. BLAKE: Mr. Smith, when we left the hearing
19 from yesterday, Mr. Adler and I attempted to reache the
20 Aamodts. We were unsuccessful and Mr. Adler was to continue
21 on into the evening. I have been unable to contact Mr.
22 Adler this morning, so I will have to await a further report
23 to the Board until I have been able to touch base with Mr.
24 Adler.

25 CHAIRMAN SMITH: Could you remind me, what was the

1 final determination we made with respect to responding to
2 TMIA's motion to reopen the record? Were you to come back
3 to us?

4 MR. BLAKE: I will be prepared by this afternoon
5 to respond to that orally on the record.

6 CHAIRMAN SMITH: But we didn't set a particular
7 time?

8 MR. BLAKE: No, you didn't set a particular time.
9 And if you wanted me to, I will try to get hold of Ms.
10 Bradford to set a time.

11 CHAIRMAN SMITH: I think that might be a good
12 idea.

13 (Pause.)

14 CHAIRMAN SMITH: We received a message from Ms.
15 Bradford that she plans to be here this afternoon. We
16 ourselves, if we want to set a particular time, can call her
17 and let her know. But since we know that we will be here
18 until this afternoon, why don't we just set it for the end
19 of the evidentiary session. And if our plans change, we'll
20 call Ms. Bradford and advise her. But we will just
21 anticipate that she will be here.

22 Ms. Straube, we did not consult with the
23 Commonwealth about the position on reopening the record.

24 MS. STRAUBE: Chairman Smith, if there's going to
25 be discussion this afternoon, I think Mr. Adler could be

1 here. I don't know what his position is, but I think he
2 could be here this afternoon to discuss it.

3 CHAIRMAN SMITH: The way it is going now, we will
4 be hearing oral arguments on the motion this afternoon. So
5 I think he should be advised of that if he wishes to
6 participate.

7 MS. STRAUBE: Could I have a moment to call him
8 now?

9 CHAIRMAN SMITH: Well, we can call him.

10 MS. STRAUBE: I would appreciate that, if somebody
11 could call him.

12 CHAIRMAN SMITH: And we will tell him that his
13 options are -- well, that we would prefer to have it
14 addressed orally rather than in writing. We will call him
15 to that effect.

16 Now, is there anything further?

17 (No response.)

18 All right. Ms. Straube, you may continue with
19 your cross-examination.

20 MS. STRAUBE: Chairman Smith, I should explain my
21 cross-examination plans. I tried to shorten them, which
22 means I now have to jump between two plans. I hope it is
23 not going to be unduly confusing for the Board to try to
24 follow them.

25 CHAIRMAN SMITH: We have never had difficulty

1 following your cross-examination plans. They've been very
2 good.

3 Whereupon,

4 THOMAS E. HARDY

5 BRUCE J. SWIREN,

6 VERNON ADLER

7 the witnesses on the stand at the time of recess, resumed
8 the stand and, having previously been duly sworn by the
9 Chairman, were examined and testified further as follows:

10 CROSS-EXAMINATION

11 BY MS. STRAUBE:

12 Q Starting with attachment 1, and on the first page
13 of attachment 1 you referred -- I guess toward the bottom of
14 the page there is the sentence that: "The overall response
15 capability of Pennsylvania was shown to exceed minimum
16 standards on the whole."

17 My question, as it was of Mr. Dickey: What are
18 the minimum standards you are referring to?

19 A (WITNESS HARDY) Again, these are the same
20 standards that the one through five represents. So in that
21 case it would represent -- I believe it is a four. I would
22 have to doublecheck. But it coincides with those one
23 through five levels that are called standards, that are not
24 related to the 0654 standards.

25 Q That were described yesterday? The one through

1 five were described yesterday?

2 A (WITNESS HARDY) Right.

3 Q Is your statement about the overall response
4 capability of Pennsylvania applicable to the states,
5 counties and municipalities?

6 A (WITNESS ADLER) Yes, it is an overall and
7 integrates all of those components.

8 I would like to make one minor correction. If you
9 refer to the work sheet that we have entered into evidence
10 earlier, the number 3, is capability acceptable, so we are
11 talking about standards of capability. I realize that that
12 word has caused a lot of confusion.

13 MR. ZAHLER: Mr. Chairman, just so the record is
14 clear, this came up yesterday in Mr. Adler's testimony. The
15 standards are the document that he has referred to now and
16 in testimony yesterday is not a formal part of the record.
17 It was handed out to the parties, but there shouldn't be any
18 confusion; it has not been made an exhibit in this
19 proceeding.

20 BY MS. STRAUBE: (Resuming)

21 Q What is the effect on that statement of York
22 County not participating in the exercises?

23 A (WITNESS ADLER) The results of the exercise do
24 not include York County because York County was not a
25 player.

1 Q Okay. And what is the effect on that statement of
2 the fact that all the municipalities did not participate in
3 the exercise?

4 A (WITNESS ADLER) We believe there was a
5 representative participation. It was never an intent, on
6 our part at least, to require or even desire that all
7 municipalities participate.

8 Q Okay. What assurances do you have that York
9 County can and will respond in a coordinated fashion during
10 an emergency?

11 A (WITNESS ADLER) To the extent that it is
12 documented, we have the plan, obviously. We do understand
13 understand that York County will be exercised, and that is
14 important to us.

15 Q What assurance do you have that all of the
16 municipalities within the ten-mile EPZ can and will respond
17 in a coordinated fashion during an emergency?

18 A (WITNESS ADLER) We do believe the system for that
19 kind of coordination was demonstrated in the exercise. In
20 fact, the degree of coordination and the deficiencies within
21 the area of coordination are well documented in our product,
22 in our report.

23 Q By "system for coordination," do you mean
24 coordination that was shown during the exercise between the
25 counties and the participating municipalities? Is that what

1 you are referring to?

2 A (WITNESS ADLER) Yes.

3 Q What assurances do you have that adequate
4 personnel and resources are available in each municipality
5 to respond to an emergency?

6 A (WITNESS ADLER) Many of those resources are
7 documented in the county plans. Beyond that, we had
8 representative participation of emergency workers during the
9 exercise at the county and lower levels of government.

10 Q So you have actual knowledge of those
11 municipalities that participated, that they have adequate
12 personnel and resources; is that correct?

13 A (WITNESS ADLER) Yes.

14 Q And you are extrapolating, I guess, from that that
15 the other municipalities would equally have the same
16 personnel and resources?

17 A (WITNESS ADLER) We are. I am using the word
18 "representative" in that sense.

19 A (WITNESS HARDY) If I could add, the
20 representative aspect of the municipalities that played is
21 not really the end of the line. If you go back to
22 NUREG-0654, Standard N, paragraph 1(b), it talks about
23 verifying the capability to respond over a five-year
24 period. So for instance, on the next full-scale exercise
25 for TMI, we would be wanting other municipalities to play

1 and check their integrated capability with the county level
2 and with the state.

3 So it is a process that takes time, and in this
4 case it is designed to be done over a five-year period.

5 Q Are the 72 recommendations contained in attachment
6 1 required by NUREG-0654?

7 A (WITNESS ADLER) No.

8 Q Are any of them required by NUREG-0654?

9 A (WITNESS ADLER) No. Individually, no.

10 Q This may be a facetious question: Why do they
11 have to be done?

12 A (WITNESS ADLER) As was discussed yesterday, all
13 of the standards -- and now we are talking about the
14 measurement book of 0654 that is used in the region -- all
15 of those standards were met to some extent. The
16 recommendations are in our view important measures that the
17 state and counties should take as a result of what we
18 learned in the exercise.

19 Mr. Chairman, I want to underscore the fact that,
20 while these individually are not requirements, FEMA wants
21 very much to work with the state and counties to properly
22 address each and every one of those 72 recommendations.

23 MS. STRAUBE: Chairman Smith, I don't know whether
24 it is appropriate for me to make this statement at this
25 point, but FEMA has no problem, at least to the extent of

1 recommendations for state things. They have no problem with
2 any of the recommendations except for one, and I'm going to
3 go into that one next.

4 CHAIRMAN SMITH: Except for?

5 MS. STRAUBE: One of them, and I'm going to go
6 over that one next.

7 CHAIRMAN SMITH: Okay.

8 MS. STRAUBE: But I don't want the Board to have
9 the impression through my cross-examination that the state
10 is saying that these recommendations should not be done. We
11 recognize that all these things should be done. We are
12 trying to figure out which ones we should do first,
13 essentially.

14 CHAIRMAN SMITH: I think it is appropriate for you
15 to make these explanations as you go along, because it is
16 not self-evident from your role in the case just what your
17 position is. But that is very helpful when you do make
18 those explanations.

19 WITNESS ADLER: Mr. Chairman, I would like to add
20 for the record that it is our understanding from
21 conversations with people at the state level, with PEMA
22 principally, that they are anxious and willing to be
23 responsive to those recommendations. I would not want this
24 Board to think that our impressions are otherwise.

25 CHAIRMAN SMITH: This is from your own direct

1 observation in working with them?

2 WITNESS ADLER: Yes. We can't underscore enough
3 the importance of the collegial relationship that we have in
4 improving together the entire situation for emergency
5 planning, together meaning PEMA and FEMA.

6 CHAIRMAN SMITH: Are we going to hear any more
7 about the problem attendant with the failure of York to
8 participate in the exercise, York County, or has that been
9 fairly well covered?

10 MS. STRAUBE: I wasn't going to go into it any
11 more, Chairman Smith.

12 CHAIRMAN SMITH: We will.

13 MS. STRAUBE: I don't know if you have a copy of
14 the NRC staff position on emergency preparedness for TMI-1,
15 which does address the issue somewhat.

16 CHAIRMAN SMITH: Ms. Bradford provided us a copy.
17 Did you intend for us to have that?

18 MR. CHESNUT: Yes, sir.

19 CHAIRMAN SMITH: We may have just a few questions
20 on that at the end of the panel's presentation.

21 BY MS. STRAUBE: (Resuming)

22 Q Okay. On pages 1 and 2 of attachment 1, you have
23 identified seven areas that you feel should be addressed
24 first. What was your reasoning in saying that these should
25 be addressed before the others?

1 A (WITNESS ADLER) Can you point me to the sequence
2 that you are referring to?

3 Q It is the first and second pages of attachment 1,
4 under introduction. And it says: "The following items
5 represent a consolidation of some recommendations that
6 should be addressed first." And then it has seven issues.

7 A (WITNESS ADLER) Based on the overall exercise,
8 these seven areas arose as among those most important to us
9 for improving the efficiency of the overall response to an
10 emergency.

11 Q Okay. I'd like to go -- rather than going through
12 each of the 72 recommendations, I am going to try to go
13 through each of these seven more important ones and try to
14 cover what I want to cover through them.

15 A (WITNESS ADLER) Before we do that, could we
16 change this microphone?

17 (Pause.)

18 Q For the first one, what was the reason that this
19 has to be changed?

20 A (WITNESS HARDY) It's my understanding that the
21 plan calls for notification from the Licensee to the state
22 to go to the Pennsylvania Emergency Management Agency as the
23 first notification in each accident classification level,
24 and therefore this represents our thought that the exercise
25 showed that after the notification of an unusual event at

1 each incident classification level above that the first
2 communication of that change in level went to the Bureau of
3 Radiation Protection and not to the Pennsylvania Emergency
4 Management Agency. And it is my understanding the plan
5 calls for that.

6 Q In other words, the exercise showed that the plan
7 was not being implemented as it was written?

8 A (WITNESS HARDY) Yes.

9 Q Okay. Could this item be corrected by changing
10 the plan to state that the first notification would go to
11 the Bureau of Radiation Protection rather than to PEMA? In
12 other words, the change to reflect what happened in the
13 exercise?

14 A (WITNESS HARDY) Certainly, if they feel that is
15 what they want to do, since that is in actuality what they
16 did. It is just that in looking at the difference between
17 what actually happened and what was in the plan, we are
18 recommending that the plan, we are recommending that the
19 plan be followed.

20 Of course, the plan could be changed to show -- to
21 follow practice. It's the state's decision as to which way
22 they want to correct it. Either way is acceptable, but the
23 plan and actuality should coincide.

24 Q Okay. For the second one, "improved coordination
25 on operational matters," what was the reason for

1 recommending this?

2 A (WITNESS ADLER) The direction and control
3 functions are of very fundamental importance to
4 communicating the important information to the citizens,
5 down through the chain of authority. There were weaknesses
6 demonstrated in the coordination interfaces between the
7 state, counties and municipalities, and because of the
8 overall importance of the coordination at those interfaces,
9 we felt that they could be worked on and improved and should
10 be without delay.

11 Q Is that a change in planning or is that something
12 that can be corrected by a process of drills?

13 A (WITNESS ADLER) Both, but I would emphasize the
14 importance of drills.

15 Q What levels should the drills be between? Who
16 should the drills be between?

17 A (WITNESS ADLER) What level of training, was your
18 question?

19 Q No. What level of government or organization
20 should be drilled?

21 A (WITNESS ADLER) Well, the state bodies together
22 with FEMA; such examples as Department of Health and
23 Education, at the state level. We can give you more
24 specifics.

25 A (WITNESS HARDY) The levels of government that

1 should be training to accomplish this are indicated in the
2 72 recommendations. This is not a separate recommendation,
3 number two. It is a consolidation of recommendations that
4 point toward a need for drilling. And even within the
5 seven, number seven points to that, so that we are talking
6 about in a lot of cases drills and tabletop exercises across
7 the board, in this particular case to drill the coordination
8 aspects among all three levels, state to county, county to
9 municipality, and county to state.

10 (Pause.)

11 Q Okay. Since you've already referenced
12 recommendation number 7, why don't I do that one too. Why
13 do these drills and tabletop exercises have to be done prior
14 to a full-scale exercise?

15 A (WITNESS ADLER) I don't believe we said they have
16 to be done prior to a full-scale exercise.

17 Q Number 7 says: "Additional tabletop exercises and
18 drills by each organizational level to discover and work out
19 internal problem areas prior to full-scale exercising." And
20 that is repeated several times throughout the testimony.

21 A (WITNESS HARDY) Just to say how it should work,
22 in order to go into a full-scale exercise, which tests the
23 system as it says in 0654, the integrated capability, you
24 should not go to a situation, an integrated full-scale
25 exercise, without having drilled your own internal

1 responsibilities and broken it down into drills, possibly
2 even of segments, smaller -- so for instance if you're a
3 state agency, you would not want to go into full-scale
4 exercise not having drilled your own responsibilities within
5 your agency.

6 You should have enough experience with those
7 responsibilities to then go in and work on the interface
8 with the other agencies and with the other levels of
9 government. So if you are worried or trying to figure out
10 what you should be doing with your responsibilities, you
11 won't be able to work on that integration. So that is why
12 you need to tabletop things and drill things separate from a
13 full-scale exercise, which is consistent with 0654.

14 Q Shouldn't these exercises and drills then also be
15 done before an actual emergency, before the integrated
16 response has to be done in an actual emergency?

17 A (WITNESS ADLER) Yes. And I misunderstood your
18 earlier question, I'm sorry.

19 Q Okay. Number three, "improve coordination on
20 public information between state and county."

21 MR. ZAHLER: Ms. Straube, I am confused by the
22 last question. Tabletop drills and exercises before an
23 actual emergency? I am confused what the reference was to
24 actual emergency. I don't know what the question was
25 getting at.

1 MS. STRAUBE: The question was before there had to
2 be an integrated response to an actual emergency.

3 MR. ZAHLEP Is that something about doing these
4 drills and tabletop exercises before an exercise, an
5 emergency response? I mean, we don't know when an emergency
6 is going to occur. Maybe I'm missing something in the
7 question.

8 WITNESS ADLER: This is the reason for the
9 periodic exercise requirements. I'll put it in a fuller
10 context. Drills and tabletop exercises that Mr. Hardy
11 referred to should be a standard part of ever-present
12 planning preparedness at all levels. Now, obviously no one
13 is trying to time an accident to coincide with exercises,
14 drills and tabletops. It's a matter of continual and
15 constant preparedness. That is the purpose of training,
16 that is the purpose of drilling, that is the purpose of
17 tabletop exercises. That is in fact the purpose of the
18 periodic full exercise.

19 BY MS. STRAUBE: (Resuming)

20 Q Okay. Number three, "improve coordination on
21 public information." What were the problems that were
22 identified in the exercise that need to be corrected through
23 this recommendation?

24 A (WITNESS ADLER) I think the report deals with the
25 problems, but if I may address the question of public

1 information, assuming that is part of your concern. We had
2 testified earlier about the combined adequacy, and here I am
3 referring to the standard of 0654, the combined adequacy of
4 state and county brochures.

5 There were differences in the exercise county by
6 county in terms of information given to the public and
7 responses by the county, a call for sheltering in one case.
8 There was very little coordination among the counties in
9 coming up with a unified set of responses. That concerned
10 us. And we hope to see an improvement in that area.

11 Q So the coordination of public information you're
12 talking about, both public information prior to an emergency
13 and public information given out during an emergency, am I
14 correct?

15 A (WITNESS ADLER) Yes,

16 Q Both need improved coordination?

17 A (WITNESS ADLER) Yes.

18 Q What form would you anticipate this coordination
19 -- strike that.

20 How would you anticipate that this could be
21 corrected? Would it be a change in plans or would that
22 again be a drilling type of thing?

23 A (WITNESS ADLER) Both plans and training.

24 Q And plans at what levels?

25 A (WITNESS ADLER) All levels of responsible

1 action.

2 Q State and county?

3 A (WITNESS ADLER) Definitely.

4 Q Okay. For number 4, correction of this problem
5 involves one sentence, inclusion of one sentence in the
6 plan; is that correct, number 4?

7 A (WITNESS ADLER) I'm sorry, I didn't hear you.
8 Would you say it again?

9 Q Okay. We're on number 4. Would correction of
10 this problem involve including just one extra sentence in a
11 plan; is that correct?

12 A (WITNESS ADLER) I think that a rationale for that
13 one sentence might be worth adding. So let's say one
14 paragraph.

15 CHAIRMAN SMITH: I have lost the drift of the
16 testimony.

17 WITNESS ADLER: The question, Mr. Chairman, dealt
18 with whether or not item 4 could be satisfied with a
19 one-liner. And I don't want to go on the record as
20 suggesting that one of the seven most important items,
21 number 4, can be easily fixed by a one-line statement in the
22 plan.

23 CHAIRMAN SMITH: Then you said, however a
24 paragraph might do it.

25 WITNESS ADLER: I'm sorry, I was being facetious.

1 CHAIRMAN SMITH: Well, I didn't say that you
2 were.

3 WITNESS ADLER: I'll amplify if you wish.

4 CHAIRMAN SMITH: I'm up with you now. I just lost
5 the thrust of what you were doing.

6 WITNESS ADLER: You see, it's very important that
7 practice and intent and philosophy in the concept of
8 operation be accurate. And we felt that by adding an
9 explanation of Pennsylvania's policy to evacuate is
10 important in the plans. We don't feel it is adequately
11 reflected.

12 BY MS. STRAUBE: (Resuming)

13 Q Would I be correct in stating that the state plan
14 and Lancaster County's plans are the only two of the six
15 that do not contain this particular information?

16 A (WITNESS ADLER) To my knowledge or to our
17 knowledge, it's not included in any of the plans.

18 Q I guess we're going to have to let the plans speak
19 for themselves.

20 Has FEMA done an independent analysis of the
21 acceptability of this approach of evacuation of either the
22 entire ten-mile EPZ or none? Do you want me to repeat the
23 question?

24 A (WITNESS ADLER) If my answer is unresponsive,
25 tell me. But I'd like to say that FEMA does not find this

1 approach to be an unacceptable one from its standpoint in
2 meeting the 0654 requirements.

3 Q My question is whether you've done an analysis of
4 whether that is acceptable or not or are you, because it is
5 in the plan, accepting it?

6 A (WITNESS ADLER) We've not done an independent,
7 detailed analysis.

8 CHAIRMAN SMITH: Could you explain that? It seems
9 that the only variance from 0654 is that it does more than
10 is required by 0654, and why would FEMA object to that?

11 WITNESS ADLER: We don't object, sir. But we feel
12 from our understanding of the way the state wishes to
13 respond in an incident of this kind, namely by actions that
14 are -- might be viewed as more extreme than are necessary
15 for the safety of the public, that if indeed this is the
16 position, to take this action, we would like to see it
17 better reflected in the plans.

18 There is nothing wrong with it. There is no
19 objection to it.

20 CHAIRMAN SMITH: I understand. Is there a concept
21 that, by electing to evacuate the entire ten-mile EPZ or
22 none, that there will be a greater psychological barrier to
23 taking the large action of evacuating the entire EPZ as
24 compared to a lesser action of a quadrant. Is that part of
25 the consideration

1 WITNESS ADLER: No, sir. In fact, I understand
2 that the state believes there would be a lower psychological
3 impact during --

4 CHAIRMAN SMITH: I wasn't referring to the
5 psychological impact of the potential evacuated people. I
6 was talking about the psychological barrier on the Governor
7 or the appropriate state official of taking a large action
8 as compared to a smaller action. I mean, to evacuate the
9 entire ten-mile EPZ is going to be four times, probably,
10 more disruptive of the people than evacuating a quadrant.

11 Is there any consideration that that action may be
12 deferred when appropriate, because of the very scope of the
13 action?

14 WITNESS ADLER: No.

15 (Pause.)

16 WITNESS HARDY: There is always the possibility
17 that it could. This is one of the reasons why we would like
18 a full explanation or a layout out of this concept in that
19 section of the plan called the concept of operations, so
20 that the state explains what it is that they intend to do
21 and why they intend to do it that way, so that everyone that
22 is using the plans and wants knowledge about the plans can
23 see that this is the state's policy and how they have
24 arrived at that rationale and how they intend to carry it
25 out.

1 Because it is certainly more of a strain on
2 resources, for instance, to evacuate a ten-mile ring rather
3 than a sector. And as you state, there could be a
4 possibility of an action being delayed because of that. But
5 if it is stated clearly in the plan, we feel that that would
6 not be a factor.

7 BY MS. STRAUBE: (Resuming)

8 Q All right, let's move on to number 5, which would
9 be distribution of potassium iodide and dosimetry equipment
10 to the lowest organizational level. Does 0654 require
11 predistribution of potassium iodide?

12 A (WITNESS ADLER) No.

13 Q Does it require planning for the predistribution
14 of potassium iodide?

15 A (WITNESS ADLER) No.

16 (Pause.)

17 Q Does it --

18 A (WITNESS ADLER) The concerns with the adequate
19 protection of emergency personnel workers. And of course,
20 we believe that predistribution of potassium iodide will
21 help in that regard, and so we would prefer to see that
22 done. It is not a requirement in 0654.

23 By the way, I'm sorry, there are no requirements
24 in 0654, either. But it is not called for in the standard
25 in 0654.

1 Q Is predistribution of dosimetry equipment called
2 for or required in 0654?

3 A (WITNESS ADLER) No. The point is that you have
4 to have it either one way or the other. If you are not
5 going to predistribute potassium iodide or dosimetry, you
6 should have a plan to distribute the two. It is our opinion
7 that predistribution of both of these to the lowest
8 organizational level would be preferred, but not required.

9 Q The state's plan provides for predistribution of
10 potassium iodide; is that correct?

11 A (WITNESS ADLER) Yes.

12 Q And am I correct in stating that FEMA has found
13 the predistribution plan of the state for potassium iodide
14 to be sufficient or adequate?

15 A (WITNESS ADLER) Yes.

16 Q What sources are presently available for potassium
17 iodide that FEMA knows of?

18 A (WITNESS ADLER) Well, in the exercise the state
19 used one source in Illinois. I don't remember the name of
20 the company. But I don't believe we viewed that, either
21 PEMA or FEMA, as an ongoing reliable source. I believe that
22 the state is looking into finding alternative reliable
23 sources for the future.

24 I might add that FEMA separately is working toward
25 being able to augment state requirements across the United

1 States as a part of its responsibility to meet unmet
2 resource needs of states in an accident.

3 Q Would that be during an accident or also prior to
4 an accident?

5 A (WITNESS ADLER) FEMA is working toward
6 predistribution, so that the augmentation, if required
7 during an incident, would be speedy and effective, of the
8 people involved who have to receive it.

9 Q So are you stating that FEMA would be, if
10 necessary, willing to augment the predistributed supply,
11 willing to add to that supply which is being predistributed,
12 at the time it is predistributed?

13 A (WITNESS ADLER) That is our intention.

14 MS. STRAUBE: Okay. Chairman Smith, I would just
15 like, through these witnesses, to bring the record up to
16 date, on what the Commonwealth's plans or status is on
17 potassium iodide, only because I don't want to bring in
18 another witness.

19 Julia Cox last stated that we were looking for a
20 liquid form -- unless that's really more -- is it okay if I
21 do it through these witnesses?

22 CHAIRMAN SMITH: Yes.

23 BY MS. STRAUBE: (Resuming)

24 Q Are you aware of what the state's present plan is
25 on potassium iodide and its predistribution?

1 A (WITNESS ADLER) Yes.

2 Q Am I correct in stating that the state has
3 abandoned the idea of predistributing Lugal, which is a
4 liquid form of potassium iodide?

5 A (WITNESS ADLER) Yes, although I never saw that
6 liquid predistribution in any document. It was rather a
7 part of testimony which I was witness to here.

8 Q But is it your understanding that the state is not
9 now going to predistribute a liquid form of

10 WITNESS ADLER: ?

11 A (WITNESS ADLER) That is my understanding, yes.

12 Q And if you know, is that because the FDA has not
13 approved that liquid form of potassium iodide for thyroid
14 blocking use?

15 A (WITNESS ADLER) I understand that that is among
16 the reasons the state has decided to abandon that approach.

17 Q So am I correct in stating that the state has gone
18 back to its original plan which is stated in Annex C, of
19 predistributing the pill form of potassium iodide?

20 A (WITNESS ADLER) That is my understanding.

21 Q And am I also correct in stating that the only
22 supply of pill form of potassium iodide which is presently
23 available expires December 31st, 1981?

24 CHAIRMAN SMITH: The source or the efficacy?

25 MS. STRAUBE: I'm sorry. The pills themselves

1 expire. Should I rephrase the question, the shelf-life.

2 WITNESS ADLER: I'd welcome a rephrasing of the
3 question.

4 CHAIRMAN SMITH: All right.

5 BY MS. STRAUBE: (Resuming)

6 Q Are you also aware that the only supply of pills,
7 of pill form of potassium iodide, has a shelf life which
8 expires December 31st, 1981?

9 A (WITNESS ADLER) I am aware that that source has a
10 stated shelf-life of two years, which would make your
11 presumption correct that at the end of December it's not
12 valid for use.

13 I also understand that the basis on which the
14 two-year shelf life is stated on the product is coming under
15 further scrutiny, and if we may be just optimistic here for
16 a moment, should that be extended and doubled, for example,
17 then I would urge the state to consider expenditures by
18 buying that source with at least a two-year remaining shelf
19 life if indeed that were the only and best source
20 available.

21 We do have a problem in getting these pills
22 provided, and I would encourage the state to probe in that
23 area of increased shelf life for that pill.

24 Q With dosimetry, would I be correct in stating that
25 FEMA essentially finds the predistribution plan for

1 dosimetry of the state to be adequate?

2 A (WITNESS ADLER) We do.

3 Q But you have found that the dose --

4 (Pause.)

5 A (WITNESS ADLER) I would like to amplify. In the
6 case of the dosimetry, I understand the plans speak to an
7 available storage location, a single one within the state,
8 at Indian Town Gap, I believe. This then would mean that I
9 was wrong when I said we agree with its predistribution.
10 That is one storage point, and we would hope to see
11 dissemination well in advance of any incident to the lowest
12 organization level of dosimetry as well, which is not called
13 for in the plans right now.

14 Q Did the exercise show that there was an inadequate
15 supply of dosimetry to distribute to all the emergency
16 workers?

17 A (WITNESS ADLER) Yes.

18 Q Would FEMA -- okay. When we're talking about
19 dosimetry, are we talking about TLD's? Is FEMA willing to
20 accept the use of film badges instead of TLD's?

21 A (WITNESS ADLER) We're willing to discuss that
22 with the state. I have to look at things like the accuracy
23 of film badge measurement vis a vis TLD's. I know this is a
24 very detailed and technical area, and I am pursuing it with
25 our experts in FEMA.

1 If it is a simpler and equally adequate method for
2 the protection of emergency personnel workers, then you can
3 be assured that FEMA will not only endorse it but encourage
4 its use.

5 MR. TOURTELLOTTE: Mr. Chairman, I don't know that
6 I'm entering an objection, but I would make an observation.
7 I really don't understand this cross-examination. It
8 doesn't appear to me to be testing anything. It does not
9 appear to be going to the weight or the credibility of the
10 FEMA testimony. And as a matter of fact, with one or two
11 exceptions, it just seems to be the kind of thing that most
12 of the time FEMA would be talking to FEMA about over a
13 conference table.

14 And I don't understand why this hearing has to be
15 the place where they conduct a conference. That's all I
16 have to say.

17 CHAIRMAN SMITH: Mr. Adler has explained early in
18 the opening of the emergency planning evidentiary session
19 the unusual and rather difficult position the Commonwealth
20 has in this proceeding. We have recognized that. We have
21 accepted their approach.

22 I myself have expressed some frustration
23 sometimes. But it does appear that not only the
24 Commonwealth, but Intervenors are using the adjudicative
25 proceeding for discovery. But I don't see that as the

1 problem here.

2 She's trying to establish on the evidentiary
3 record positions, and I think she's not using it for
4 discovery. She's trying to establish the position of FEMA
5 with respect to the Commonwealth's compliance with their
6 regulations.

7 MS. STRAUBE: And I think, Mr. Chairman, with the
8 next question Mr. Tourtellotte will see what the point to
9 the questions was.

10 MR. ZAHLER: Ms. Straube, if I could interrupt one
11 second, to make sure that the evidentiary record is clear.

12 Mr. Adler, when you were answering the questions
13 with respect to the shortages of dosimetry, is it correct,
14 as Ms. Straube stated, that that relates only to TLD's and
15 not to self-reading dosimeters, which was Mr. Bath's
16 testimony last week?

17 WITNESS ADLER: The shortfall is exclusively in
18 TLD's. But my concern was with inadequate predistribution
19 mechanisms for all dosimetry.

20 MR. ZAHLER: I understand that is another part of
21 your testimony. But you just answered a question about a
22 shortfall of dosimetry. Ms. Straube made the comment that
23 was TLD's and I just wanted to state as an evidentiary
24 matter that that is what you referred to when you answered
25 the question now on shortfall in dosimetry.

1 WITNESS ADLER: Yes.

2 CHAIRMAN SMITH: Incidentally, in my previous
3 remarks I referred to Mr. Adler having explained the
4 Commonwealth's position. I was referring to Mr. Robert
5 Adler, the Assistant Attorney General, not the witness, of
6 course.

7 BY MS. STRAUBE: (Resuming)

8 Q Taking into consideration the present state of
9 planning and preparedness of the state for dosimetry and
10 potassium iodide, what assurance do you have that there will
11 be adequate protection taken for emergency workers during an
12 emergency?

13 A (WITNESS ADLER) Relatively little assurance that
14 such precautionary measures will be taken in those specific
15 areas. There are other ways of providing precautionary
16 measures for emergency workers: keeping them in an exposed
17 area for a shorter period of time than might otherwise be
18 necessary, using wet gauze and alternative approaches for
19 protection in the exposed area.

20 But the mission of protecting the public health
21 and safety is not at all undermined by the present state of
22 affairs, in our judgment.

23 (Pause.)

24 A (WITNESS ADLER) My colleagues want me to amplify
25 on the "very little assurance" statement. We are concerned

1 mainly with seeing a greater effort at predistribution of
2 these valuable protective measures. As that increases, the
3 degree of assurance will increase that emergency personnel
4 workers are receiving a desirable level of protection.

5 Q Could you amplify what the other protective
6 items? You referred to them several times throughout the
7 written testimony also. What other protective items do you
8 feel are available for emergency workers?

9 A (WITNESS ADLER) I think I just identified perhaps
10 the most important alternate one. In other words, in a
11 situation where you don't have dosimetry, for example, you
12 don't know what is happening to the exposed persons, the
13 best you can do is get them in and get them out. This means
14 rotating large numbers of people, larger numbers of people
15 than might otherwise be planned for.

16 And an additional way of handling it might be to
17 smear or spread the utility of those dosimeters, which might
18 be in shorter supply than you like, among groups. If five or
19 ten people are working at a problem in the exposed area,
20 perhaps ambulance personnel, and they are all within a very
21 small area and you don't have one set of dosimetry for each
22 man, but you know that five of these people are working as a
23 coherent close team, then one set of dosimetry is what you
24 would use to generalize the exposure of those five.

25 These are common sense applications I guess one

1 final example is protective clothing and, of course, air
2 breathing apparatus. I think those methods have been
3 documented in earlier testimony, probably more than once.

4 Q Okay. Let me deal with them real quickly
5 individually. The first you said, rotating personnel, or
6 more specifically sharing the dosimeters among the available
7 personnel. Those are the types of decisions that would be
8 made during emergencies; is that correct?

9 A (WITNESS ADLER) I don't think those are decisions
10 that are made during an emergency. With the kind of
11 planning we have now at state and county levels, those, if I
12 may be permitted, fallback positions are where we are
13 today. They are understood by all parties. Remedial
14 measures are being taken, those we have discussed: attempts
15 to predistribute and beef up the level of supplies to a
16 level where all emergency workers get adequate protection.
17 I don't think it is a one-shot deal.

18 Q The breathing apparatus that you referred to, is
19 that available, do you know, for the state? Does the state
20 have a supply of that breathing apparatus available?

21 A (WITNESS ADLER) I don't know the availability of
22 breathing apparatus to the state at this time, and I don't
23 view it as a very significant point, frankly.

24 Q Okay. Let's go to number 6, "complete access
25 control system." Does the present state planning adequately

1 provide for access control?

2 A (WITNESS HARDY) No.

3 Q What present assurance do you have that access
4 control can be implemented during an emergency?

5 A (WITNESS HARDY) Number 6 speaks for itself. It
6 says they lack demonstrated capability.

7 Q Okay. I have a --

8 CHAIRMAN SMITH: Wait a minute. Was that an
9 answer to your question? The question is, what assurance is
10 there, and you repeat the observation. The question was,
11 what assurance is there that there can be demonstrated a
12 capability for a complete access control system. And you
13 say, well, number 6, a lack of demonstrated capability.
14 That's a non sequitur, isn't it? Or have I missed the
15 thread of the question and answer?

16 WITNESS ADLER: There are deficiencies in that
17 area, which are documented on page 22, Mr. Chairman. And I
18 think this is really what Mr. Hardy was reacting to.
19 There's a whole page of description, which demonstrates that
20 access points are very, very few in number in terms of the
21 exercise. They're quite large in number in terms of the
22 need.

23 There were weaknesses in the exercise to
24 demonstrate that those, I think two or four, a very small
25 number, were handled well, and therefore aren't

1 representative of a high degree of adequacy in the access
2 control points area.

3 CHAIRMAN SMITH: Were you satisfied with the
4 answer?

5 MS. STRAUBE: Yes.

6 WITNESS ADLER: I might add that we will be
7 working --

8 CHAIRMAN SMITH: Well, let's review. What was the
9 question and what was the answer?

10 MS. STRAUBE: The question was, what assurance do
11 you have that access control can be implemented during an
12 emergency.

13 CHAIRMAN SMITH: And the answer was?

14 MS. STRAUBE: There was a lack of demonstrated
15 capability.

16 CHAIRMAN SMITH: So then you have no assurance.

17 WITNESS HARDY: No demonstrated assurance, yes,
18 that is correct.

19 CHAIRMAN SMITH: Okay.

20 BY MS. STRAUBE: (Resuming)

21 Q Is correction of this problem a planning issue and
22 a drilling issue?

23 A (WITNESS HARDY) I view it as a plans, equipment
24 and training issue, all three of those.

25 Q I have a few relatively short questions on certain

1 individual of the recommendations if you want to follow me
2 through. The first one is number two, which is on page 6,
3 regarding the nomenclature of a state of emergency. Are you
4 aware that that nomenclature "state of emergency" is
5 statutorily defined, that it is defined in statute?

6 A (WITNESS ADLER) I wasn't aware of it. I am glad
7 to know it.

8 MS. STRAUBE: Chairman Smith, I don't have to have
9 you take official notice of the Pennsylvania statutes, do
10 I?

11 CHAIRMAN SMITH: Well, you have a practical
12 problem. If you don't, we won't know what we are officially
13 noticing. We would at least need a copy of the statute that
14 you wish us to officially notice. We should officially
15 notice it and have a copy.

16 MS. STRAUBE: I could provide copies after the
17 break. I would ask now -- it is the Pennsylvania Emergency
18 Code. It is Title 35, the Purdon's Statutes, Section 7101
19 et seq.

20 MR. ZAHLER: Ms. Straube, could you identify the
21 particular provision in the Pennsylvania Emergency Code
22 where the state of emergency is defined, for those of us who
23 are less familiar with the Pennsylvania statutes?

24 MS. STRAUBE: It is 35 Purdon's, P-u-r-d-o-n-s,
25 Section 7301(c), entitled "Declaration of disaster

1 emergency."

2 MR. ZAHLER: Thank you.

3 CHAIRMAN SMITH: The Board panel library does not
4 have the state codes, so it would be very helpful if we had
5 a copy of them.

6 MS. STRAUBE: I will provide them today.

7 BY MS. STRAUBE: (Resuming)

8 Q So to follow up on that, is the problem you have
9 identified in recommendation number two actually an
10 information exchange problem?

11 A (WITNESS ADLER) Yes, but it's also a
12 communications problem.

13 Q Why don't you explain. I think we're saying the
14 same thing. Explain what you mean by communications
15 problem.

16 A (WITNESS ADLER) We want people to respond to a
17 set of words, which are a direction or a guide. We don't
18 want them to be confused by it. And we're just pointing out
19 that there was some element of confusion because of the
20 groupings of words and their similarity used by the state
21 and used by condition of an accident.

22 Q Okay. Specific recommendation number 5, which is
23 on page 7, was this actually tested during the exercise or
24 was it simulated?

25 A (WITNESS ADLER) It was actually demonstrated.

1 Q So in each county they actually notified each
2 municipality within the ten-mile EPZ, even though all the
3 municipalities didn't play, as it were?

4 A (WITNESS SWIREN) During the exercise, even though
5 a very limited number of municipalities fully participated,
6 the notification portion of the county EOC's was tested in
7 terms of making a phone call or radio message. That was the
8 extent of it for most of the other municipalities.

9 Q But not all of them?

10 A (WITNESS SWIREN) Well, in Dauphin County they did
11 go down the list. I believe it was all of them.

12 Q Okay. Were you an observer in Dauphin County; is
13 that correct?

14 A (WITNESS SWIREN) Yes.

15 Q What was the total time required in Dauphin
16 County, for example, to notify all the municipalities?

17 A (WITNESS SWIREN) I can't give you an exact time.
18 I really don't remember. But I think it was in the
19 neighborhood of 12 to 15 minutes.

20 Q And would probably Mr. Hardy know what the total
21 time required in the other counties -- well, York didn't
22 play -- in the other counties required to notify all the
23 municipalities?

24 A (WITNESS HARDY) Recommendation 5 is based on
25 observation that is mentioned in that section of the

1 report. I would have to look through the report to see what
2 that observation was directly related to. Although a
3 particular incident brought about the recommendation, the
4 recommendation would apply across the board if applicable.

5 In other words, if it would speed up notification
6 the recommendation would be to assign additional personnel
7 to notification. If you want me to look through and find
8 the incident -- well --

9 Q What I'm really getting at, and I don't want to
10 look through this now, if you assure show me that the
11 numbers are in here, I guess I'll have to believe you. What
12 was the total time required by each of the counties
13 participating to notify all the municipalities?

14 A (WITNESS HARDY) I don't remember.

15 A (WITNESS SWIREN) It wasn't that long. They did
16 follow their planned phone and radio, or their planned
17 communication contact.

18 A (WITNESS HARDY) Looking at the observations on
19 page 4 under Cumberland County, the second sentence under
20 Cumberland County says: "Message appears timely and
21 concise. However, there was a time lag in alerting the
22 municipalities by the county, 30 to 50 minutes, in all
23 status changes except the general emergency, which was
24 promptly transmitted."

25 Q Is there a maximum allowable notification time for

1 municipalities?

2 A (WITNESS HARDY) No.

3 Q Number 14, which is on page 13, I think. What do
4 you mean by the phrase "compression of time artificially
5 inserted into the exercise"?

6 A (WITNESS ADLER) The actions that took place in
7 the exercise took place during a work day, because it was an
8 exercise. In real time in an accident, we would expect that
9 it would not all take place within a work day, and so the
10 time intervals are compressed between actions in the
11 exercise from those times we would expect it to take place,
12 to transpire in a real-time emergency.

13 Q So some of the things would have taken longer
14 during a real emergency?

15 A (WITNESS ADLER) Yes, yes.

16 Q With that answer, I guess I don't follow what the
17 rest of the paragraph has to do with the first sentence.
18 The items that you -- go ahead.

19 A (WITNESS HARDY) The point is that, if I could
20 give an illustration that is not necessarily from the TMI
21 exercise, but just in general, if you were in a
22 classification level of alert, say, and it called for you to
23 carry out certain procedures and it takes a certain amount
24 of time to do that within a sequence, and before you finish
25 that sequence of events the exercise calls for you to shift

1 into a site emergency in order to then handle the site
2 emergency requirements, you would drop what you are doing
3 under the alert status, which would not give the observer
4 the opportunity to see you complete those activities.

5 So because of the compression you don't have the
6 opportunity, as it says, to permit the completion of some
7 processes that might be called for. So in order to work on
8 those things, the suggestion is that certain drills and
9 tabletop exercises --

10 Q So the things that you've listed in the rest of
11 paragraph 14 or recommendation 14 are those things that you
12 feel were not done because of the compression of time in the
13 exercise?

14 A (WITNESS HARDY) Not necessarily. Those are areas
15 that should be drilled and tabletop exercised. That doesn't
16 mean that in all cases all of those were not done to
17 completion.

18 Q How is the compression of time -- why do you say
19 that is artificially inserted into the exercise? Isn't it
20 possible that during an actual emergency the time could
21 actually go much faster?

22 A (WITNESS ADLER) It is possible. Let me amplify.
23 I feel that in future exercises, for example, there may be
24 break points in the scenario which could take place at the
25 end of a work day and the exercise itself could resume the

1 following day, for example at a point where the change from
2 site emergency to general emergency might take place. And
3 then if that were so, the offsite actions to demonstrate
4 preparedness could take place over another full -- over many
5 more hours than might be available if -- might be available
6 than if you are trying to do everything within a limited
7 time span, a more limited time span.

8 Example: If we used a ten-hour work day for the
9 exercise and the next time we used a 25-hour period with
10 logical break points, obviously compressions that the report
11 refers to need not take place.

12 Q Well, if you extended the work day to 25 hours or
13 extended the time sequence of the exercise, how realistic
14 would it be?

15 A (WITNESS ADLER) Very, perhaps more so than when
16 you are encumbered by time compressions. And I have already
17 discussed this with PEMA and gotten preliminarily positive
18 reactions.

19 Q I have no doubt that you discussed it with PEMA.
20 I'm trying to establish something on the record.

21 A (WITNESS ADLER) I don't know that and I can't
22 tell. I'm trying to give you as much meaningful information
23 as I can.

24 Q I understand that.

25 A (WITNESS ADLER) If you could help me in this

1 regard and tell me what you're trying to establish, I might
2 be more concise.

3 Q It was my understanding that the scenario for any
4 type of full-scale exercise was to be realistic and was
5 supposed to test whether the plans could be implemented
6 under realistic circumstances. And what you are describing
7 to me is making them more and more unrealistic so that you
8 can implement the plans.

9 A (WITNESS ADLER) It is my hope to make them more
10 and more realistic, rather than the converse. I'm sorry if
11 the converse is your impression.

12 DR. JORDAN: What you are saying apparently is
13 that FEMA believes a scenario in which you go from an alert
14 to a full-scale emergency is not likely to happen in a
15 matter of a few hours. Now what is the basis for FEMA's
16 belief that accidents don't go this way. Is it on the basis
17 of the WASH-1400?

18 Why does FEMA believe that that is a long
19 process?

20 WITNESS ADLER: FEMA is not trying to make a
21 judgment about the time period for an accident. I am trying
22 to say, and very poorly, obviously, that what we would want
23 to do is exercise as many components in the emergency
24 planning and preparedness effort as we can. It may or may
25 not bear any relationship to the time interval during which

1 an accident takes place. And that is the reason that the
2 exercise is preceded by training, drills, tabletop
3 exercises, which in fact exercised portions of the overall
4 are required and are so important.

5 We are not trying to prejudge or guess at what a
6 realistic time is for an accident to take place.

7 DR. JORDAN: Well, I guess I was confused by our
8 answer to Ms. Straube saying that you were, according to her
9 feelings, that you were departing from reality in stretching
10 it out over 25 hours. And you felt, you said, that that was
11 more realistic of what might actually happen. I just
12 wondered what was the basis for your saying it was more
13 realistic.

14 WITNESS ADLER: The concern is as great for an
15 accident that takes place rapidly as for one that takes
16 place over a long period of time. What we are trying to do
17 is to make sure that all of the reaction components to the
18 emergency have ample time to be demonstrated, to be
19 practiced.

20 CHAIRMAN SMITH: This leads then to another
21 question. Is it FEMA's purpose to test over a broad
22 spectrum of anticipated events, as compared to a worst
23 case?

24 WITNESS ADLER: Definitely.

25 DR. LITTLE: You are essentially testing to see if

1 all of the different parts of the plan can operate, but not
2 within some fixed period of time. This is like a test in
3 which you have 100 questions and you want to check all of
4 those questions. You are not doing a test in which you see
5 how many questions can be answered in say 25 minutes.
6 You're not looking at the time relationships, really, are
7 you, at elapsed times? You are looking at sequences, but
8 not elapsed time.

9 WITNESS ADLER: Sequences, yes. But may I
10 analogize? When you study and train on a reactor simulator,
11 you want to react in the control room to sets of data
12 circumstances correctly. It may happen quickly, it may
13 happen slowly. In that setting you have the benefit,
14 because of your computer, to be able to go back and stretch,
15 perhaps examine 40 actions that took place in 30 seconds,
16 over six hours or days if you want to be able to study in
17 order to correct later on.

18 Another analogy: You will go for a week and
19 practice tennis, and videotapes can be played back so that
20 you look at your mistakes and correct them.

21 But the functions are in a sequence that tries to
22 characterize reality as best as possible in the
23 circumstances of an accident, any accident.

24 WITNESS HARDY: If I could add a little bit to
25 that, this is one of the reasons why 0654 calls for

1 exercising over a five-year period. You can't exercise
2 everything and you can't see everything in one exercise,
3 because there are different scenarios that could occur and
4 there are different ways of approaching different parts of
5 an exercise, and those things that you see in one exercise
6 may lead you to want certain scenarios and to work on
7 certain things in the next exercise or in exercises that
8 occur every year. You might find there are certain things
9 that need continual review.

10 So you have to vary your scenario in order to try
11 to see this class of capabilities. And it is important, on
12 the one hand, to see how fast events can take place, events
13 -- that is, they can respond to events. But then again, at
14 the same time if it occurs too quickly, as an observer you
15 don't have the opportunity to see them go through the whole
16 sequence for that event before they have to move on to a
17 more critical problem because you've gone on to another part
18 of the scenario.

19 MR. TOURTELLOTTE: Mr. Chairman, I think that
20 possibly this line of questions, at least Dr. Jordan's
21 question, leads me to believe that perhaps the Board might
22 get a misimpression about the time sequence business, that
23 this was entirely FEMA's product, when in fact it was not.

24 And if this board, this panel, were asked the
25 questions, I think they would respond that in fact FEMA came

1 up with a time sequence, FEMA submitted that time sequence
2 to the state, the state requested that FEMA change it, FEMA
3 changed it. Then the state requested that they change it
4 again and FEMA changed it again.

5 And there were also inputs from the Licensee. And
6 so the time sequence is not one which FEMA just arbitrarily
7 picked out of the air. It was one that was looked at in
8 conjunction with the state, which makes me even wonder once
9 again about this line of questioning. But that is just my
10 comment.

11 MS. STRAUBE: Chairman Smith, I am not trying to
12 criticize the scenario of the exercise. I am just trying to
13 establish how many conclusions can be drawn from the
14 exercise and what kind of conclusions can be drawn from what
15 was shown in the exercise.

16 CHAIRMAN SMITH: What are you presenting these
17 papers for anyway, Mr. Tourtellotte? I don't understand
18 your objection to the cross-examination. They are questions
19 directly related to the papers that you offered into
20 evidence and were received, and this panel is here to
21 testify on.

22 MR. TOURTELLOTTE: Well, the purpose of
23 cross-examination is generally to test the witnesses, and
24 the ultimate outcome and the ultimate decision that is
25 supposed to be made on the basis of the evidence that is

1 rendered. And what we are talking about here isn't testing
2 anything. All it is is inquiring about certain reasons why
3 parts of the testimony was developed or how it was
4 developed.

5 And it really did not make any difference on the
6 basis of the testimony that Mr. Dickey gave yesterday, which
7 was totally uncontroverted either by any affirmative
8 evidence -- and it appears there will be none -- or by any
9 cross-examination of Mr. Dickey, that he took all of these
10 factors into consideration in toto, and he arrived at his
11 conclusion.

12 And it doesn't make any difference if one or the
13 other of those factors at this time is under attack, because
14 there is no indication that even if it is attacked
15 successfully that it will cause any different conclusion to
16 be reached from the evidence that is submitted. And
17 consequently, the cross-examination is meaningless in terms
18 of developing reliable and probative evidence.

19 I will grant you that in terms of the
20 administrative law cliché -- and I call it a cliché because
21 I think it is badly abused -- of developing a more full and
22 complete record, that we're developing a full record. And
23 whether it is complete in terms of meaningful evidence is
24 something else, and I don't believe it is. That is a
25 judgment call from my end.

1 But I don't really mind the witnesses being
2 cross-examined on something that is significant. But it
3 even seems to me the examination of Ms. Straube, by the
4 state, did not in any way indicate that the state had
5 anything to do with establishing these time constraints, and
6 it is as though it was somehow imposed on the state or it
7 was somehow imposed on the exercise superficially by FEMA.
8 And I think that is a disingenuous approach, and it doesn't
9 in the final analysis lend anything to the evidentiary
10 record.

11 MS. STRAUBE: Chairman Smith, I'd like to respond
12 not as the attorney for the Commonwealth but just as an
13 attorney. What Mr. Tourtellotte is doing is, yesterday he
14 gave us Mr. Dickey and Mr. Dickey said, I made this decision
15 that it was adequate and I made the decision without the
16 basis of any standards and on the basis of these documents,
17 I guess those three documents, but don't ask my any
18 questions about these three documents.

19 We now have the people who can substantiate the
20 three documents and we're being told, don't ask them any
21 questions either. I mean, I'm sorry, I don't understand
22 exactly what fair and due process is being given here.

23 CHAIRMAN SMITH: Well, we have not sustained any
24 objections, but I think Mr. Tourtellotte does have a right
25 to inquire, a right to know, when it is not clear from your

1 questioning what the purpose of your cross-examination is.
2 It is an inference that could be made, not unreasonably,
3 that there was an implied criticism of FEMA in the time
4 intervals in the exercise. And I think his inquiry was
5 reasonable.

6 Again, I myself have indicated an unhappiness with
7 where we find ourselves in this emergency planning
8 adjudication, and there's no use going over that again. But
9 are you developing a record upon which you intend to make
10 proposed findings on these issues? Of course, you may not
11 know until you get the answers.

12 MS. STRAUBE: That is true, I don't know what our
13 findings will be until we get the answers.

14 CHAIRMAN SMITH: But you are approaching it with a
15 reasonable expectation that you may make proposed findings
16 on these answers?

17 MS. STRAUBE: Yes.

18 CHAIRMAN SMITH: Okay.

19 MS. STRAUBE: I'm also done with that line of
20 questioning. I don't have that much left.

21 CHAIRMAN SMITH: Well, that representation is
22 sufficient. Are you done with the line of questions on the
23 one item 14?

24 MS. STRAUBE: Yes. I would like to ask some
25 questions on route alerting.

1 BY MS. STRAUBE: (Resuming)

2 Q Is there a maximum allowable time for route
3 alerting?

4 A (WITNESS HARDY) No.

5 Q Doesn't Appendix 3 of NUREG-0654 recommend that 45
6 minutes be the maximum time for route alerting?

7 A (WITNESS HARDY) I believe it does.

8 Q What is the function of route alerting during an
9 emergency?

10 A (WITNESS HARDY) To alert the population to turn
11 on their radios to get information.

12 Q Is it a backup system to the siren notification
13 system?

14 A (WITNESS HARDY) It could be.

15 Q Under the present state of planning, is that what
16 it is designed to be in the TMI area?

17 A (WITNESS ADLER) Currently there is no siren
18 system, so it is not a backup. It is the primary means of
19 alerting the population.

20 MS. STRAUBE: Chairman Smith, in light of the NRC
21 staff position, I think I'm going to skip most of that line
22 of questioning.

23 CHAIRMAN SMITH: That is your decision, Ms.
24 Straube. There's nothing that the Board has ruled.

25 MS. STRAUBE: I'm just explaining.

1 MR. ZAHLER: Mr. Chairman, if I could jump in,
2 because I don't think the last response was actually
3 responsive to the question, which is under the current state
4 of planning -- that is, not what is in place now but what is
5 intended to be in place in the foreseeable future. The
6 question was, is route alerting intended to be the backup
7 for the siren system. We all understand that the siren
8 system isn't operational at the present time.

9 WITNESS HARDY: Yes, when the siren system is in
10 place route alerting would be a backup in case there should
11 be a failure.

12 BY MS. STRAUBE: (Resuming)

13 Q Well, then I misunderstand something. It was my
14 understanding that route alerting would be done and the
15 siren notification system would be used, that both would be
16 used.

17 A (WITNESS HARDY) No.

18 Q Then I think the previous testimony --

19 A (WITNESS ADLER) May I add something? It is my
20 belief that these are not mutually exclusive. There will be
21 a primary system. If that system, when tested, demonstrates
22 virtually 100 percent coverage to the standards that we
23 have, route alerting would be unnecessary to accomplish the
24 end that Mr. Hardy described.

25 If it were something less than that, route

1 alerting would supplement the primary means of alerting,
2 sirens.

3 Q Is recovery and re-entry a basic element of the
4 emergency response plans?

5 A (WITNESS ADLER) Yes.

6 Q Am I correct in stating that the exercise did not
7 require a change of shift?

8 A (WITNESS ADLER) True.

9 Q Was a second shift of personnel available at the
10 various EOC's?

11 A (WITNESS ADLER) At some, to the best of my
12 knowledge, it was.

13 Q What assurance do you have there are adequate
14 personnel available for two shifts?

15 A (WITNESS ADLER) The planning, together with the
16 representation of those two shifts in certain areas during
17 the exercise, is our basis for determining adequacy.

18 Q Is this something that should have a drill, for
19 this particular type of thing, a shift change, exchange of
20 information during a shift change?

21 A (WITNESS ADLER) Yes.

22

23

24

25

1 Q Okay. In attachment 2 you say there are public
2 education and information programs which are still under
3 development.

4 CHAIRMAN SMITH: Are you done with attachment 1
5 now?

6 MS. STRAUBE: Yes.

7 CHAIRMAN SMITH: All right. I think it may be
8 time for our morning break. But before you leave this
9 document -- well, I'll come back to the point after the
10 break.

11 Let's take a mid-morning break of 15 minutes.

12 (Recess.)

13 CHAIRMAN SMITH: Ladies and gentlemen, let's
14 proceed.

15 During the break I received a message that Mrs.
16 Aamodt wanted me to call and I did. And she will object to
17 receiving the latest letter from Mr. Blake to Mr. Adler on
18 commitments. She is uncertain whether she wishes to come to
19 the hearing and argue her objection or whether she wishes to
20 respond in writing. She is going to think about it.

21 I told her if she did not request an opportunity
22 to argue the matter before 11:30 this morning we will assume
23 that she has taken an option to respond in writing. And I
24 gave her the option of appearing at 9:00 a.m. or responding
25 in two weeks, 9:00 a.m. tomorrow or responding in writing in

1 two weeks. And she will let us know before 11:30 if she
2 wishes to come tomorrow.

3 Ms. Straube, I would like to inquire about the
4 status of your statement that the Commonwealth accepts the
5 71 and 72 recommendations. I think it may be something that
6 may be appropriately a matter of findings by the Board, and
7 I want to know if it is in the form of a commitment by
8 counsel or just an explanation of what the Commonwealth's
9 intentions are, or just exactly what the posture of the
10 Commonwealth's position is.

11 Can we accept it as a commitment, as a participant
12 in the case by counsel? Or do we need an affidavit, or what
13 form may we refer to it in our decision if we do refer to
14 it? And another option might be if you make it in your
15 proposed findings, that could also cover it.

16 MS. STRAUBE: I would like to respond formally
17 after lunch, after I've had an opportunity to talk to PEMA.
18 But essentially, my discussions with PEMA have indicated
19 that, except for the very first recommendation which we
20 discussed today, it is no problem. PEMA is committed to
21 either helping the counties resolve each of the
22 recommendations or those that are our own things to fix up,
23 we are committed to do them.

24 What we have not received any guidance on is when
25 they have to be done and which have to be done first. And

1 I'm not sure. I have to discuss it with my client. I'm not
2 sure we're willing to commit to when we're going to do each
3 one.

4 CHAIRMAN SMITH: Okay. The reason I'm raising it
5 is I wanted you to be aware that we regarded your statement
6 as being an important statement and we want you to realize
7 that we think it is an important statement. And if it is a
8 commitment, we want you to realize -- we want mutual
9 understanding that it is a commitment and that you as
10 counsel make the commitment.

11 MS. STRAUBE: May I suggest after lunch I come
12 back and tell you how we're going to do that?

13 CHAIRMAN SMITH: Sure.

14 Do you want to continue?

15 WITNESS ADLER: May I add something? During the
16 break I was corrected and I'd like the record to show that
17 the state does have a statement -- not the state, but there
18 is a statement dealing with 360-degree ten-mile evacuation
19 in more than one plan. It is not present in the state or
20 Lancaster plans, but I'm assured by Mr. Hippart of PEMA that
21 it does already exist in a couple of the plans.

22 CHAIRMAN SMITH: Yes, and I think we've heard
23 testimony on it, too, in the hearings.

24 MS. STRAUBE: Okay. Chairman Smith, just for your
25 information, most of what I had on the cross-examination

1 plan for attachment 2 has already been asked. So this
2 should be pretty quick.

3 BY MS. STRADLE: (Resuming)

4 Q In attachment 2 on public education and
5 information, you said that there are some such programs
6 still under development. I was wondering whether you meant
7 anything beyond the pamphlets which have already been
8 discussed here?

9 A (WITNESS ADLER) Where are you reading from?

10 Q In attachment 2, the section on public education
11 and information. It'll take me a moment to come up with
12 where it is.

13 (Pause.)

14 Q Section G under state and county plans, the third
15 paragraph.

16 A (WITNESS SWIREN) The areas that are being
17 referred to concern the printing and distribution of the
18 informational brochures, at the county level in particular.
19 That is the primary reference.

20 Q Okay. Is distribution of that material required
21 by 0654?

22 A (WITNESS SWIREN) The material that you're talking
23 about, could you characterize it more fully and then I can
24 answer it yes or no?

25 Q Well, let me start this way. Did Mr. Swiren --

1 was he just referring to the five county brochures and the
2 one PEMA brochure which are entered as exhibits?

3 A (WITNESS SWIREN) That is what I was referring to,
4 yes.

5 Q And my question was about whether the distribution
6 of those brochures is required by 0654.

7 A (WITNESS ADLER) Yes.

8 Q Okay. Also in attachment 2, you were discussing
9 radiological emergency response training. Am I correct in
10 stating that the FEMA-sponsored courses are available, but
11 all the personnel have not taken those courses yet? Section
12 O.

13 A (WITNESS ADLER) Please state the question.

14 Q Would I be correct in stating that the
15 FEMA-sponsored courses are available, but all the necessary
16 personnel have not taken them yet?

17 A (WITNESS ADLER) Yes. You said the FEMA courses?

18 Q Federal, yes.

19 Has FEMA, federal, assessed whether all emergency
20 response personnel have received the necessary training?
21 That would include state level, county level, and municipal
22 volunteers.

23 A (WITNESS ADLER) I'm sorry, the door slammed.

24 Q Has FEMA assessed whether all emergency response
25 personnel have received the emergency necessary training --

1 the necessary emergency training? And I'm including state,
2 county and municipal volunteers.

3 A (WITNESS ADLER) They have not.

4 Q Is that training required by 0654?

5 A (WITNESS ADLER) It is an integral part of the
6 overall training program requirements. It specifically is
7 not a requirement of 0654. It is a part of the whole
8 training effort that we want.

9 Q Does FEMA have any plans to monitor who gets
10 trained and when they get trained?

11 A (WITNESS HARDY) Yes. For those courses that are
12 federally sponsored, the FEMA courses, requests for
13 attendance at those courses come to the FEMA regions and the
14 individuals that are proposed to take those courses are
15 matched against the plans and the needs that are described
16 in the plans, to ensure that the individuals that are to
17 take the courses are in fact individuals that do need the
18 courses as laid out in the plan.

19 It is also our intention over the long haul to
20 know what training courses other than federal courses that
21 state and county and municipal people are receiving.

22 Q Would training of the state, county and municipal
23 personnel in FEMA courses only, with no other training, be
24 enough, be adequate for 0654?

25 A (WITNESS HARDY) It would depend on the individual

1 and their function during an emergency and whether or not
2 the course that they are going to take or have taken is
3 sufficient.

4 A (WITNESS ADLER) I would like to add that we don't
5 want to give you the impression that with the FEMA training
6 courses the hard work that has been done by the state in
7 ranking into its plans what we believe to be a very
8 important and valuable state-initiated program is not
9 necessary. It is.

10 Q Okay. My question is, does FEMA have plans to
11 monitor the status of the training program that has been
12 developed by the state?

13 A (WITNESS ADLER) We do.

14 MS. STRAUBE: Okay. I don't have any further
15 questions.

16 CHAIRMAN SMITH: Mr. Zahler?

17 MR. ZAHLER: I have one question.

18 CROSS-EXAMINATION

19 BY MR. ZAHLER:

20 Q Mr. Hardy, is it your understanding that during
21 the June 2 exercise the Licensee contacted each of the risk
22 counties directly at the time a general emergency was
23 declared?

24 A (WITNESS HARDY) Yes. My understanding -- and I
25 should say that is not from members of the offsite

1 evaluation team. Members of the team did not observe that
2 this happened. And with this, when I had this information,
3 these observations, I went to the onsite team leader, Dale
4 Donaldson, and asked him if he had any information on that.
5 And subsequently he told me that the logs were checked, the
6 Licensee's notification logs were checked, and that each of
7 the counties had been notified at the general emergency
8 level.

9 MR. ZAHLER: I have no further questions.

10 CHAIRMAN SMITH: Do you have any follow-on?

11 FURTHER CROSS-EXAMINATION

12 BY MS. GAIL BRADFORD: "

13 Q Mr. Adler, is the plan adequate if it assumes
14 sending emergency workers into a contaminated area without
15 dosimetry?

16 I'm sorry. Can you hear me all right?

17 CHAIRMAN SMITH: Wasn't this question asked and
18 answered of this panel? Ms. Bradford?

19 MS. GAIL BRADFORD: I could just leap into the
20 following question, if you'd like. Would you prefer?

21 CHAIRMAN SMITH: I don't have any preference one
22 way or the other. You see, there's two aspects. When a
23 question has already been asked and answered, not only is it
24 inappropriate but it is also misleading, because you strain
25 to identify the difference between the two questions. And

1 if there is no difference we should know.

2 But it seemed to me that the question was covered
3 yesterday. But if you have another purpose, okay. That is
4 the reason I wanted to know.

5 MS. GAIL BRADFORD: It seems to me to make more
6 sense than just asking a question which comes out of
7 nowhere, somehow, two hours after he was asked the question
8 before.

9 CHAIRMAN SMITH: All right.

10 MR. ZAHLER: Can I ask Ms. Bradford, request Ms.
11 Bradford to identify whether she's talking about all
12 dosimetry or TLD's or self-reading dosimeters?

13 MS. GAIL BRADFORD: Without the dosimeter which is
14 lacking at the moment.

15 WITNESS ADLER: The standards of 0654 state that
16 dosimetry is needed, and so there would be no -- it would be
17 deficient. They would be deficient in their plans without
18 dosimetry.

19 BY MS. GAIL BRADFORD: (Resuming)

20 Q But if an event came up, an emergency event when
21 there was not adequate dosimetry, would you expect that
22 emergency workers would be sent in?

23 MR. TOURTELLOTTE: I'm sorry, I didn't hear the
24 question. Could the question be repeated? Ms. Bradford's
25 voice trailed off and I didn't hear the last part.

1 BY MS. GAIL BRADFORD: (Resuming)

2 Q If an emergency event came up without there being
3 adequate dosimetry for emergency workers, would you expect
4 that emergency workers would be sent in?

5 A (WITNESS ADLER) I would expect the emergency to
6 be met with whatever resources were available.

7 Q How would you know the EPA guidelines would not be
8 exceeded for dose exposure to emergency workers

9 (Pause.)

10 A (WITNESS HARDY) It is not really an either-or
11 case, either you have enough dosimetry or there is none.
12 There is dosimetry of both the self-reading and the
13 permanent record type. It is not at this time enough to go
14 for each emergency worker.

15 You would know what the levels of emergency worker
16 contamination were, as alluded to earlier, within groups.
17 And by doing it that way as a group level went up you would
18 be cognizant of that and you would pull those people out.

19 A (WITNESS ADLER) It is worth adding that the field
20 monitoring teams are doing their thing independently of
21 emergency personnel workers, and so there is a way of
22 measuring, gauging where we are with regard to EPG's.

23 (Pause.)

24 Q Mr. Hardy, did you testify earlier that there was
25 generally adequate staffing shown during the exercise?

1 A (WITNESS HARDY) I don't remember saying that, but
2 I would say in general yes.

3 Q Would you or Mr. Swiren tell us whether or not
4 there was 40 percent of the staff missing at Dauphin County
5 emergency operations center?

6 A (WITNESS SWIREN) Yes, there were staff missing.

7 Q Could you tell us how many staff were missing,
8 approximately?

9 A (WITNESS SWIREN) Okay. They did not have the
10 county police coordinator, fire or transportation. They
11 also did not have their public information officer, who was
12 a county commissioner. Those are the major staff members
13 missing.

14 The reason for that was a political decision at
15 Dauphin County not to use volunteers, and these people, not
16 being paid members by the county for that particular
17 position, were considered volunteers, so they did not show
18 up. It was reported in my observer critique.

19 Q Surely the county commissioner isn't a volunteer?

20 A (WITNESS SWIREN) In the position he was
21 occupying, I guess technically he was considered a
22 volunteer. I am not supporting his position. I am just
23 reporting what I found.

24 Q Can you tell us how many, out of a full staff what
25 the proportion of missing staff was as compared to the full

1 staff of one shift?

2 A (WITNESS SWIREN) I think that was already said.
3 Of the key emergency coordinator types at the county EOC,
4 that represented 40 percent, I think, missing. However,
5 during a real emergency I think we all realized that those
6 volunteers would have been there.

7 Q What assurance do you have of that?

8 A (WITNESS SWIREN) Excuse me. What was your
9 question?

10 Q What assurance do you have of that?

11 A (WITNESS SWIREN) Well, I believe during the TMI
12 incident itself there was pretty much a full mobilization.
13 And in general when there is an emergency there is no
14 question asked as to what their jobs are. In other words,
15 if you are assigned that position during a real emergency
16 you sure would show up.

17 Q Do these positions also have a second shift person
18 assigned?

19 A (WITNESS SWIREN) Not all of them, and that was a
20 problem that was noted.

21 Q Do most of them not have a second shift person
22 assigned and trained to be, for instance, transportation
23 coordinator?

24 A (WITNESS SWIREN) Just relying on my memory, the
25 police and fire coordinators did not have an assigned second

1 shift at the time we were there. However, the county EOC
2 indicated they would have that in effect in as short a
3 period of time as they could. Technically that was a
4 deficiency.

5 (Pause.)

6 MS. GAIL BRADFORD: Sir, I'd like to cover
7 something which I covered somewhat yesterday, if I may go
8 back to that.

9 CHAIRMAN SMITH: Well, you know the rules that we
10 have been applying. Do you have a reason for it? Are you
11 requesting a waiver of our procedural rules?

12 MS. GAIL BRADFORD: Yes, sir.

13 CHAIRMAN SMITH: Why?

14 MS. GAIL BRADFORD: It is just something that has
15 occurred to me since that I wanted to ask.

16 CHAIRMAN SMITH: Okay. We'll wait and see.

17 MS. GAIL BRADFORD: I understand you want to know
18 what the question is.

19 BY MS. GAIL BRADFORD: (Resuming)

20 Q You receive training as a part of your job, is
21 that true? You go to training in Emergency Management
22 Institute sessions, do you not?

23 A (WITNESS HARDY) Are you speaking to one of us in
24 particular?

25 Q All three, any.

1 A (WITNESS ADLER) Yes.

2 Q Can you tell us what kind of guidance is given you
3 in those sessions to aid you in data processing, as I
4 believe Mr. Dickey referred to it, or data reduction?

5 A (WITNESS ADLER) The data reduction process that
6 we were referring to within the last day or two has to do
7 with taking inputs from observers and making professional
8 judgments about the importance, the validity, the tone of
9 each of those inputs. This is the job that Mr. Hardy has,
10 is responsible for carrying out.

11 The training at Emmettsburg and at other places in
12 emergency management which we have received links to that
13 skill to some degree. It's difficult to quantify it, just
14 as there are many, many other links. If you could be more
15 precise, perhaps our answer could be more pointed in what
16 you're asking.

17 Q What guidance do you receive in these training
18 sessions that helps you reduce the data, not just for an
19 exercise, also for evaluating plans?

20 A (WITNESS ADLER) Well, an example that comes to
21 mind is the time spent in elaborating upon the effects of
22 radiation and the PAG's that have been established as
23 important signposts for concern, for worry. Responses to
24 various radiation exposure levels is one illustration of how
25 data reduction is done in an exercise intelligently, one

1 very, very small example.

2 Q What training do you receive in specifically
3 evaluating state or county plans? Do you not do the
4 evaluation of the state and county plans at the region? You
5 don't send those on in total to the national office, do
6 you?

7 A (WITNESS ADLER) As I see it, there are two parts
8 to your question. The first part, the answer is yes, we do
9 it in the region. The second part, what do we send on to
10 national; we send them copies of plans as well. It is our
11 job in the region to do what you described.

12 Q And you also send them an evaluation of the plan
13 that you have prepared?

14 A Yes.

15 Q What training do you receive in doing evaluations
16 of plans?

17 MR. ZAHLER: Objection. Mr. Chairman, I could be
18 wrong, but it's my recollection that way back when, when Mr.
19 Adler and the other members testified initially with respect
20 to their review of the state and county plans, there was
21 inquiry as to the training that they received with respect
22 to evaluating plans. I mean, not only is this not
23 follow-on, it has been covered at an earlier date in the
24 proceeding.

25 MR. TOURTELLOTTE: Mr. Chairman, I've been sitting

1 over here with the same objection in mind, but not speaking
2 up. In fact the same questions have been asked and
3 answered, in I believe April testimony of this witness.

4 CHAIRMAN SMITH: That is in accordance with my
5 memory, too, Ms. Bradford.

6 MS. GAIL BRADFORD: It goes to an entirely
7 different point. Maybe this witness doesn't grasp it, but
8 I've been asking what standards, is the word I've been using
9 a lot, do they use to judge whether a plan will work,
10 whether it is adequate.

11 CHAIRMAN SMITH: I know you've been asking it hour
12 after hour.

13 MS. GAIL BRADFORD: I know, and I'm not getting
14 answers.

15 CHAIRMAN SMITH: You're getting answers.

16 MS. GAIL BRADFORD: With these guys you have to
17 play 20 questions. You have to think of the thing they're
18 thinking of in order to ask them the right question. Well,
19 I didn't ask them this time around about the training that
20 they've gotten, in addition to the memoranda and 0654 and
21 their professional judgment, which is the other things that
22 I've been --

23 WITNESS ADLER: I'll try to be more helpful.

24 MR. ZAHLER: Mr. Chairman, I do have an objection,
25 because there is testimony on the record and I don't know

1 what is going to come out of it this time, and it is just
2 not a way to produce a record that is credible.

3 CHAIRMAN SMITH: I would like to have a better
4 explanation from Ms. Bradford as to how this question
5 differs from the previous questions and answers on this
6 subject matter.

7 MS. GAIL BRADFORD: You mean in April or when?

8 CHAIRMAN SMITH: Whenever. What are you trying to
9 accomplish now? How does this question differ from previous
10 questions that sound the same?

11 MS. GAIL BRADFORD: When?

12 CHAIRMAN SMITH: Any time. When Mr. Adler and Mr.
13 Bath first appeared, let's take that, in April.

14 MS. GAIL BRADFORD: For one thing -- please
15 correct me if I'm wrong -- that was conducted as a voir
16 dire, which I would not be able to use for other purposes,
17 is that not true?

18 CHAIRMAN SMITH: My memory doesn't serve me so
19 well that I can divide it. In any event, I don't see the
20 distinction.

21 MR. TOURTELLOTTE: Mr. Chairman.

22 MS. GAIL BRADFORD: I'd like to finish, thank
23 you.

24 CHAIRMAN SMITH: Go ahead.

25 MS. GAIL BRADFORD: Recently, yesterday the

1 questions were directed to Mr. Dickey and Mr. Jaske.

2 They're different people.

3 CHAIRMAN SMITH: I understand that. We're not
4 going back to yesterday's. I didn't understand the
5 objection to be based on yesterday's inquiry, but when the
6 FEMA witnesses first appeared there was a rather thorough
7 inquiry as to their training and their competence and their
8 standards and how they know to go about this business. And
9 my memory is that it went on for some time and it was rather
10 thoroughly covered.

11 Now we want to know what did you not accomplish
12 then, or that you had the opportunity to accomplish, that
13 you're trying to accomplish now. I just don't understand
14 what is happening now that has not happened before.

15 MS. GAIL BRADFORD: Well, just as I explained
16 earlier.

17 CHAIRMAN SMITH: Well, do it again. Explain it
18 again.

19 MS. GAIL BRADFORD: I was trying to be
20 comprehensive and think of all the ways that we might have a
21 source for qualified judgments on the plans. I thought of
22 in-house memoranda, regulations, and now going to training.
23 And I would think that they would use whatever training they
24 had, and I'd like to know what it is.

25 (Board conferring.)

1 CHAIRMAN SMITH: Mr. Tourtellotte?

2 MR. TOURTELLOTTTE: What I got from what Ms.
3 Bradford said I think indicates that she may have a
4 misconception about the evidentiary value of testimony that
5 has been elicited. She had said earlier that she was asking
6 the same questions because she was now --

7 MS. GAIL BRADFORD: I didn't say that.

8 MR. TOURTELLOTTTE: Let me finish now, will you,
9 please?

10 She was asking those questions because she was
11 approaching a different subject. And I would simply submit
12 that if she does not know that if you ask the same
13 questions, which elicit the same answers, that you can use
14 the answers that you got before for any purpose that you
15 wish so long as they tend to prove the point that you want
16 to prove -- so it isn't necessary in an evidentiary
17 proceeding to ask the same question over and over again for
18 a different purpose.

19 You can ask it one time, you can get an answer,
20 and you can use that answer for any purpose that is
21 appropriate.

22 CHAIRMAN SMITH: Providing that the context
23 justifies it.

24 MR. TOURTELLOTTTE: Yes.

25 CHAIRMAN SMITH: You certainly have covered the

1 subject matter very thoroughly with Mr. Adler when he first
2 appeared, at least with the panel that Mr. Adler was on.
3 And so to the extent that the question is duplicative, it
4 goes to the training of the agency members as a whole, it is
5 correct you have already covered it and the objection should
6 be sustained on that basis.

7 If it goes to the particular competence of the
8 other two witnesses who have not testified before, it should
9 have been raised at the very beginning. It is late now.
10 But that is not what I understand to be your particular
11 point. You are trying to establish again what these
12 gentlemen and others like them know about their business and
13 the training school.

14 MS. GAIL BRADFORD: No. What standards do they
15 apply that they might have learned in the training.

16 CHAIRMAN SMITH: In a particular area? You're
17 going beyond data reduction now. You're talking -- all
18 right, objection sustained, because you have just covered
19 that subject matter very thoroughly the first time that they
20 appeared.

21 MS. GAIL BRADFORD: For Mr. Hardy and Mr. Swiren,
22 do you hold that Mr. Adler's answers last April hold for Mr.
23 Hardy and Mr. Swiren?

24 CHAIRMAN SMITH: There are two purposes for
25 inquiry: the competence of the witnesses to testify as

1 experts and the standards which are employed by the
2 personnel of the agency and how the standards develop and
3 the source of them. I think there are two distinct
4 objectives to that type of examination.

5 You are now again going into the -- what are you
6 trying to do now? Before you were going into competency of
7 the individuals. Now you are going into standards.

8 All right, Mr. Tourtellotte's observation then I
9 think is germane, that even though you may have inquired for
10 different purposes earlier, it is not isolated testimony and
11 it can be used universally. I have no independent memory
12 that you asked questions concerning their training on
13 standards. If I'm going to rely upon my memory, it would be
14 that you did not.

15 MS. GAIL BRADFORD: I don't believe I did.

16 CHAIRMAN SMITH: With the explanation that she
17 have given now, that she is asking only as it relates to the
18 development of standards, is your objection still
19 meritorious?

20 MR. ZAHLER: Mr. Smith, I'm concerned that we are
21 in a somewhat slippery area as to parsing up the training
22 these gentlemen had. It is my recollection that the
23 examination did go as to how they apply, for example, the
24 guidance in 0654, that that was a major part of it in terms
25 of how do you review a plan against the guidance elements.

1 And I don't understand the questions at this point
2 to be any different. We substituted the word "standards"
3 for the 0654 guidance elements, but it is my understanding
4 that the regional people when they compare the plans, that
5 is what they do. And we already inquired yesterday of Mr.
6 Dickey as to how he reviewed the plan against the standards
7 that he uses. So I still don't think that there is any
8 element of the examination that has not previously been
9 covered.

10 (Pause.)

11 CHAIRMAN SMITH: Well, here's where we are. You
12 have been told repeatedly what the standards are or are not,
13 and now I really don't understand exactly what you're
14 trying. I know you explained it. There's no use trying to
15 explain it again.

16 Let's hear what the answer is. You simply have
17 not taken the testimony up to this point as satisfying you
18 that they have identified all their standards and you're
19 still probing to see if there may not be some more.

20 Don't you think that this panel would have been
21 very eager to come forward and tell you that they had some
22 standards, objective standards other than those, if they had
23 them? Don't you think that would have been a natural
24 inclination? Or you don't know?

25 MS. GAIL BRADFORD: I think the difference today

1 is that last night I received a copy of a training manual
2 which FEMA uses, which I found a lot of stuff in there that
3 I would, in my judgment -- and I don't work for FEMA and I
4 have not taken these courses. I just was reading the
5 manual.

6 CHAIRMAN SMITH: What manual is this?

7 MS. GAIL BRADFORD: It is a training manual from a
8 course given at the Emergency Management Institute in
9 Emmettsburg, Maryland, June 22nd through the 26th of this
10 year.

11 CHAIRMAN SMITH: So you purport to be in
12 possession of information which indicates that the testimony
13 that we have received so far is not complete or it may be
14 inaccurate, and that there are indeed standards which are
15 covered at the training school?

16 MS. GAIL BRADFORD: Well, let me explain it. And
17 I understand that I don't work for FEMA and I don't deal
18 with their jobs on a day to day basis. And what they call
19 standards I don't call standards.

20 I don't know what the miscommunication there is.
21 But in reading this -- and it's a collection of documents.

22 CHAIRMAN SMITH: Why don't you present them with
23 the information that you have directly, and then we'll go
24 directly to that, if that is the basis for your
25 cross-examination.

1 I am very sorry. I have just lost the thread of
2 what you're trying to accomplish and I can't be of any more
3 help to you.

4 DR. LITTLE: What he is suggesting is that you
5 bring the document to our attention and to their attention
6 and go ahead and establish whether they are familiar with it
7 and whether they use it and so on.

8 CHAIRMAN SMITH: What I'm saying is, get to the
9 point, get directly to the point that you're trying to
10 establish. If you have information which you believe to be
11 inconsistent with the testimony that you have received, go
12 straight to that information, ask them about it directly,
13 without any further fooling around, and we'll avoid all of
14 these objections and get on with the hearing.

15 MS. GAIL BRADFORD: May I have a minute?

16 CHAIRMAN SMITH: Yes.

17 (Pause.)

18 BY MS. GAIL BRADFORD: (Resuming)

19 Q Did any of you attend the Emergency Management
20 Institute training at the end of June, June 22nd to 26th, I
21 believe?

22 A (WITNESS HARDY) Repeat the question, please?

23 Q Did any of you attend the Emergency Management
24 Institute training at Emmettsburg, Maryland, June 22nd to
25 June 26th, 1981?

1 A (WITNESS HARDY) I did.

2 Q Mr. Hardy?

3 A (WITNESS HARDY) Yes.

4 Q Did you receive a manual, a collection of
5 documents in a binder? These may be all things you already
6 had, I don't know.

7 A (WITNESS HARDY) We were given different pieces of
8 material to be used during the week of the course or the
9 seminar. That looks a lot thicker than what I had, but then
10 again, as you stated, I could have had some of that
11 already. I don't know what's in there.

12 (Pause.

13 MS. GAIL BRADFORD: There isn't any index, so let
14 me pass out some things.

15 CHAIRMAN SMITH: All of this now is an
16 afterthought? Is this still in the category of
17 cross-examination that you overlooked yesterday?

18 I see, all right. Dr. Little reminded me.

19 (Pause.)

20 MS. GAIL BRADFORD: These are all selections of
21 thing that came out of here. I didn't Xerox entire
22 articles, just first and last pages, sometimes just the
23 first page.

24 There's a title page on this which has a schedule,
25 Monday, Tuesday, Wednesday, Thursday. And then there's a

1 synopsis which I would like to read:

2 "This one-week course is structured to provide an
3 arena in which federal, state, local and utility personnel
4 involved in REP planning can discuss issues of concern and
5 share views on interpretation and means for implementing the
6 federal regulatory policies and guidance and can share and
7 build on lessons learned from past experience."

8 BY MS. GAIL BRADFORD: (Resuming)

9 Q Now, it would seem to me that there would be
10 something in that training which would help you assess
11 plans; is that not true?

12 A (WITNESS ADLER) Yes.

13 Q Now, it may be difficult for you to identify
14 what. Is that what your problem is?

15 A (WITNESS ADLER) My difficulty is tying a
16 specific course lecture at Emmettsburg to my abilities to
17 make comprehensive judgments in plans evaluation and
18 preparedness.

19 Q Mr. Hardy?

20 A (WITNESS HARDY) The week at Emmettsburg is
21 characterized as a seminar, and in a seminar type of
22 structure there is an exchange of views and ideas so that
23 you can see that there is more than one way possibly to tack
24 a particular problem. So it has a tendency to broaden your
25 base from which you are able to make the judgments on

1 preparedness.

2 Q Did you receive the material or more complete
3 copies of the material which I have included in this package
4 which the panel has a copy of?

5 A (WITNESS HARDY) The one you gave me?

6 Q Yes, sir.

7 A (WITNESS HARDY) The one that says "course
8 material" and then there's an article attached from the
9 "Scientific American"?

10 Q There are a number of different things.

11 CHAIRMAN SMITH: Ms. Bradford, you have -- well, I
12 will wait until the end.

13 WITNESS HARDY: I'm looking to make sure I did
14 receive all of this.

15 CHAIRMAN SMITH: We urged you to go directly to
16 the subject matter of your cross-examination, and you don't
17 seem to be doing it. Nor can I perceive from the material
18 which you have distributed to the parties where you are
19 going. I don't understand what you are doing with this
20 material. You have yet to talk about the discrete subject
21 matter on this cross-examination.

22 (Pause.)

23 BY MS. GAIL BRADFORD: (Resuming)

24 Q Did you review the material, Mr. Hardy?

25 A (WITNESS HARDY) Yes, we were given this

1 material.

2 Q Did you also receive other material which
3 presented a different point of view from this? I would just
4 point out that all of this material is very biased in the
5 direction of being pro-nuclear. It contains --

6 CHAIRMAN SMITH: This is where you're going. This
7 is not objective definitive standards, which you represented
8 to the Board was the purpose of your cross-examination. I
9 am not saying this is an inappropriate area of
10 cross-examination, but we must know what you're doing.
11 Otherwise we will sustain the objections.

12 Now, if it is your approach to this
13 cross-examination that the training material gives them a
14 biased viewpoint of this industry, that is one thing. But
15 we have a right and the parties have a right to know what
16 you're doing in the cross-examination, and you have not come
17 forth with it. Now you must do it or you cannot
18 cross-examine.

19 MS. GAIL BRADFORD: Sir, I think there are also
20 some other things in here which I will bring up later which
21 I did not Xerox, which relate -- let me finish.

22 CHAIRMAN SMITH: You had better get to the subject
23 matter of the cross-examination without delay. Otherwise I
24 will sustain the objections that were previously made.

25 MS. GAIL BRADFORD: I would like to ask about

1 both, what I will describe as biased training --

2 CHAIRMAN SMITH: Biased training is a subject
3 matter which I recognize can be relevant and would take an
4 approach to that. But you were permitted to cross-examine
5 on this subject on the representation to this Board that you
6 had course material which indicated specific standards in
7 evaluating emergency preparedness. And I have examined this
8 material quickly. I see no such information.

9 And as I infer from your leadoff question about
10 bias, that is not the purpose of your cross-examination
11 either. You are not talking about standards; you're talking
12 about a general bias.

13 MS. GAIL BRADFORD: As I have said, sir, I would
14 like to inquire about both.

15 CHAIRMAN SMITH: Now you get right down, without
16 any further delay. You go to cross-examination on
17 standards. If you are unable to do that, say so.

18 MS. GAIL BRADFORD: I had this material Xeroxed
19 and I thought I would start with this. I will start with
20 that if you would prefer.

21 CHAIRMAN SMITH: Yes. I don't prefer that you do
22 anything. I am telling you that you were given leave to
23 cross-examine along this line on a certain representation.
24 Now get back to that line of questioning or tell us what the
25 other subject matter is. The parties and the Board have a

1 right to know what you are doing, and we don't know.

2 MS. GAIL BRADFORD: I think we are having a
3 miscommunication.

4 CHAIRMAN SMITH: Yes.

5 MS. GAIL BRADFORD: Accepting a view that nuclear
6 power is necessary and it's going to be increasing in use
7 and various viewpoints like that lead to different ways of
8 looking at, evaluating plans. And I think this does go to
9 standards and evaluation.

10 CHAIRMAN SMITH: Now, I think at the very outset
11 of your beginning of your entering into this subject matter,
12 you could have explained completely what you had in mind, so
13 the objections could be rationally made, so they could be
14 intelligently ruled upon. But you haven't done that. You
15 have simply not communicated, to me at least, what you are
16 trying to accomplish until this very moment, until this very
17 moment. After all the back and forth we've had, it is not
18 until now that we have any inkling, or at least I have any
19 inkling, of what you're trying to do.

20 Now, is that what you are trying to accomplish?

21 MS. GAIL BRADFORD: That is not all. There is
22 other material.

23 CHAIRMAN SMITH: Well, tell us all. Will it
24 frustrate the purposes of your cross-examination if you
25 reveal it?

1 MS. GAIL BRADFORD: Sir, all the training I have
2 in cross-examination I have gotten right here. And it's
3 difficult for me to do it.

4 Now, you want me to explain it to the witnesses
5 and explain it to you and explain it so that these counsel
6 can assist me, as you always let them do, by asking their
7 questions instead of getting my questions answered.

8 CHAIRMAN SMITH: Ms. Bradford, we are not talking
9 about legal procedures in particular. We are not talking
10 about anything except we want a simple narrative explanation
11 from you as to what the purpose of your questions are. You
12 don't have to be a lawyer to do it. You just have to
13 understand what your own position is and communicate it.

14 Now, if you're going to represent to us that you
15 have a purpose you don't want to disclose to the witnesses,
16 that is another thing. But you are capable of communicating
17 that idea too. I have watched you doing this. I know what
18 your capabilities are. You can communicate with us.

19 All right, we'll take an early lunch break. At
20 1:00 o'clock we are going to have a special -- we'll ask for
21 about ten minutes -- a special arrangement. Channel 8 has
22 asked for a question and answer session.

23 All right, do you want to continue to discuss it?

24 MS. GAIL BRADFORD: Sir, I think this is really
25 unfair. Now they're going to go, they're going to look up

1 all of this stuff, they're going to rehearse their answers
2 with their counsel. What kind of adequate opportunity is
3 that?

4 CHAIRMAN SMITH: I asked you to represent to the
5 Board, if that is the case, that your cross-examination plan
6 that you have in mind depends upon not revealing to these
7 witnesses the subject matter of your cross-examination. You
8 were silent on that.

9 MS. GAIL BRADFORD: It is because I couldn't talk,
10 sir.

11 CHAIRMAN SMITH: All right. That is why I
12 recommended -- I can see that. That is why I recommended we
13 take an early lunch break.

14 Now, in view of your last statement, we will
15 admonish counsel and the witnesses to not discuss the
16 subject matter of what we see to be the area of the
17 cross-examination, nor to refer to the training manual,
18 which I think you've probably identified now, so that there
19 will be continuity of our cross-examination.

20 Are there any objections to that?

21 MR. TOURTELLOTTE: No. Had you not admonished us,
22 we would have done that anyway.

23 CHAIRMAN SMITH: Then when we get back we will
24 provide an opportunity for other parties to raise objections
25 to this line of questioning if they have any. And you can

1 organize your cross-examination approach and your arguments,
2 whatever you have, during the lunch break.

3 And we're not foreclosing -- we have not
4 foreclosed any line of questioning. We simply are requiring
5 you to make your approach known to us so that we can with
6 full information rule upon objections and understand.

7 Also, before we begin the evidentiary session, if
8 you wish we can have an off-the-record bench conference as
9 to what your problems might be and how we can advise you.

10 MS. GAIL BRADFORD: Thank you, sir.

11 CHAIRMAN SMITH: All right, we will return at --
12 we have received a telephone communication from Mrs. Aamodt,
13 and this is the nature of it. Mrs. Aamodt wishes to have
14 the following statement made by her read into the record.
15 The statement is:

16 "Commonwealth counsel informed me by telephone
17 this morning about the latest agreements between the
18 Commonwealth and the Licensee. The details are known to me
19 only to the extent that they were summarized by the
20 Commonwealth's counsel. Chairman Smith indicated in a later
21 telephone call that the agreements were complicated.

22 "Therefore, it is wholly inappropriate to make any
23 response at this time. Similarly, it is inappropriate to
24 question counsel of the Commonwealth and Licensee tomorrow,
25 as suggested by the Chairman. It is only proper to study

1 the proposals in detail, and the proposals are not in my
2 possession. I, therefore, reserve the right to respond to
3 these documents within a time frame that is fair and
4 consistent with the hearing.

5 "Mrs. Marjorie Aamodt."

6 Mrs. Aamodt has left out several material aspects
7 of that telephone conversation. I said indeed that the
8 agreements were complicated, too complicated to explain by
9 telephone, that it took me approximately 15 minutes to read
10 and understand them.

11 The comment that she made, that she has not
12 received a copy of the proposed commitments and that they
13 are not in her possession, does not include the fact that
14 there was an offer to deliver it to her by messenger today
15 made by Mr. Blake. There are other less material variances
16 between Mrs. Aamodt's recollection of the conversation and
17 mine.

18 We will return here at 1:00.

19 MS. GAIL BRADFORD: Sir, did you instruct the
20 witnesses not to discuss this amongst themselves?

21 CHAIRMAN SMITH: Yes.

22 MS. GAIL BRADFORD: Thank you.

23 (Whereupon, at 11:51 a.m., the hearing was
24 recessed, to reconvene at 1:00 p.m. the same day.)

25

AFTERNOON SESSION1
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(1:03 p.m.)

CHAIRMAN SMITH: Ladies and gentlemen, are we ready to proceed.

A preliminary matter. Mr. Blake, Mr. Tourtellotte, before we adjourn this session the Board itself may have some questions about the most recent series of commitments. We don't know that we do, but I hope that Mr. Adler and you and Mr. Tourtellotte will be available to answer questions about these commitments, Mr. Robert Adler.

MS. STRAUPE: Could I have an idea of when?

CHAIRMAN SMITH: That will be at the end unless there is a problem that any one of the participants can't make it.

MS. STRAUPE: Okay, I'll tell him.

CHAIRMAN SMITH: Any time you are ready, Mr. Sollenberger. Some time ago, I had a conversation with Dave Sollenberger of TV Channel 21, in which he expressed a certain amount of frustration at not being able to report the progress of the hearings and what they are about adequately. And I recognized that indeed it was traditional that Licensing Board members do not grant interviews, particularly on-camera interviews.

But I pointed out to Mr. Sollenberger that the Commission's regulations, 2.715, which refers generally to

1 limited appearances by members of the public in a
2 proceeding, also provides in a statement of consideration,
3 and I will quote from it: "A person making a limited
4 appearance statement may: One, want not only to state his
5 position, but to raise questions which he would like to have
6 answered." I suggested to him that there was no reason why
7 representatives of the media should not avail themselves of
8 this provision of the regulations and ask questions.

9 The reason I have been reluctant to grant
10 interviews by any of the media is that anything I have to
11 say about the case I want to be said on the record in the
12 presence of all the parties. So we have arrived at this
13 approach to it, and we have put aside the next few minutes
14 for Mr. Sollenberger to ask questions about the
15 proceedings.

16 He has provided me in advance with copies of most
17 of the questions which I understand that he will ask. Mr.
18 Sollenberger?

19 MR. SOLLENBERGER: The first question generally,
20 now that the hearings are going to be wrapped up, if you
21 could just detail the next step in the decisionmaking
22 process.

23 CHAIRMAN SMITH: Yes. We are already in the
24 process of the next step, and that is the parties, the
25 intervenors, the Commonwealth, the NRC staff and the

1 Licensee are preparing proposed findings of fact and
2 conclusions of law to present to the Board. The proposed
3 findings are written in the form of a decision which the
4 Board could adopt, if we agreed with it, that actually gives
5 paragraphs together with citations to the record which the
6 parties urge us to adopt as being our findings in the case.

7 That is going on now. We have already received
8 proposed findings and reply findings on management issues.
9 We have set a schedule and we have also received most of the
10 design hardware issues, and we will be setting a schedule
11 for proposed findings on emergency preparedness and planning
12 issues at the end of this session.

13 Then it will be the responsibility of the Board to
14 write its decision by referring to the proposed findings and
15 conclusions of law and on our own referring to the record as
16 we see fit. And then our decision will issue.

17 MR. SOLLENBERGER: After that, has the NRC given
18 you any indication of how long it will take to make a
19 decision?

20 CHAIRMAN SMITH: Yes, it has. In the original
21 hearing order and one that was issued this spring, the NRC
22 specified that if our decision should authorize the restart
23 of Unit 1, TMI Unit 1, the Commission would look at that
24 decision and within 35 days either agree with it or disagree
25 with it. Then that will of course, necessarily will have to

1 be, I would imagine, will have to be a rather summary look.
2 And then the normal appellate procedures on the merits of
3 the entire decision will come into play.

4 MR. SOLLENBERGER: Can you pinpoint why this
5 particular hearing has exceeded its expected duration?

6 CHAIRMAN SMITH: Well, there are several reasons.
7 One, there was not really an expected duration. There was a
8 recommended schedule that the Commission attached to its
9 hearing order, which they suggested we consider. But they
10 made it clear that we were not required to, we should feel
11 free to depart.

12 Well, the Commission had no way of knowing at the
13 time they issued the order how many issues there would be,
14 how many parties there would be, and just what the magnitude
15 of the hearing would be.

16 In addition to that, there was continuous changing
17 in the law as the hearing went along, particularly in the
18 area of emergency planning. The Commission adopted new
19 emergency planning rules and our arrangement with the
20 Federal Emergency Management Agency, and that took some time
21 to fall into place.

22 Moreover, there was a need, as I understand it,
23 for the NRC staff to apply some of the resources to other
24 plants in the United States who also had to make adjustments
25 and modifications because of the lessons learned from the

1 accident in Three Mile Island 2. So there was a need to
2 spread the resources out among other places. And then just
3 generally the magnitude of the problem had not been fully
4 appreciated, I believe, at the time the hearing order
5 issued.

6 MR. SOLLENBERGER: What has been the difference
7 between this relicensing hearing and similar ones, in terms of
8 significance, for example?

9 CHAIRMAN SMITH: I wouldn't want to comment on the
10 significance. That could be quite debatable and arguable.
11 It is -- the importance of it I think is obvious to
12 everyone. But other than that, I have no comment as to the
13 significance is concerned.

14 As far as the procedure is concerned, it is
15 somewhat different. Normally the decision of a Licensing
16 Board is appealed to an Atomic Safety & Licensing Appeal
17 Board, and the Commission does not get into the decision
18 except if they wish to. In this instance, our decision will
19 be directly reviewed by the Commission and they will be
20 reviewing the record as a full appellate panel. That is
21 different.

22 MR. SOLLENBERGER: Finally, to what degree has
23 this study been the most exhaustive safety review of any
24 nuclear power plant in the country.

25 CHAIRMAN SMITH: I cannot tell you to what extent

1 other plants might have been as exhaustively studied by the
2 NRC staff. But as far as being studied in a hearing
3 process, adjudication, this by many times has been the most
4 exhaustive by far for any particular nuclear power plant.

5 MR. SOLLENBERGER: Can you talk about the reasons
6 for that?

7 CHAIRMAN SMITH: Just the number of issues, the
8 number of contentions raised, the number of parties who
9 entered into the procedure, the vigor with which they
10 prosecuted their contentions. All of those parts put
11 together made it a long hearing and a rather exhaustive
12 one.

13 MR. SOLLENBERGER: Thank you.

14 CHAIRMAN SMITH: Sure.

15 All right, Ms. Bradford, do you want to proceed?
16 Would you like to have a bench conference?

17 MS. GAIL BRADFORD: Could we have a bench
18 conference, sir?

19 CHAIRMAN SMITH: Okay.

20 (Discussion off the record.)

21 CHAIRMAN SMITH: Ms. Straube?

22 MS. STRAUBE: I just have a statement to make and
23 if the Board wants to ask questions after that, you're
24 welcome to. The Commonwealth commits to address each of the
25 72 recommendations which pertain particularly to the state,

1 with no commitment a to the time period within which each
2 will be addressed. The state further commits to provide as
3 much assistance as possible to the counties in addressing
4 those deficiencies which pertain particularly to them or to
5 the municipalities. The Commonwealth will prioritize how
6 and when we will address each of the deficiencies,
7 particularly pertaining to the state, in our findings of
8 fact.

9 CHAIRMAN SMITH: Do we also understand that the
10 Commonwealth intends to pursue these recommendations with
11 reasonable diligence? You say no commitment as to time, but
12 do you regard them as being worthy of needing reasonable
13 attention?

14 MS. STRAUBE: Yes, sir. And I think we intend in
15 our findings to put some time commitments with them.

16 CHAIRMAN SMITH: Now, during the bench conference,
17 Ms. Bradford has provided a cross-examination plan. You may
18 proceed, Ms. Bradford.

19 Whereupon,

20

THOMAS E. HARDY

21

BRUCE J. SWIREN,

22

VERNON ADLER

23 the witnesses on the stand at the time of recess, resumed
24 the stand and, having previously been duly sworn by the
25 Chairman, were examined and testified further as follows:

1 CROSS-EXAMINATION -- RESUMED

2 BY MS. GAIL BRADFORD:

3 Q Mr. Hardy, do you happen to have the material you
4 received in the training course at the end of June here?

5 A (WITNESS HARDY) You mean the excerpts you gave me
6 or the complete package?

7 Q The complete package.

8 A (WITNESS HARDY) No, I do not.

9 Q Can you tell us how the -- or did the training you
10 received in June 22nd to 26th, 1981, assist you in
11 evaluating the test exercise?

12 A (WITNESS HARDY) For me it was done already by
13 then. Our observations and recommendations, attachment 1,
14 was already completed before I attended that course.

15 Q I understand that. I should go back a bit. I
16 understood you to say that you thought that you earlier
17 received some of this material.

18 A (WITNESS HARDY) No, I did not receive any of the
19 material until I arrived at Emmettsburg on Sunday.

20 Q All of the material that was given to you was new
21 to you?

22 A (WITNESS HARDY) I'm not sure I understand. Are
23 you saying the material they gave us during the course, was
24 it used during the course?

25 Q Was this the first you had used that material.

1 DR. JORDAN: Was the material handed to you at the
2 conference or was it mailed to you so you could study it
3 ahead of time?

4 WITNESS HARDY: It was given throughout the
5 seminar. When I arrived on Sunday -- the seminar started on
6 Monday -- there were a couple of pieces to be read as
7 background for the first session on Monday morning.

8 DR. LITTLE: Just a moment. I thought I
9 understood you earlier to say that the package that she had
10 appeared larger than what you wound up with, and it may have
11 been because you already had some of this material before
12 coming into the course.

13 WITNESS HARDY: Oh, I see what you mean. In the
14 course of my work, some of the material we used, for
15 instance, was 0654, guidance memorandums that we've already
16 talked about. Those things I had in the course of my duties
17 and did not need to receive them during the course. We were
18 not asked to read those or do anything with them before the
19 course.

20 Also, I may point out, the course is principally
21 intended for state and locals, and that myself going there
22 or the utilities is for the interface, to try to get a
23 broader picture of how different people are handling their
24 planning process.

25 (Pause.)

1 BY MS. GAIL BRADFORD: (Resuming)

2 Q Mr. Hardy, can you tell us what your role is in
3 assessing the TMI area plans?

4 A (WITNESS HARDY) I guess it breaks down into three
5 areas. One is in advance of the exercise to work with the
6 state to ensure that, within limits, those things that we
7 would like to observe and evaluate will take place; and at
8 the same time, developing a team of observers that would be
9 able to look at those items that are in the scenario.

10 Second would be during the exercise itself to try
11 to keep a handle on what is happening, to ensure that if
12 there is something that takes place, that occurs because of
13 the free playing, that if possible we will have an observer
14 there to see it.

15 Or an example in another direction would be to
16 ensure that things do not end, if possible, before we have
17 had a chance to observe it. There are a couple of instances
18 in the exercise observations, you will note, where the state
19 police at access control points left before the observers
20 had an opportunity to see them at their post. That is one
21 of the things I am supposed to try to prevent, but I am not
22 always successful.

23 And then thirdly, after the exercise to bring the
24 team together, and I think this has already been mentioned.
25 It was done in this room, for them to be able to express

1 their observations to the group, because each one, each
2 individual, has seen only his portion or her portion, to
3 give them a sense of the larger picture, give them an
4 opportunity to put together their critique sheets and bring
5 those together into a consolidation, which you have seen,
6 and direct and coordinate the development of the exercise
7 report.

8 So it is sort of three phases: before the
9 exercise, during the exercise, and following the exercise,
10 culminating in the observations and recommendations.

11 Q Do you also have a role in assessing the written
12 plans?

13 A (WITNESS HARDY) Yes.

14 Q Could you describe that?

15 A (WITNESS HARDY) As chairman of the regional
16 assistance committee, it is my job to coordinate the efforts
17 of the federal agencies to ensure that all of the items of
18 0654 are reviewed and commented on and discussed among
19 ourselves to ensure that we all understand what we are
20 saying, and to direct the consolidation of the individual
21 comments into a coherent whole, which then becomes the basis
22 for developing the findings which would be attachment 2.

23 Q Can you tell us how you know, or what affects your
24 judgment in deciding when an event demonstrates a deficiency
25 during an exercise?

1 A (WITNESS HARDY) It begins with an individual
2 observer's determination of where he or she feels where that
3 area is, if it is deficient or not.

4 Q Is it just a feeling, or is that the right choice
5 of words?

6 A (WITNESS HARDY) Well, I guess it would not be the
7 right choice of words. It's based on their professional
8 experience in observing something that is or is not in the
9 plan, based on what they have from their review of the
10 plan. Is that what you mean?

11 Q So it is based on professional experience?

12 I'd prefer to have Mr. Hardy answer the questions,
13 thank you.

14 A (WITNESS HARDY) It is kind of difficult to pull
15 apart a process that is somewhat subjective. An individual
16 who has a background of knowledge and experience in a field
17 is assigned to observe certain areas of the exercise based
18 on his or her background. And based on that observation and
19 their professional judgment of how responsive the players
20 were, from that they give a rating, and that rating, the
21 numbers are backed up by the narrative of what they saw.

22 (Pause.)

23 Q Would it be correct to say that the training that
24 informs the judgment that the evaluators bring to evaluating
25 an exercise occurs outside or perhaps before they join

1 FEMA? I mean, they come to FEMA with a particular set of
2 credentials?

3 A (WITNESS HARDY) Some do. I would say that most
4 of the Atraining is on the job experience, on the job
5 training. By participating as an observer in an exercise you
6 can become more proficient at observing and characterizing
7 those observations and providing recommendations.

8 Q Can you tell us who evaluated public information
9 during the test exercise?

10 A (WITNESS HARDY) Yes. The names of the people or
11 their positions?

12 Q Their qualifications is really what I'm more
13 interested in.

14 A (WITNESS HARDY) Well, the team leader for public
15 information, Mr. Hugh Lane, was the public information
16 officer for FEMA Region III, a position he's held for quite
17 a while. He was --

18 Q Could you identify what a public information
19 officer -- he deals with the press?

20 A (WITNESS HARDY) I'm sorry?

21 Q What is a public information officer? Is it
22 someone who deals with the press for FEMA?

23 MR. TOURTELLOTTE: Mr. Chairman, I don't want to
24 interpose an objection and I want the witness to be able to
25 answer that question. However, I believe this question was

1 interposed at a time when the witness had not really
2 finished the answer to the previous question. And if Ms.
3 Bradford would like to have an answer to her other question,
4 I think it would be appropriate for him to answer that
5 question before the next question is asked.

6 CHAIRMAN SMITH: Had you completed?

7 WITNESS HARDY: Then which would you like?

8 CHAIRMAN SMITH: Finish your answer to the
9 question.

10 WITNESS HARDY: To the original?

11 MR. TOURTELLOTTE: If I may refresh the
12 recollection, as I understood it the initial question that
13 was asked was, who is it that reviewed the public
14 information. And we started off and only got through the
15 team leader, and there were probably other people. And we
16 were interested in, or at least I understood the expression
17 to be an interest on who the people were and what their
18 qualifications were.

19 And I would suggest that perhaps the witness, as
20 he tells who they are and what their qualifications are, can
21 explain those terms.

22 CHAIRMAN SMITH: Were you satisfied with answer to
23 Your question?

24 MS. GAIL BRADFORD: I was asking him what a public
25 information officer was.

1 CHAIRMAN SMITH: That was the previous question.

2 MS. GAIL BRADFORD: That was the question he was
3 answering. I wish Mr. Tourtellotte wouldn't jump in on
4 this. If he has an objection, he can make an objection. If
5 he is doing this to be helpful, I wish he would stop.

6 MR. TOURTELLOTTE: I was interposing an objection
7 because the witness is entitled to answer the question
8 before another question is asked. And I mentioned as I did
9 enter the objection that I was not objecting to his
10 answering the other question, but I was objecting on the
11 grounds that he was being interrupted.

12 And I have the right -- I would also state to the
13 Chairman, in response to what Ms. Bradford said, I have a
14 right to make objections and whether she likes my objections
15 or not is irrelevant. I have the right to make them and I
16 intend to continue.

17 CHAIRMAN SMITH: We recognize that. Your point is
18 quite accurate, Mr. Tourtellotte.

19 He does have an interest in seeing that the answer
20 is not interrupted. Otherwise the evidentiary record looks
21 like the full answer to the question is what was really
22 given as a partial answer.

23 MS. GAIL BRADFORD: I'm perfectly willing to allow
24 the witness any amount of time.

25 CHAIRMAN SMITH: Well, he did it in -- I think

1 fatigue is making perhaps all of us a little more irritable
2 than we normally are, and it is regrettable, because we have
3 gone through a very long and difficult hearing in relatively
4 good spirits without bad feelings. And I am determined that
5 we are going to end it that way.

6 So let's just take it a question at a time. We're
7 going to take all of the time we need to go about it
8 thoroughly and well.

9 Now, had you completed your answer to that
10 question? I guess not.

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1 WITNESS HARDY: No, I had not. There were three
2 individuals assigned principally to public information. As
3 I mentioned, the team leader, Mr. Lane, who is the public
4 information officer for FEMA Region III. Also included on
5 that team was Mary Ann Jackson, who is the public
6 information officer for FEMA Region II. In addition, there
7 was a Ms. Diaz, Diane Diaz, and she is a public information
8 officer as a reservist for the Disaster Response and
9 Recovery Division of FEMA Region III.

10 Those were the three individuals whose principal
11 assignment was observing public information.

12 BY MS. GAIL BRADFORD: (Resuming)

13 Q Can you also tell us who evaluated the public
14 information that is in written form in the plans and the
15 Commonwealth and the county pamphlets?

16 A (WITNESS HARDY) That was a combination of
17 individuals, including Mr. Bath, Mr. Swiren, Mr. Cunard, and
18 the public information officer for Region III, Mr. Lane.

19 Q Who was the one after Mr. Swiren?

20 A (WITNESS HARDY) Mr. Cunard.

21 Q What are his credentials?

22 A (WITNESS ADLER) Excuse me, I'm going to have to
23 interrupt, because I don't understand at all. I'd like to
24 amplify, if I may, that the people we are identifying are
25 people who work in Region III's Plans and Preparedness

1 Division, with the exception of those identified from other
2 regions thus far. We have a listing of the names of the
3 people. We can provide them if they're wanted.

4 But I'd like to understand, Mr. Chairman, if you
5 would indulge me, why all the individual names have to be
6 identified, and furthermore why we even have to provide a
7 job description for a public information officer.

8 CHAIRMAN SMITH: You don't even have to come to
9 the hearing, as we've stated before. But when you come in,
10 when you offer testimony, you have to be open to a certain
11 amount of cross-examination.

12 Now, where this cross-examination is going. I am
13 again confused.

14 WITNESS ADLER: May I add, Mr. Hardy has a group.
15 Mr. Hardy reports to me at FEMA Region III. He is also the
16 RAC chairman. We have those individuals who were named who
17 work in the Plans and Preparedness Division. It is their
18 job to do plans evaluation. They are used also as
19 observers.

20 It is an integrated effort. We have 38 observers,
21 most of whom were from FEMA and RAC members, who were an
22 inter-agency body: DOT, EPA, HHS, and others.

23 CHAIRMAN SMITH: What are you doing now in your
24 cross-examination? I just don't follow. I mean, is this
25 follow-on cross-examination?

1 MS. GAIL BRADFORD: Can I explain?

2 CHAIRMAN SMITH: Yes.

3 MS. GAIL BRADFORD: The best answer I've gotten
4 yet to my question is that they used their professional
5 judgment, which is a matter of the skills that they bring
6 with them to evaluating it. It says, how do you know the
7 public information is sufficient and complete or will be
8 effective, and I want to know whose judgment that was in
9 particular and what credentials.

10 I specifically asked, I said I didn't need to know
11 their names, just what were the credentials of the people
12 who were evaluating that, the public information. I've
13 gotten a rather long answer and Mr. Adler's comments, a
14 complete misunderstanding of what my question was.

15 CHAIRMAN SMITH: Is this still your
16 cross-examination that was suggested to you by the material
17 that came into your possession last night, or is it
18 follow-on.

19 MS. GAIL BRADFORD: To what?

20 CHAIRMAN SMITH: Well, here is the reason. When
21 the Board allows an examination to go on on the basis of a
22 cross-examination plan and the parties to a certain extent
23 have to, where they have made objections, otherwise have to
24 have confidence in the Board to allow a fair
25 cross-examination.

1 I don't understand how we got to this point, how
2 we got to the last two questions from the training materials
3 that came into your possession. If it is follow-on
4 cross-examination, it doesn't have to be by a
5 cross-examination plan.

6 I see now a remote relationship between the
7 question and the training.

8 MS. GAIL BRADFORD: It was a matter of what answer
9 he gave me earlier.

10 CHAIRMAN SMITH: There's no objection, there's no
11 understand pending. So just proceed with your next
12 question.

13 You are going to continue to receive questions
14 such as, our judgment, our judgment, our judgment.

15 MS. GAIL BRADFORD: I got a different answer. The
16 answer was, our training, our credentials. I want to know
17 -- and it's right here. I genuinely want to know, why do
18 they think that public information is adequate.

19 CHAIRMAN SMITH: That is where you have lost me
20 entirely in the thread of your cross-examination. But go
21 ahead. See what happens. It might come about, I don't
22 know. Ask your next question.

23 MS. GAIL BRADFORD: Sir, you really wore me down.
24 I just can't continue, I really can't. I am sorry, I
25 can't.

1 CHAIRMAN SMITH: Well, I'm sorry too, Ms.
2 Bradford. I don't know what other options I have. It is
3 important that the Board understand what you are trying to
4 accomplish in your cross-examination. This member of the
5 Board doesn't, and I've just conferred with Dr. Little and
6 she doesn't know where you're going and I don't know. Maybe
7 Dr. Jordan can explain it. But I don't understand what
8 you're doing. I simply don't understand.

9 Dr. Jordan says we're willing to try. I've
10 invited you to proceed. Maybe the thread of your
11 cross-examination will become apparent. But you are
12 entitled to know that we don't know what you're doing. It
13 is certainly not productive for you to conduct a
14 cross-examination which escapes us.

15 We've already ruled. The Board is of the opinion
16 that you should be given an opportunity, within our
17 discretion, to try to establish your point, even though we
18 don't understand now what it is. So we're giving you that
19 chance. We're being patient. Don't feel under time
20 pressure.

21 DR. JORDAN: Ms. Bradford, I have a feeling I do
22 know where you're going, and I guess -- let me put it on and
23 see if this does agree with you. Now, it may well be that I
24 too will run afoul of some of the regulations or some
25 procedures. That has happened many times before. But with

1 the Chairman's indulgence, let me just try.

2 I believe that your point is that the evaluation
3 of the adequacy of the public information was done by people
4 whose qualifications for making this evaluation are not
5 apparent, to you anyhow. And you would therefore like to
6 understand how these people -- what qualifications they have
7 for evaluating the adequacy of public information and how
8 they got that, was that part of their training.

9 Now, am I correct? Is that where you were going?

10 MS. GAIL BRADFORD: Yes, sir.

11 DR. JORDAN: All right. Now I guess I have to ask
12 the Chairman whether this is follow-on or whether this is
13 related to the other. I can't tell you that.

14 CHAIRMAN SMITH: That's right, you're right back
15 to my question. I don't know, that is what I was trying to
16 find out.

17 Go ahead. The Board is unanimous in its desire
18 for you to proceed with what you're trying to accomplish.
19 There are no objections.

20 Let's take a break. We'll take a short
21 five-minute break, and you see what you want to do and where
22 you want to go. But you are under no restraints now. You
23 are free to proceed with your cross-examination. Five
24 minutes.

25 (Recess.)

1 CHAIRMAN SMITH: All right. Ms. Bradford?

2 BY MS. GAIL BRADFORD: (Resuming)

3 Q Mr. Hardy, what I am interested in knowing is how
4 you assess whether the public information, for TMI of
5 course, is sufficient, complete, or whether or not it will
6 be effective. And my question is, what are the credentials
7 of the people who evaluated both the plans and the test
8 exercise on the aspects of public information?

9 A (WITNESS HARDY) The three individuals whose
10 primarily responsibility was to observe the public
11 information side, all three have experience in public
12 information, which means working with the public, working
13 with the press, exchange of information, that type of
14 thing.

15 In addition to that, they review the plans,
16 especially those pieces of the plans that have to do with
17 public information. They review the pieces of 0654 that are
18 related to public information. They are provided with
19 information by myself and other members of the team as to
20 things that we feel particular attention should be paid to
21 during the exercise, those things they should try to
22 observe.

23 Q Do you know of any other training other than
24 dealing with the press or the public that they have,
25 specific academic training, for example, or anything else

1 you can think of?

2 A (WITNESS HARDY) For public information?

3 Q Yes.

4 A (WITNESS HARDY) As an area or for exercise
5 observation?

6 Q For public information, to assess whether or not a
7 particular set of public information will be effective,
8 whether it is complete, whether it is sufficient.

9 A (WITNESS HARDY) I don't know of any education
10 type that they have. My feeling is that they rely on their
11 many years of experience in doing just that, how to transmit
12 information to people effectively, how to deal with the news
13 media to impart that information, how to deal with the
14 public to give them information, that type of thing.

15 Q Do you personally have any training or credentials
16 in the area of public information?

17 A (WITNESS HARDY) No.

18 Q Does Mr. Swiren?

19 A (WITNESS SWIREN) No.

20 Q I would like to ask the same kind of questions
21 about exposure control. Can you tell us about the
22 qualifications or training received in FEMA or outside of
23 FEMA for persons who evaluate exposure control, both in the
24 exercise and in the plans?

25 (Pause.)

1 A (WITNESS HARDY) The question was do they receive
2 any training from FEMA; is that correct?

3 Q Or other training that they have. What
4 qualifications and credentials do the people who evaluate
5 exposure control have?

6 A (WITNESS HARDY) Well, exposure control is a
7 number of different items together, one of which would be
8 access control. Another would be the use of potassium
9 iodide, recordkeeping from the dosimeters, that type of
10 thing. The individuals that observed the exercise and tried
11 to concentrate on exposure control included a Department of
12 Transportation representative who was watching access
13 control, which is really a transportation matter, to keep
14 people out, for instance, to limit exposure by preventing
15 them from going into the area to get that exposure.

16 Those that tried to watch the potassium iodide
17 problem, the main individual was from the Food and Drug
18 Administration. And his qualification -- the Food and Drug
19 Administration is responsible for KI and other drugs, and I
20 cannot really speak to his background. But from my dealings
21 with him and his knowledge of the plans and the use of KI,
22 he was a qualified individual. And I am told he is also a
23 health physicist.

24 Q I am also really interested in the qualifications
25 of the people who looked at the plans and assessed whether

1 plans would adequately, if implemented, could adequately
2 protect the public.

3 A (WITNESS HARDY) Exposure control?

4 Q Exposure control.

5 A (WITNESS HARDY) The individuals that were
6 observers in the exercise are the same individuals who also
7 made the review of the plan.

8 Q You sent out total copies or partial copies of the
9 plans?

10 A (WITNESS HARDY) Total copies.

11 Q To all of those people?

12 A (WITNESS HARDY) Every member of the Regional
13 Assistance Committee gets a complete copy.

14 Q What do they send back, or is this an oral
15 critique?

16 A (WITNESS HARDY) Both written and oral. I can't
17 say that in each case as related to site-specific TMI it was
18 all written or all oral or what the combination was. We
19 have eight plants that we deal with in this region and they
20 are all being reviewed at one stage or another.

21 Some of the information is verbal, some is
22 written. In other words, an individual like the Food and
23 Drug Administration representative on the committee, after
24 reviewing those portions of the plan connected with
25 potassium iodide, would talk to Mr. Swiren and they would,

1 you know, be asking each other questions about, where did
2 you find this or did you see that or that type of thing.

3 So it wouldn't necessarily come as a written piece
4 of paper, although most of the time it is.

5 Q Can you tell us, while we are on this, what the
6 reaction or comments the person who was specifically
7 evaluating potassium iodide had on providing potassium
8 iodide to the public?

9 A (WITNESS HARDY) You are asking what the
10 individual's comments were on whether or not it should be
11 given to the public?

12 Q Yes. And I would just note that in this training
13 manual there is a page that says, "potassium iodide is safe
14 and effective," et cetera. And I don't know how this
15 guidance was applied.

16 A (WITNESS HARDY) Well, it goes back to NUREG-0654,
17 and in looking at the plans the state determines how they
18 are going to use potassium iodide or if they are going to
19 use it. If the decision is not to give potassium iodide to
20 the public, then we go from that basis. In other words, we
21 review the plans for their capability of doing what they
22 determine they are going to do with it.

23 In other words, it is not required or it is not an
24 element of 0654 that they have to provide or do not have to
25 provide, either way, potassium iodide to the public.

1 Q So you're not either agreeing with or disagreeing
2 with their decision. You just accept their decision as
3 their decision and you go from there?

4 A (WITNESS HARDY) Yes.

5 Q What qualifications does the person have who
6 integrates whether the total exposure control package is
7 sufficient?

8 (Pause.)

9 Q You described it as someone who's a transportation
10 specialist looks at the access control, someone in Food and
11 Drug looks at potassium iodide. Is someone responsible for
12 putting those pieces together to see whether the total
13 picture of control is adequate?

14 A (WITNESS HARDY) Yes, in what I would call a first
15 cut. In other words, an individual is assigned, during the
16 process that I mentioned earlier that took place in this
17 room. Based on the information that is provided and the
18 individuals that are observing that area, I choose someone
19 to bring those pieces together into a cohesive whole.

20 And in this case it was the Department of
21 Transportation representative, who felt that he had the best
22 handle on what was observed in the exercise in that area.
23 He developed the first draft. And then we discussed it and
24 I reviewed it and then it was my determination as to whether
25 or not something was relevant or not.

1 Q And what are the qualifications of the person who
2 reviewed the plans for the synthesis of the exposure control
3 methods?

4 A (WITNESS HARDY) These are the individuals, such
5 as the Department of Transportation representative. His
6 qualifications -- I don't know his background.

7 (Pause.)

8 A (WITNESS ADLER) Allow me to take you a step back
9 from the exercise it elf, because you're asking about plans
10 review, and add that the people in Region III have gone
11 through the plans and the exposure control sections page by
12 page, using the 0654 criteria against which to judge the
13 adequacy.

14 Q That was not what my question was. My question
15 was what were the qualifications. Perhaps there was not
16 someone who knitted together the separate parts of exposure
17 control and looked at it. Was there someone who looked at
18 that, who was responsible for exposure control as an item
19 composed of several parts?

20 A (WITNESS HARDY) The exercise?

21 Q The plans, in reviewing the plans.

22 A (WITNESS HARDY) Yes, that's Rick Bath.

23 Q Rick Bath was responsible for?

24 A (WITNESS HARDY) Developing the overall, for both
25 state and county plans. He's the team leader responsible

1 for TM1. So that it is his job to bring together all of
2 those pieces.

3 Q All right, and there wasn't another level in the
4 middle there?

5 A (WITNESS HARDY) Well, he was assisted at times by
6 Mr. Swiren and others within Plans and Preparedness in that
7 review. But it was his responsibility.

8 Q Okay, thank you.

9 (Pause.)

10 Q I guess I could make it really simple. Mr.
11 Swiren, did you have any additions to make to your
12 credential sheet or other experience you've had or training
13 you've had which assists you in your work?

14 A (WITNESS SWIREN) No, I don't, other than the fact
15 that I have had day to day on the job type of training also,
16 which everybody has.

17 Q Mr. Hardy, turning to the packet that I handed out
18 earlier, did you review those items that I handed out
19 earlier?

20 A (WITNESS HARDY) Is this the one that starts out
21 with the course material and shows the sequence of films?

22 Q Yes.

23 A (WITNESS HARDY) Are you asking me if I've looked
24 at that since you gave it to me?

25 Q Yes.

1 A (WITNESS HARDY) I have glanced at it, yes, and
2 read part of what you gave me.

3 Q Did you receive these or any of these earlier at
4 the June 22nd?

5 A (WITNESS HARDY) Yes, I specifically remember
6 being given the first one, from the "Scientific American,"
7 "The Necessity of Fission Power."

8 MR. TOURTELLOTTE: I am sorry, I don't understand
9 from the question, though the witness may understand. I
10 don't understand the "22nd."

11 MS. GAIL BRADFORD: On June 22nd, I was referring
12 to, which was the beginning date of the Emergency Management
13 Institute training session that he attended.

14 BY MS. GAIL BRADFORD: (Resuming)

15 Q Did you understand the question?

16 A (WITNESS HARDY) Yes.

17 Q Do any of the others seem familiar?

18 A (WITNESS HARDY) No.

19 Q Can you tell us whether these items are typical in
20 content and attitude of the literature you receive on the
21 general nature of nuclear power, rather than on the
22 technical nature?

23 MR. TOURTELLOTTE: I object to the question on the
24 grounds that it isn't specific enough. The question is just
25 asked in terms of what he receives. Well, what he receives

1 where, in training?

2 MS. GAIL BRADFORD: In training.

3 MR. TOURTELLOTTE: Training all along, training
4 since June the 22nd? Where?

5 MS. GAIL BRADFORD: In training and the training
6 manuals that he receives in the course of his work.

7 WITNESS HARDY: I have never received articles
8 like this anywhere except at this seminar.

9 CHAIRMAN SMITH: So with that limitation, what is
10 your answer.

11 WITNESS HARDY: I'm sorry?

12 CHAIRMAN SMITH: Recognizing that the only place
13 you have received training materials is at this seminar,
14 what is your answer, with that limitation?

15 WITNESS HARDY: I guess we'll have to go back to
16 the question, then, because I thought I was answering it.

17 CHAIRMAN SMITH: This is not all of the training
18 material that you have received at the seminar?

19 WITNESS HARDY: No.

20 CHAIRMAN SMITH: Is this typical of the training
21 material you received at the seminar on comparable
22 subjects? What we are seeking is --

23 WITNESS HARDY: The material, the type of
24 material, namely that I received and the material that I was
25 interested in, had to do with NUREG-0654, the guidance

1 memorandums, with the FEMA proposed rule, with the NRC rule
2 on preparedness, and items like that.

3 This type of thing is really extracurricular
4 reading, which was not discussed in the class. It was only
5 for background information, that those that were interested
6 in reading it -- and frankly, I did not read it -- could use
7 it so that in the seminar type situation they would have
8 things to talk about, one of which in relation to the
9 article that I did mention that I remembered was not
10 discussed during the seminar, but during breaks or in the
11 evening, was a discussion back and forth on the actual
12 necessity. In other words, individuals were giving their
13 opinions to their colleagues, to the members of the
14 seminar.

15 But these things were not really the meat of the
16 seminar.

17 BY MS. GAIL BRADFORD: (Resuming)

18 Q So you would say that these materials, if they
19 were included, that they were just included as kind of
20 extras? They were not part of your training?

21 A (WITNESS HARDY) They were for information
22 purposes. The ones that you've given me here were the type
23 that would say, okay, we are going to talk about, I don't
24 know, talk about something tomorrow morning, and you might
25 want to read this and that tonight so that you would have

1 some background information.

2 But in the seminar itself, generally items like
3 this were not actually discussed. They were only for
4 information, so they would have some substance to talk from
5 or background.

6 Q Did you at that time or have you in the course of
7 your work received materials which present arguments that
8 accidents may be far more likely than is posited in
9 WASH-1400, for example?

10 A (WITNESS HARDY) It's hard for me to understand.
11 I'm partially watching your lips and you had your hand --
12 CHAIRMAN SMITH: I didn't hear the question
13 either, Ms. Bradford.

14 BY MS. GAIL BRADFORD: (Resuming)

15 Q Did you receive during this session or have you
16 received at other training sessions in the course of your
17 work any materials presenting arguments that accidents may
18 be far more likely than is posited in WASH-1400?

19 A (WITNESS HARDY) No.

20 Q Have you received information which suggests how
21 likely or unlikely accidents may be?

22 A (WITNESS HARDY) The information that I use for
23 review of the plans and the exercise is that information
24 contained in NUREG-0654 and the guidance memorandum, that
25 attempts to clarify portions of it, and the FEMA proposed

1 rule. I don't use any other documents.

2 Q And you also have not received any others in the
3 course of your work with FEMA?

4 A (WITNESS HARDY) I don't know whether they're
5 relevant to me, because I don't use them. So if it does
6 come across my desk -- as I said, I didn't read this article
7 on the necessity of fission power because it is irrelevant
8 to me. It has nothing to do with the criteria.

9 MS. GAIL BRADFORD: Sir, I think that's all the
10 questions.

11 CHAIRMAN SMITH: Is there any follow-on? Do you
12 have redirect?

13 MR. TOURTELLOTTE: Does the Board have any
14 questions?

15 CHAIRMAN SMITH: Yes.

16 MR. TOURTELLOTTE: I'd like to --

17 CHAIRMAN SMITH: Yes.

18 MR. TOURTELLOTTE: I'd like to wait until after
19 the Board questions.

20 DR. LITTLE: This line of questions is in
21 reference to attachment 1. Throughout our proceeding
22 there's been a particular interest in whether the plans as
23 they related to schools were workable. And first I would
24 like to have you tell me what opportunity you had to address
25 how the notification of schools was carried out in the

1 drill.

2 I know you have some comments on that on page 8 of
3 attachment 1, and also on page 13. Let's refer to those.
4 First on page 13, which is your finding, one of the
5 recommendations was that at the state level -- it is given
6 in item 13 on page 13 -- the concept of operations
7 concerning local school districts should be reviewed, with
8 the object being to enhance the coordination between the
9 state department of education, the various school systems
10 and the counties, including locals.

11 And I assume this refers back primarily to the
12 information on page 8, with the possibility of conflicting
13 directions during the exercise. And I would like a little
14 bit of expansion on what was observed there that led you to
15 make a finding that you did.

16 (Pause.)

17 WITNESS SWIREN: I will give you some of the
18 details as occurred in Dauphin County that went into this
19 paragraph. One of the problems was that the state
20 department of education -- I don't know if it was a problem
21 per se, but the state department of education had notified
22 directly the superintendents of the county schools in
23 Dauphin County, without having notified the county that they
24 had done so. And the county plans stated that is a county
25 responsibility. So there was an area of confusion there as

1 to where the schools were getting their information.

2 There was a decision at the county level in
3 Dauphin County that they did not want to evacuate the
4 schools before a general call for evacuation was called,
5 their feeling being that that would cause far more confusion
6 and difficulty than the potential problem they would be
7 trying to eliminate. In other words, they wanted the school
8 children to be evacuated at the same time as the parents, so
9 there would be an opportunity for the parents to find their
10 children.

11 So there was a direction and control problem, and
12 the recommendation partially addresses that.

13 I suppose the other problem concerning school
14 plans themselves -- I think Rick Bath's testimony referred
15 to a master plan, a master school plan. That would be the
16 annex to the county plans dealing with school evacuation.
17 At the school district level or local school level, you
18 don't really have at this time specific plans just dealing
19 with, you know, fixed nuclear facility evacuations. It is a
20 broad-based disaster type of plan which can deal with far
21 more things than a nuclear accident.

22 Our feeling at FEMA is that it would be beneficial
23 to further refine the planning down to the individual school
24 area so that in terms of the actual number of additional
25 school buses needed and certain procedural details, to help

1 eliminate some of the confusion that we saw in the exercise,
2 that a local plan would go a long way toward doing that.

3 However, I should add that the observation at the
4 Dauphin County EOC was that they had good coordination with
5 the school superintendent for Halifax, the Halifax High
6 School, and they did succeed early on in identifying the
7 need for additional school buses should an evacuation be
8 necessary. So there was coordinated activity going on.
9 However, it could have been refined more. And I think that
10 is the issue with local school plans, that more effort still
11 needs to be put into that.

12 DR. LITTLE: The next question then is how serious
13 did you view these, this confusion and lack of
14 coordination? How serious do you consider these
15 observations in assessing the readiness of the schools at
16 this point to carry out the emergency plans?

17 WITNESS HARDY: Enough so that we felt it was
18 necessary to bring it out in the observations and make a
19 recommendation that they go back to their concept of dealing
20 with schools.

21 WITNESS ADLER: I think, succinctly stated, we
22 would like to see such a school plan, an overall school
23 plan, as a part of county plans.

24 DR. LITTLE: Of the 72 items, would you rank that
25 in the top ten percent for priority, or where do you rank

1 that for priority?

2 WITNESS ADLER: We didn't identify it in terms of
3 the severity of the deficiencies observed in the exercise
4 among the top seven.

5 DR. LITTLE: You did not identify it as one of the
6 top seven?

7 WITNESS ADLER: Let me check.

8 DR. LITTLE: Well, I read this over, and I didn't
9 know if one of those had this as a subcategory or not.

10 WITNESS HARDY: It is part of -- within the seven
11 that we identified at the beginning, in the so-called
12 introduction. It is contained in number two. It would
13 relate to that, improved coordination on operational
14 matters. It would pertain also to number seven and possibly
15 to number three.

16 In other words, that fit into our consolidation of
17 problem areas that had to do with coordination. Two
18 different entities were trying to control the directions
19 that the schools would go.

20 DR. LITTLE: Is there a pretty clear understanding
21 in discussions which have taken place outside this hearing
22 as to how PEMA knows what goes under each of these seven
23 categories? Is there some clear understanding so that PEMA
24 can look at items one through seven and figure out which one
25 of the findings go under where and what kind of relative

1 priority they have?

2 WITNESS ADLER: We're having ongoing discussions
3 about it. However, it is a problem in terms of the ranking
4 sheet categories, not being directly cross-indexed to the
5 standards or the criteria. That might be a problem that the
6 Board has in trying to slot in their own mind each of the
7 deficiencies we've discussed. Hence a functional activity
8 of this kind is, as Mr. Hardy states, a piece of three or
9 four of the recommendations mentioned, the recommendation
10 areas one through seven.

11 This ought not to be a problem in our discussing
12 the issue with PEMA. It has not been one so far.

13 DR. LITTLE: It has not been?

14 WITNESS ADLER: It has not been a problem.

15 DR. LITTLE: The Board is well aware that all of
16 those type of negotiation -- we assume that it's not going
17 to stop once we close the hearing process, and what we are
18 interested in finding out is what the mechanisms are for
19 keeping it ongoing and making sure that the findings are
20 corrected on a timely basis and that each party to them
21 understands clearly what it is supposed to do.

22 WITNESS ADLER: We can assure you that this would
23 not stop at the closing of the hearing. One reason comes to
24 mind immediately, and that is that the state, we understand,
25 would like to submit for formal approval, and thereby

1 noticing in the Federal Register in the coming weeks, their
2 state and county plans with FEMA, submit them for formal
3 approval.

4 We have iterated; it has been an ongoing process
5 for a year or more. And cleaning up and finalizing the
6 plans in such a way that the state is proud to officially
7 submit them for approval to FEMA is I think a driving force
8 here that is very important to both FEMA and PEMA. That is
9 one example, the nearest term illustration beyond the
10 conclusion of this Board's work.

11 In addition, we have constant dialogue. The
12 training program is one link of a continuing nature. The
13 drills, tabletop exercise and overall exercise schedule in
14 the ensuing years is another link. And in the case of
15 Pennsylvania, other than plants for which Plans and
16 Preparedness Division in FEMA Region III is already
17 reviewing plans, the state plan as it is interfaced by other
18 counties for, for example, Susquehanna.

19 So there is an interlacing of interests that makes
20 the effort of a continuing nature.

21 DR. LITTLE: There will be annual drills for each
22 facility; is that correct?

23 WITNESS ADLER: Yes.

24 DR. LITTLE: So if each facility is exercised on
25 an annual basis, the state will be exercised much more

1 frequently at the state level?

2 WITNESS HARDY: The state is required to
3 participate in one full-scale exercise each year, and
4 because there are three and shortly four facilities here,
5 then each year they would shift to a different facility to
6 play on a full-scale basis.

7 The items that are determined, like these 72
8 recommendations, will be used for the next exercise if they
9 are appropriate to that facility. So that we will be
10 looking at items that are identified here, not just for the
11 next exercise for TMI, but for the next exercise wherever it
12 may be in Pennsylvania.

13 DR. LITTLE: So essentially you'll have a
14 continual feedback mechanism, feedback and refining
15 mechanism for the plants.

16 WITNESS ADLER: Could you repeat that?

17 DR. LITTLE: You have a feedback mechanism, so
18 that in the future they will be refining all the plans.

19 WITNESS ADLER: That's true.

20 DR. LITTLE: Okay.

21 DR. JORDAN: I guess I have misunderstood a little
22 bit previously. How often and when do you expect there will
23 be another exercise for TMI?

24 WITNESS ADLER: In another year we would expect
25 there to be a TMI-related exercise.

1 DR. JORDAN: So TMI is being singled out, then.
2 Because if the state only is involved once every year, they
3 were involved this year at TMI, or are they also going to be
4 involved next year at TMI?

5 WITNESS ADLER: I expect they will, but I don't
6 believe it is a requirement. The EOC's that are involved
7 and the place from which the basic information at the site
8 flows could shift. I could conceive of using Dauphin County
9 as a parent county next year if we wished to.

10 DR. JORDAN: I see. But it is FEMA's intent to
11 have another TMI exercise in less than a year?

12 WITNESS HARDY: It is within 15 months of the
13 previous exercise. Exercises are divided into full-scale
14 and small-scale, and a full-scale exercise with full
15 participation would have to be done at whichever site is
16 selected. We could do TMI two years in a row, but I am sure
17 that they won't.

18 But a small-scale exercise, there are certain
19 requirements for that and they are in the NRC rule, as well
20 as elaborated somewhat in 0654.

21 DR. JORDAN: Okay, that clears that up. Thank
22 you.

23 MR. ZAHLER: Dr. Jordan, just so there's no
24 confusion on the Board, 10 CFR Part 50, Appendix E, Section
25 F, provides specific guidelines with respect to the training

1 drills as a matter of regulation. NUREG-0654 elaborates on
2 that somewhat further.

3 In addition, let me just point out that TMI is
4 somewhat unique in that, given the separation of units,
5 there is an emergency plan for TMI-1, there is also an
6 emergency plan for TMI-2. The exercise that was conducted
7 in June was the exercise for TMI-1. I am informed that they
8 will be holding an exercise in December for TMI-2. I
9 cannot, however, tell you the level of participation the
10 state will play in that December exercise.

11 CHAIRMAN SMITH: What will the forthcoming
12 exercise involving York County look like?

13 WITNESS ADLER: I'm sorry, Mr. Chairman? What
14 will the exercise --

15 CHAIRMAN SMITH: Involving York County look like.

16 WITNESS ADLER: Oh, it should look very much like
17 the exercise of any of the other counties in the June 2
18 overall exercise.

19 CHAIRMAN SMITH: That will involve the Licensee,
20 too?

21 WITNESS ADLER: Let me back off just a moment. We
22 don't know sitting here that there is definitely going to be
23 a York County exercise.

24 CHAIRMAN SMITH: I was going to ask about that,
25 too.

1 WITNESS ADLER: We understand from the state, from
2 PEMA and from their discussions with Randy Curry, emergency
3 management coordinator for York County, that on or about
4 August 29th we would expect to have an exercise that would
5 involve participation by PEMA.

6 Excuse me a second.

7 (Pause.)

8 CHAIRMAN SMITH: Do you know, Mr. Rogan?

9 MR. ROGAN: Yes, sir. To the best of my
10 information right now, we have not finalized all the
11 details. It is my understanding that the Licensee and PEMA
12 will input to an exercise so that from the county point of
13 view it looks very much like the June 2nd exercise. We will
14 provide plant scenario with PEMA play, but clearly not on
15 the full scale that we did on June 2nd. But there will be
16 sufficient play that from the county's point of view and the
17 appearance of receiving information and notification and so
18 forth it will look like a full-scale exercise. That is my
19 understanding right now.

20 CHAIRMAN SMITH: Can anybody -- and I don't care
21 who it is -- tell us what is the basis for believing that
22 York will in fact participate in the exercise?

23 MR. HIPPERT: I am Ralph Hippert, the Acting
24 Deputy Director for Plans and Preparedness for PEMA.

25 I was at the meeting that we had last week, or the

1 week before that last week, I guess it was, with York
2 County, where York County proposed to have an exercise on
3 the 29th of August. That happens to be on a Saturday, which
4 is the day they would like to have it.

5 It is my understanding that that date is
6 tentatively acceptable to FEMA, to the Licensee, and it is
7 also acceptable at the present time to PEMA. It is my
8 understanding that the exercise will not be on the same
9 scale as it was June 2nd, but there will have to be enough
10 demonstrated to show the interplay between PEMA and the
11 county and the Licensee and the county.

12 CHAIRMAN SMITH: Did I miss? My particular
13 interest is, is it acceptable to York County?

14 MR. HIPPERT: It is acceptable to York County to
15 have an exercise on the 29th.

16 CHAIRMAN SMITH: So there's no question that at
17 least in principle --

18 MR. HIPPERT: They are agreeable to having an
19 exercise the 29th of August.

20 CHAIRMAN SMITH: I'm sorry, what is your name,
21 sir?

22 MR. HIPPERT: Hippert, H-i-p-p-e-r-t.

23 MS. GAIL BRADFORD: Could I just ask a question of
24 Mr. Hippert, whether the municipals will be playing in the
25 exercise.

1 MR. HIPPERT: Whether what?

2 MS. GAIL BRADFORD: Whether any of the
3 municipalities will be playing.

4 MR. HIPPERT: There will be a municipality
5 playing, one or more. There was some comment of having four
6 or five play.

7 CHAIRMAN SMITH: Mr. Hippert, did Mr. Curry
8 observe the exercises on June the 2nd.

9 MR. HIPPERT: Yes, he did.

10 CHAIRMAN SMITH: Where was he?

11 MR. HIPPERT: He was at the state EOC here in
12 Harrisburg and he was also down at Dauphin County.

13 (Pause.)

14 CHAIRMAN SMITH: Any further questions before we
15 have redirect, or any questions of Mr. Hippert?

16 (No response.)

17 All right, Mr. Tourtellotte?

18 MR. TOURTELLOTTE: No redirect.

19 CHAIRMAN SMITH: All right. Gentlemen, thank you
20 very much. You are excused.

21 (Witnesses excused.)

22 CHAIRMAN SMITH: I don't recall if Mr. Hippert has
23 been sworn, but my memory is that he has and he has given
24 testimony. But I don't recall.

25 MS. STRAUBE: No, he has not been sworn.

1 CHAIRMAN SMITH: Mr. Hippert, I'm going to ask you
2 to take the oath because the testimony you gave is
3 important, I believe. So if you'll just --

4 Do you swear that the testimony you gave in this
5 hearing is the truth and the whole truth, so help you God?

6 MR. HIPPERT: I do.

7 Whereupon,

8 RALPH J. HIPPERT,
9 called as a witness, having first been duly sworn by the
10 Chairman, was examined and testified as follows:

11 BOARD EXAMINATION

12 CHAIRMAN SMITH: What is your full name, Mr.
13 Hippert?

14 THE WITNESS: Ralph J. Hippert.

15 CHAIRMAN SMITH: Thank you very much.

16 MR. TOURTELLOTTE: Shall we go ahead and take our
17 afternoon break now? Or is there some other business you
18 want to take up?

19 CHAIRMAN SMITH: We're going to go with Mr.
20 Chesnut after the break.

21 When is the staff going to address its position on
22 emergency planning?

23 MR. TOURTELLOTTE: That will be at the time Mr.
24 Chesnut goes on the stand. He will sponsor that piece of
25 paper as another exhibit.

1 CHAIRMAN SMITH: All right. Let's take our
2 afternoon break, then.

3 (Recess.)

4 CHAIRMAN SMITH: Mr. Tourtellotte?

5 MR. TOURTELLOTTE: This witness has been sworn
6 previously, Mr. Chairman.

7 Whereupon,

8 STEVEN CHESNUT,
9 recalled as a witness by counsel for the Regulatory Staff,
10 having previously been duly sworn by the Chairman, was
11 examined and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. TOURTELLOTTE:

14 Q Mr. Chesnut, did you prepare a document entitled
15 "Emergency Preparedness Evaluation for TMI-1, Supplement 1,
16 by the Division of Emergency Preparedness, Office of
17 Inspection and Enforcement, Docket No. 50-289," dated May
18 29, 1981?

19 A Yes, I did.

20 Q And are there any additions, corrections,
21 deletions or updates you would like to make to that document
22 at this time?

23 A Yes, I have two updates I'd be prepared to
24 discuss. On page II-2, the first item which I feel should
25 be updated is on the top two lines on that page, where I

1 state that: "The Licensee indicated that the system" -- the
2 system being the alert notification system -- "will be
3 operational by July 1981." I understand from informal
4 conversation with the Licensee that that may have slipped on
5 the order of a couple of weeks and it could have slipped to
6 August of '81. And I can offer no further details beyond
7 that, except that I am aware that all of the equipment is on
8 site and that installation is in progress.

9 Q Okay.

10 A The second update on that page is on the last
11 line, the same page, where I indicate that: "A final report
12 on the siren system will be submitted to the staff by June
13 1, '81." And that was in fact received.

14 CHAIRMAN SMITH: So we would correct it to read
15 "was submitted on June 1."

16 THE WITNESS: Yes, sir.

17 My last remaining update would be some additional
18 information on page 2-4, dealing with the public education
19 and information program. Since the time of this SER, I
20 received a letter from GPU Nuclear dated June 26, 1981, in
21 which -- this letter was from Mr. William Gifford to General
22 DeWitt Smith of PEMA, in which GPU Nuclear indicated that it
23 would assume the responsibility for printing and
24 distributing the brochures at no cost to PEMA or the
25 counties. And it also indicated that the target date for

1 completing that task was September 1st, 1981.

2 That is my last update.

3 BY MR. TOURTELLOTTE: (Resuming)

4 Q Are there any additional corrections or deletions
5 you wish to make at this time?

6 A No, sir.

7 Q And is the document then true and correct to the
8 best of your knowledge?

9 A Yes, it is.

10 Q And the updates that you made would not in any way
11 alter the conclusion that you reached in that document?

12 A No, they would not.

13 MR. TOURTELLOTTE: I would ask that the document
14 be marked as Staff Exhibit 23 and entered into the record.

15 (The document referred to was
16 marked Staff Exhibit No. 23
17 for identification.)

18 CHAIRMAN SMITH: If there are no objections, the
19 exhibit stamped 23 is received.

20 (The document referred to,
21 previously marked for identi-
22 fication as Staff Exhibit No.
23 23, was received in evidence.)

24 THE WITNESS: Excuse me, Mr. Chairman. I would
25 like to make one further addition which I forget to add.

1 There was one open item that was listed in the SER, where I
2 indicated that an emergency action level for iodine should
3 be consistent with NUREG-0654. I forgot to state that
4 earlier, that we have received a letter from Licensee
5 committing to exactly -- to comply with 0654 for that
6 emergency action level.

7 BY MR. TOURTELLOTTE: (Resuming)

8 Q That change does not in any way alter the
9 conclusions that you made in the document; is that correct?

10 A No, it does not.

11 Q Did you also prepare a document entitled "NRC
12 Staff Position on Emergency Preparedness for TMI-1"?

13 A Yes, I prepared that document in consultation with
14 my management at the NRC headquarters.

15 Q And is that true and correct to the best of your
16 knowledge?

17 A Yes, it is.

18 Q Do you have any additions, corrections or
19 deletions that you wish to make?

20 A No, sir.

21 Q And do you adopt that as your testimony in this
22 case?

23 A Yes, I do.

24 MR. TOURTELLOTTE: Mr. Chairman, I previously
25 indicated I would mark this as an exhibit. But instead I

1 would ask that it be incorporated into the record as if
2 read.

3 CHAIRMAN SMITH: Are there any objections?

4 (No response.)

5 All right. We will receive as Mr. Chesnut's
6 testimony the NRC staff position on emergency preparedness
7 for TMI-1.

8 (The document referred to follows:)

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mem 7/1
7/8/81

NRC STAFF POSITION ON EMERGENCY
PREPAREDNESS FOR TMI-1

The overall emergency preparedness for TMI-1 is adequate subject to exceptions listed below and provides reasonable assurance that appropriate protective measures can and will be taken in the event of a radiological emergency at TMI-1 Unit 1. The basis for this position is the NRC Staff review of the TMI-1 Emergency Plan against the requirements of 10 CFR 50.47(b), 10 CFR Part 50, Appendix E, and the guidance of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants", as well as the interim findings and determination of the Federal Emergency Management Agency (FEMA) which indicate that the State and local plans are adequate and capable of being implemented. However, the Staff position is also that the following actions should be completed satisfactorily prior to a restart of TMI-1:

- (1) Demonstrate the ability to implement the York County Emergency Plan.
- (2) Complete the prompt alerting system for the TMI plume exposure Emergency Planning Zone.
- (3) Modify the TMI-1 Emergency Plan to reflect the commitment that the licensee's Emergency Operations Facility (EOF) will be staffed and functional within about one hour of the declaration of an emergency of a classification of Site Area Emergency or higher.

1 MR. TOURTELLOTTE: In explanation, I would like to
2 add that this NRC staff position is offered to the Board and
3 to the parties today because, although the staff had
4 consulted with FEMA in the past and had a very strong
5 feeling as to where we would come out, nevertheless we felt
6 it would be prudent to wait until after FEMA had testified
7 and gone through cross-examination before we developed a
8 position.

9 Since Mr. Dickey did appear and testify on the
10 overall emergency preparedness yesterday and it was the
11 general view of the staff that his testimony in no way
12 affected our assessment as to the overall emergency
13 preparedness for TMI-1, we then undertook to draft this
14 position and inform the parties.

15 BY MR. TOURTELLOTTE: (Resuming)

16 Q Mr. Chesnut, this is a brief document. Could you
17 explain briefly what is contained in that document?

18 A Yes. I guess I could go through almost a sentence
19 by sentence explanation of it. The first sentence basically
20 provides a bottom line or conclusion that the staff has
21 reached, whereby we indicate that the overall preparedness
22 for TMI-1 is adequate with some exceptions, and those
23 exceptions are listed also at the bottom of the page.

24 The next sentence indicates the basis for that
25 conclusion, and that basis, although it has been the subject

1 of SER's and testimony before, just summarizes how the NRC
2 arrived at the conclusion, and that was based on our review
3 of the TMI-1 emergency plan against the criteria of
4 emergency planning regulations and the guidance of
5 NUREG-0654.

6 For the onsite -- excuse me -- for the offsite
7 part of the review, we based our findings on the interim
8 findings and determinations of the Federal Emergency
9 Management Agency, which also indicated that the state and
10 local plans were adequate and capable of being implemented.

11 Following that, the staff indicated as a result of
12 our reviews we felt that three deficiencies or three items
13 should be undertaken prior to a restart of TMI Unit 1, and
14 those are: One, to demonstrate the ability of the York
15 County emergency plan; two, complete or make operational the
16 prompt alerting system for the TMI plume exposure emergency
17 planning zone; and the last item is to modify the TMI-1
18 emergency plan to include a staffing of the emergency
19 operations facility within about one hour of a site area
20 emergency or higher.

21 CHAIRMAN SMITH: May I ask a question?

22 MR. TOURTELLOTTE: Yes.

23 CHAIRMAN SMITH: On item number 3, you would have
24 them modify the emergency plan. Did you intend to use the
25 language "reflect the commitment"? I am not aware of any

1 commitment.

2 THE WITNESS: That may be weak -- what I mean by
3 that, Mr. Chairman, was that, to reflect the plans or to
4 commit to staffing at EOF within about one hour, making it
5 fully functional.

6 BY MR. TOURTELLOTTE: (Resuming)

7 Q I think the question that is asked, Mr. Chesnut,
8 is how that commitment been made or is it that you are
9 suggesting that that commitment be made?

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1 A At the time I wrote that and developed that with
2 my management, I was suggesting that that commitment be
3 made. We have received during the lunch break a letter from
4 the Licensee where it said a commitment. However, there is
5 a commitment to make the EOF at least partially manned and
6 functional within one hour, and that was not what was meant
7 when we reviewed and wrote that statement.

8 I guess I should probably get into it to provide
9 some explanation. We received over the lunch break a letter
10 which indicated that the Licensee had agreed to staff its
11 EOF with about six key personnel. However, that would not
12 include the emergency support director, who is essentially
13 the decisionmaker of the emergency operations facility.

14 So I consider the provisions for staffing the
15 emergency operations facility inadequate because that
16 decisionmaker, who makes the offsite recommendations, who is
17 overall in charge of the emergency response, is not in the
18 emergency operations facility.

19 CHAIRMAN SMITH: Well, how is the Board going to
20 rule on this what appears to be unresolved dispute?

21 MR. ZAHLER: Mr. Chairman, I have some
22 cross-examination for Mr. Chesnut on that. I propose to,
23 through Mr. Chesnut, to put the letter that he referred to
24 into evidence, because it reflects the present commitment of
25 Licensee.

1 I think that you will see that the difference
2 between the two of us, at least in Licensee's view, is
3 incredibly small, and we would hope that resolution of it --
4 the issue is to be resolved by the Board, because the
5 parties, although they have tried diligently and often and
6 have been talking about it for a long period of time, have
7 not been able to resolve it.

8 With the letter, the issue will be crisply and
9 precisely defined for the Board. There is one small nuance
10 that the parties have not agreed to, notwithstanding our
11 best efforts to reach agreement.

12 CHAIRMAN SMITH: Are you going to offer the letter
13 as an exhibit?

14 MR. ZAHLER: Yes.

15 BY MR. TOURTELLOTTE: (Resuming)

16 Q Does the NRC staff position on emergency
17 preparedness fairly summarize the staff position that is
18 reached in your overall emergency preparedness evaluation,
19 Staff Exhibit 23?

20 A Yes, sir.

21 MR. TOURTELLOTTE: I have no other questions at
22 this time.

23 CHAIRMAN SMITH: Ms. Bradford, we have received
24 also a comprehensive cross-examination plan from the
25 Commonwealth. Would you prefer that they proceed?

1 MS. GAIL BRADFORD: I'll start, if that's all
2 right.

3 CROSS-EXAMINATION

4 BY MS. GAIL BRADFORD:

5 Q Mr. Chesnut, could you explain a little more about
6 the sirens and the testing dates and testing procedures
7 which would follow the projected completion dates?

8 (Pause.)

9 A Excuse me. I'm just looking for the correct page
10 in my SER. I'll be right with you.

11 (Pause.)

12 A All right, let me make sure I understand your
13 question. Are you asking me what are the dates proposed for
14 testing the siren system?

15 Q Yes, that and also what are the testing
16 procedures?

17 A Well, I do not have a date that has been firmly
18 offered as a testing date for the prompt warning system
19 around Three Mile Island Unit 1. All I can say is I would
20 assume it would closely follow the completion of that
21 system, which I expect would follow either in late July or
22 early August. That would be the completion date of the
23 siren system. The actual testing date, I just could not
24 state that right now. It might be better directed to the
25 Licensee, but I do not know that date.

1 Q Could you tell us about the testing procedures?
2 Have they been identified? I assume that you somehow want
3 to assess that the system actually does provide coverage,
4 and also assess whether or not the individual units work on
5 a periodic basis?

6 A Well, NUREG-0654 has some testing guidance in its
7 Appendix 3. That is primarily a maintenance type of
8 testing, sort of a monthly or quarterly test of a certain
9 nature, and also including an annual test of the siren
10 system.

11 I would suspect from our discussions with other
12 utilities that would usually be done in conjunction with
13 annual exercises. However, in this case I would not know
14 when that would be, the testing for the siren system.

15 As far as a survey or whatever to see if it is
16 adequate, the NRC has asked FEMA to undertake that test for
17 us and they have contracted to determine the effectiveness
18 of siren systems and they will be doing that for us.

19 I am also aware of a contract using some FEMA
20 funds and sort of guided by the NRC for a survey of the area
21 around TMI and a comparison of the area around Three Mile
22 Island and the proposed siren locations, to help develop
23 evaluation criteria for siren systems. And that would use
24 the Three Mile Island siren system as a test case. But that
25 is some time down the line before that is finally

1 developed.

2 I would expect at least one audio test where you
3 actually activate the sirens to determine if the sirens
4 actually physically work.

5 Q Can you tell us how they would be tested to
6 determine coverage? I mean, do they turn them on for a
7 particular length of time and go listen, or what do they
8 do?

9 A I think there are several methods. The Licensee
10 prepared a fairly detailed theoretical study whereby they
11 considered not only siren locations and the output of each
12 siren; also considered was the range of physical conditions,
13 whether obstructions --

14 Q But that is a theoretical study?

15 A That is a theoretical study. However, you know,
16 this is not an emerging technology. In my review and also
17 some reviews I have had from consultants on an initial look
18 at that siren report, that indicate that it is a reasonable
19 study and it looks like it's done in accordance with accepted
20 technical standards.

21 Also, the final test where FEMA will be doing a
22 survey to determine how the population actually would
23 receive that notification using this system. I believe it
24 has got a questionnaire and a statistical sampling is
25 proposed. But I'm not sure if that is going to be finally

1 the method accepted and utilized by FEMA to determine the
2 adequacy of the siren systems.

3 Q Is there also a testing program which would
4 indicate particular nonfunctional sirens, and how often is
5 that testing program run if there is one?

6 A Well, NUREG-0654 on page 312 has some siren
7 testing guidance to determine problems, just as you have
8 just stated. There is guidance indicating that there be a
9 silent test every two weeks.

10 Q Who conducts that test?

11 A Pardon me?

12 Q Who conducts that test?

13 A I would imagine that would be done by the
14 individual counties who would be activating that test.

15 Q Do you have any assurance that there is a
16 procedure or that those tests will be run?

17 A Right now I don't have the details of that, of how
18 much depth the procedures have been developed. The system
19 is not in, however.

20 Additionally, these siren systems are going to be
21 compatible with existing siren systems that these counties
22 already have, and most probably will be tested in accordance
23 with existing civil defense siren system tests.

24 Q Do you know which counties need additional radio
25 controls and when these new controls will be fully

1 operational?

2 A Well, I called the Licensee on that question when
3 I was writing this SER and he told me, the Licensee told
4 me. But I have forgotten which counties it is that required
5 it. I believe Lancaster County was one, but I may be
6 wrong.

7 I also am aware that the NRC sort of got its
8 consultants performing a survey of the Three Mile Island,
9 went to the locations where the sirens will be activated and
10 discussed it. But I'm not sure of the results yet. I
11 haven't seen any result back.

12 Q So you don't know when those new radio controls
13 will be available?

14 A No. All I know is that the Licensee has indicated
15 that, to me, the equipment has been received and
16 installation is in progress. I have not been informed of
17 any delays in making the system operational other than it
18 might exceed a couple of weeks past the original date.

19 Q Can you tell us when FEMA and NRC will determine
20 the ultimate acceptability of the systems for alerting the
21 population? What steps do you have to go through?

22 A Well, as I stated before, FEMA is the agency
23 charged with determining the adequacy of the siren systems.
24 In the course of our relationship here in the hearings, we
25 have each done some reviews. And for instance, the NRC and

1 FEMA are working together on the criteria. And I do not
2 have a date certain when that would occur.

3 Q Can you tell us what stages or what steps you
4 would go through, and doesn't the NRC review FEMA's decision
5 on that to determine the adequacy for NRC purposes?

6 MR. TOURTELLOTT: Mr. Chairman, I guess I object
7 to the line of questioning on the grounds that it really is
8 not relevant to the testimony. This witness has already
9 testified that the position of the staff is that a complete
10 prompt alerting system for the TMI-1 plume exposure
11 emergency planning zone should be installed prior to
12 restart.

13 And unless she's trying to prove that it should
14 not be installed prior to restart, these questions serve no
15 useful purpose. And I don't believe that's her position.

16 MS. GAIL BRADFORD: I would like to know from the
17 NRC what they mean. What are the stages involved, what are
18 the steps involved in determining that the system is
19 adequate? It is not just installing it. You have to test
20 it, or maybe they don't require testing. Maybe they need
21 radio controls installed in the counties to make sure the
22 counties know how to operate them. Maybe they don't need
23 that. It is not clear.

24 CHAIRMAN SMITH: It does seem to me to be a cross
25 of the direct testimony on page II-2, where you talk about

1 the testing. As far as your other point is concerned, the
2 Intervenor and the Board won't have to accept the staff's
3 conclusion that an adequate siren system will be installed
4 and that is the end of it.

5 The hearing order makes clear that we can inquire
6 into the specifics of these actions. Objection overruled.

7 BY MS. GAIL BRADFORD: (Resuming)

8 Q Did you get the question, Mr. Chesnut?

9 A Yes.

10 CHAIRMAN SMITH: Wait a minute. However, this
11 should not be an opportunity to explore anew the entire
12 issue of the siren, siren coverage, and the testability of
13 them. It should only be what is new here in the
14 supplement. And it does seem to me you're covering ground
15 which was fairly well covered at one time in the
16 proceeding. But I do see that it was covered again in the
17 supplement. That is just a request that you limit it to
18 what was not covered before.

19 MS. GAIL BRADFORD: Well, perhaps I'm
20 anticipating, but it does seem that his answer on the
21 testing is that it hasn't been decided yet what the testing
22 process would be exactly, or either it has been decided and
23 he doesn't happen to know.

24 But I'm wondering whether the NRC has already
25 decided how they will determine what is included in

1 determining the ultimate acceptability of the system. Is
2 that including the testing procedures? And I don't think
3 we've covered that at all before.

4 All it says on the other sheet is "complete the
5 prompt the prompt alerting system for the TMI plume exposure
6 emergency planning zone."

7 CHAIRMAN SMITH: There's no objection -- the
8 objection has been overruled and the answer may be
9 submitted.

10 Dr. Jordan has pointed out that the standards are
11 fairly well spelled out on page II-2. What is the question
12 now?

13 THE WITNESS: Mr. Chairman, I remember the
14 question. We had discussed before that basically the
15 approval process is evolving. And the current philosophy,
16 the way I understand it, is that FEMA is going to be doing a
17 survey after the sirens have been physically tested. I am
18 not aware of a specific timetable, however, for those survey
19 results to be delivered to the NRC.

20 But in the interim, to determine the adequacy at
21 this stage what the NRC staff did was to: one, look at the
22 siren report provided by the Licensee, which is a very
23 detailed technical report. We compared that with Appendix 3
24 of NUREG-0654. And after that we also looked at CPG-1-17,
25 which is referred to in NUREG-0654, and essentially came to

1 a conclusion that the design of this proposed system would
2 be adequate.

3 That was done both at NRC headquarters and also we
4 had one of our consultants at Pacific Northwest look at that
5 study and they indicated likewise, that the siren system
6 appeared to meet the criteria for coverage of the plume
7 exposure emergency planning zone.

8 And as I recall the testimony from Mr. Dickey
9 yesterday, he indicated that FEMA had already done a review
10 of the design of the system and he reported yesterday the
11 design was adequate. So that is where we are to date. We
12 have a system where the NRC and FEMA both agree that the
13 design of the system is adequate and we have an estimated
14 date of installation of the system. I just can't give you
15 the final target date for the final FEMA report on the Three
16 Mile Island notification system.

17 DR. LITTLE: Can I interject something here? I
18 think part of the problem is determining what "completion"
19 means. One stage is installation, the next stage is
20 testing, the next stage is confirmation that the test was
21 successful.

22 So what do you mean by the "completion" on the NRC
23 staff position on preparedness?

24 THE WITNESS: What I meant by that and what the
25 staff meant by that was that the siren notification system

1 should be installed, that procedures developed for the
2 operation of the siren, and that it be operational on all
3 respects. That does not mean that we should have back
4 necessarily the FEMA report indicating the final design of
5 it, the final results of the notification.

6 CHAIRMAN SMITH: The final results of?

7 THE WITNESS: The FEMA task to determine the
8 ultimate acceptability of the siren system.

9 CHAIRMAN SMITH: Which would include actually
10 running the sirens?

11 THE WITNESS: That would include a test whereby
12 FEMA distributes some survey or determines somehow the
13 adequacy of the sound level, the propagation of the siren
14 system itself. There may indeed be tests to determine
15 whether the sirens are operational. There may be individual
16 ground tests where a siren is tested and rotated for just a
17 second or two in the process of the installation of that
18 siren. I am not sure.

19 But at any rate, we would accept some sort of
20 indication from the Licensee or from the state that that
21 siren system is operational. I would expect also that they
22 would indicate what the status of the testing with that
23 siren system would be.

24 There are several kinds of tests which are
25 referred to in NUREG-0654. There are silent tests, where my

1 understanding of that is that it is more of a circuit test
2 to test the activation system, but not an actual physical
3 operation of the siren; a ground test, which is sort of a
4 quarterly maintenance test, where they actually test that
5 the siren is operational, but they don't let it build up
6 enough speed or momentum or noise level to, you know,
7 startle the public, for instance. And then there is a
8 complete cycle test for the whole system, at least on an
9 annual basis, will be activated as if there were an actual
10 radiological emergency.

11 CHAIRMAN SMITH: That is what I am waiting to hear
12 about. Is there going to be such a test of the sirens?

13 THE WITNESS: The NRC has not required that that
14 test be physically conducted by a certain date of the whole
15 siren notification system. In fact, to my knowledge there
16 hasn't been any plant in the country who has tested the
17 siren notification system for that.

18 CHAIRMAN SMITH: Could you explain why? It just
19 seems to me that when they go to all the expense and trouble
20 installing 83 sirens in this area, that you're going to run
21 them to see if people can hear them.

22 THE WITNESS: Well, I think -- I guess what I was
23 indicating, I'm not sure what FEMA's schedule is for going
24 out and monitoring the testing schedule, because their
25 criteria is still under development. I really couldn't

1 indicate that such a test much be conducted by a certain
2 date.

3 I feel that the siren system can be operational
4 and that we have already reviewed the design of it. You can
5 test the entire system and have assurance that it'll be
6 operational and not necessarily have to have it before
7 restart. There may be an exercise in the near future that
8 the utility desires to test the system.

9 CHAIRMAN SMITH: What are the disadvantages of
10 having a full-scale actual test?

11 THE WITNESS: I guess, well, there aren't really
12 any disadvantages except that there's a lot of notification
13 and warning and advance notice for such a test, you know,
14 that necessarily precede a test of that system, just to
15 alleviate any fears the public might have.

16 MR. TOURTELLOTTE: Mr. Chairman, I would note and
17 invite the attention of the Board to the fact that the siren
18 system is only a part of the notification system. And as I
19 recall it, when similar questions were put to Mr. Dickey
20 yesterday, that is along the lines of the sirens, he
21 indicated that although the sirens had not been yet
22 installed, he was nevertheless able to find that the overall
23 plan was adequate because there were other means of
24 notifying the public and therefore the simple installation
25 was not absolutely required for his overall finding.

1 Nevertheless, he urged that they be installed and as quickly
2 as possible.

3 What the staff's position has been is that we more
4 or less agree with that, and that we believe that an overall
5 finding of emergency preparedness can be made; nevertheless,
6 the siren system should be installed. Whether there is a
7 test of that system or not as a condition precedent to
8 restart does not necessarily affect the overall preparedness
9 -- I'm sorry -- the overall emergency preparedness finding.

10 CHAIRMAN SMITH: Now, I understand the staff's
11 position and FEMA's position. But every time an individual
12 buys a machine he likes to see if it works. Industrially,
13 when you install a device you run it. In the military
14 service, they repair a weapon and they test it.

15 Testing is such a logical aspect to acquiring and
16 making operational that when it is not being contemplated,
17 then it raises a question as to why not. And I ask, are
18 there any disadvantages, and the answer is, well,
19 notification. Well, it just provides the basis for the
20 Board to inquire why it is not going to be fully tested, in
21 the absence of any fully demonstrated disadvantages.

22 You design, acquire, install and test. These are
23 just traditional sequences.

24 (Pause.)

25 MR. TOURTELLOTTE: I'm not sure that Mr. Chesnut,

1 from what I've heard from him, that he knows whether it will
2 or will not be tested. But I think what he is simply saying
3 is that in the staff's view it doesn't have to be tested as
4 a condition to restart.

5 CHAIRMAN SMITH: We understand. So the staff is
6 not going to require it.

7 MS. GAIL BRADFORD: Could I say something on what
8 Mr. Tourtellotte said earlier? Could I ask if it is the
9 staff's position that the current notification and alert
10 system for the TMI area is adequate without the sirens? Is
11 that what I understood you to say?

12 MR. TOURTELLOTTE: What I said was that the
13 overall emergency preparedness is adequate and provides a
14 reasonable assurance that appropriate protective measures
15 can and will be taken.

16 MS. GAIL BRADFORD: Without the sirens, without
17 the new siren system?

18 MR. TOURTELLOTTE: No. The end of that is -- the
19 exception is that we believe with regard to sirens that they
20 should be installed and be fully operational. We don't have
21 any particular predisposition about whether they should be
22 tested prior to restart. That is my understanding of our
23 position.

24 CHAIRMAN SMITH: And I am stating that the normal
25 condition is to test, and if that is not being followed we

1 want to know why. That is a departure from normal logical
2 process.

3 MR. TOURTELLOTTE: It may be that Mr. Zahler can
4 shed some light as to whether they will or will not be
5 tested. I don't think this witness has indicated that he
6 knows whether they will or they won't.

7 MR. ZAHLER: Mr. Chairman, I think we can shed
8 some light, and I think Mr. Rogan can shed some
9 illumination. There is some confusion, though, because it
10 has to do with what the word "test" means.

11 As Mr. Chesnut has already testified, one would
12 expect that the operability of the sirens would in fact be
13 tested. That is, that each siren was installed correctly,
14 that you can activate it from the appropriate EOC, and that
15 it results in sound coming out of the sirens.

16 There is another part of testing, which is that in
17 fact the entire populace has heard the sound. That is more
18 of a confirmation of the design rather than a test of the
19 equipment. As I have understood it, the plan had always
20 been that FEMA would do a survey to confirm that the
21 population heard it.

22 If I understood Mr. Dickey correctly yesterday, he
23 indicated at one point that FEMA was having some problems
24 with OMB with respect to the authority to conduct those
25 kinds of surveys. And I also understood Mr. Chesnut

1 correctly, what he said now was that the ultimate
2 acceptability of the system, that is the confirmation that
3 people heard it, is still under evaluation as to the means
4 to which it will be implemented or done.

5 Given that set of events, what I think Mr. Chesnut
6 is telling us is there is no date at which that level of
7 confirmation will be done.

8 CHAIRMAN SMITH: That is very helpful and that
9 brings it into sharp focus. But the thing that I have not
10 been able to get out of this witness or anybody, and I'm not
11 sure that I have it from you is that when they install the
12 things they're going to turn them on and run them.

13 MR. ZAHLER: I think Mr. Rogan will testify that
14 that we are going to do. That is what operability is.
15 There is no question about that. And actually, I would
16 prefer Mr. Rogan to describe what Licensee plans in
17 connection with the state and the county, as to the fact
18 that you turn them on and they work.

19 DR. JORDAN: Well, I guess there's one further
20 thing you might ask. Rather than just a test of whether the
21 populace heard it or not, there are specifications that you
22 gave to us that the sound levels had to be 70 db above
23 background in heavily populated areas, certain areas and so
24 on. And one could test for that.

25 MR. ZAHLER: Well, if it is appropriate at this

1 point, Mr. Rogan can interject something. We'll have it all
2 at one place in the record.

3 CHAIRMAN SMITH: Yes, I think it would be.

4 MR. ROGAN: Mr. Chairman, perhaps a few summary
5 remarks to put it in perspective. First, with regard to
6 what are the disadvantages of a large-scale test. I will
7 have to take minor exception to the witness' testimony. The
8 installation of sirens has not been the unanimously well
9 received situation by the population around TMI. In fact,
10 one of the problems that we've had, although minor in
11 nature, and it has caused some delays, was the procurement
12 of right-of-way to locate sirens where we thought they
13 optimally should be located in order to generate the proper
14 sound levels.

15 Nonetheless, we think we have managed most of
16 those problems and we expect to resolve a few outstanding
17 issues. Our program essentially provides that after each of
18 the sirens has been properly installed we will have a
19 separate startup and test program, which will call for the
20 confirmation of the operability of both the radio control
21 equipment which operates the particular siren and the siren
22 itself.

23 There is some uncertainty at the moment as to
24 whether we will sound the individual sirens for a full three
25 to five minutes each to test their full timing mechanism and

1 so forth, because of the possibilities of some adverse
2 public response in some of the areas. However, all of the
3 sirens once installed will be tested to assure full
4 operability of both the radio control equipment and the
5 sirens themselves.

6 CHAIRMAN SMITH: Their measured output as
7 described --

8 MR. ROGAN: Yes, what we'll do, in addition to
9 simply checking the operability, our acoustical consultant
10 will come down, the one that did the original study for us
11 and who is a competent, qualified, acoustical engineer, and
12 will take sample testing, not at all of the sites because it
13 is a small team and he will not have the survey capability,
14 for instance, that FEMA plans at some point in the future,
15 but will actually go out and selectively sound test various
16 siren locations.

17 And then we'll go back and confirm the model that
18 was used to do our original sound studies, and out of that
19 we will do two things: first, because we have had some
20 locations moved as a result of right-of-way negotiations and
21 other problems; and two, because we expect in actuality to
22 have some minor variations in some locations because of
23 changes in foliage or terrain beyond what we originally
24 expected and projected on those studies.

25 He'll go back, confirm the model, and we will

1 publish a separate addendum to that study which will show
2 the actual readings of sound levels and contours throughout
3 the ten-mile EPZ. We will then provide that to the staff
4 and we will use it for our own purposes until such time as
5 FEMA actually conducts their survey test.

6 CHAIRMAN SMITH: When is this going to be done?

7 MR. ROGAN: We would expect to do that the latter
8 part of July right now, assuming that we keep on the
9 schedule that we are presently on. We are not experiencing
10 any material problems right now, but we are experiencing, as
11 I say, some right of way problems, including legal problems
12 with regards to filing certain rights-of-way with the Public
13 Utilities Commission once they are received, and there are
14 just some delays involved there.

15 If our present schedule holds true, we would
16 expect to be clearly, within the next 45 to 60 days,
17 completed. But unquestionably before restart we will be a
18 fully operational, tested system.

19 MS. STRAUBE: Chairman Smith, are we allowed to
20 ask Mr. Rogan a couple of questions?

21 CHAIRMAN SMITH: I think that this particular
22 subject matter should be exhausted right now, yes.

23 MS. STRAUBE: I'm not sure I fully understood what
24 you said. The engineer that you have, the acoustical
25 engineer, is he going to test each, specifically test for

1 contours and sound levels for each siren which is not placed
2 where the study says it was going to be placed?

3 MR. ROGAN: No. What we will do -- we have two
4 groups of people actually conducting the tests, but they
5 will work in concert. One is the group of people who will
6 do the operability test to make sure the system is fully
7 operational, functions properly, and they will have the
8 capability right at that time to do warranty work on the
9 system, to replace radio equipment and so forth. So that as
10 they complete a siren site they can literally turn over that
11 siren to GPU Nuclear. And as we get it, we can then
12 transfer responsibility for operation to the county.

13 In addition, the acoustical engineering people who
14 did our study for us will come down and selectively check
15 various sites, of which I am sure the majority will be ones
16 that have changed, but I can't say it's 100 percent of them,
17 to verify the model in its overall validity, and also to
18 verify any impact on the system as a result of the changing
19 of locations. So clearly changing location will be
20 important.

21 But the testing of the acoustical sound dispersion
22 and contour levels would not be restricted just to ones that
23 have been changed, because we will want to verify the whole
24 system. But he will not actually measure all 83 sites at
25 various levels from the sites.

1 MS. STRAUBE: Then my question is, those that have
2 been changed, the locations that have been changed will
3 definitely be part, will definitely be individually looked
4 at by the acoustical engineer?

5 MR. ROGAN: I cannot say all 100 percent of those
6 that have been changed will be checked. I've got to talk to
7 the engineer and find out what his technical judgment is in
8 terms of what his sampling has to be. Because in fact there
9 is very little difference in terms of the measuring of the
10 acoustical contours between those that have been changed and
11 those that haven't, because all the calculations you start
12 with were theoretical and were based on a location, and the
13 fact that those locations have shifted one way or the other
14 may impact on the overall contour level, but not necessarily
15 the sound dispersion in the model.

16 So he will do a random sampling of the whole
17 ten-mile EPZ.

18 MS. STRAUBE: Is his end result supposed to be a
19 conclusion whether 100 percent of the population within the
20 ten-mile EPZ can be notified by that siren system within 15
21 minutes?

22 MR. ROGAN: Yes, indeed. Yes, indeed. As a
23 matter of fact, his product is four maps: one for summer
24 days, summer nights, winter day, winter night, to account
25 for the absorption factors of foliage in the summer, snow in

1 the winter, reflectivity, day and night temperatures, and so
2 on and so forth. And then he actually draws out contour
3 lines on the map, shows the sound levels at every area
4 within the ten-mile EPZ.

5 And in essence, the original study showed there
6 was no place within ten miles of Three Mile Island that had
7 less than a 60 decibel sound level coverage. And he will be
8 simply then, with his field testing of the actual sirens,
9 comparing his model against the field test data.

10 Let me say, however, that that study is not
11 totally theoretical, because before we did this study we
12 required the vendor to deliver two sirens, one of each kind
13 of siren, to the Syracuse Laboratories, where we conducted
14 actual sound tests to certify the outputs of the sirens,
15 because an interesting thing we learned in this was that
16 heretofore siren certification of output had not been a very
17 clearly defined things.

18 And so because of the upper and lower limits we
19 were working with, we wanted to make sure that we had an
20 absolute certification and we now have that, through the
21 good offices of Syracuse Laboratories.

22 CHAIRMAN SMITH: Anything further of Mr. Rogan?

23 MS. GAIL BRADFORD: Yes. Can you tell us whether
24 the testing will involve turning the sirens on from the
25 county offices?

1 MR. ROGAN: The initial operability tests will
2 not. They will be done on the basis of individual
3 locations. However, it is our proposal right now, our plan,
4 that as we complete a county siren we will deliver,
5 literally make a turnover, if you will, of the
6 responsibility and control of that county's worth of sirens
7 to that county.

8 And at that time it is our intention to propose
9 that we run a silent test. Now, part of that silent test is
10 that it indicates that the activation in the EOC was picked
11 up at the radio remote devices on the poles that operate the
12 sirens, and it will be so indicated on a counter in the
13 radio control box.

14 The importance of that is twofold, obviously.
15 Without creating any sound, we can check to make sure all of
16 the activation devices are working. And because we have a
17 requirement for periodic silent testing, and because we at
18 the Licensee will maintain the sirens, our crews can go
19 around periodically and check the control boxes and ensure
20 the biweekly tests are being run and that they are being
21 recorded on this counter, and we will know then that the
22 radio devices themselves are actually functioning.

23 MS. GAIL BRADFORD: So the silent testing will
24 reveal any particular sirens that are not functioning?

25 MR. ROGAN: Yes. And quarterly, then, we actually

1 turn them on. That's a very short test. The silent test is
2 almost an on-off. As soon as you hit the button, you turn
3 it back off. On the growl test, in six and a half seconds
4 the siren is operating at full sound output. So it's really
5 a turn on and off, and you hear just enough of the rotation
6 of the sirens to hear it growl and that indicates it's
7 mechanically operating.

8 MS. GAIL BRADFORD: Is the growl test from the
9 siren location or from the county?

10 MR. ROGAN: It's from the county. Part of our
11 arrangement is a formal letter of agreement with each of the
12 five counties, with the county commissioners of the five
13 respective counties which tells them -- it commits us to
14 purchase, install and maintain at no cost to the local
15 government the system; and they in turn agree to operate the
16 system consistent with and in compliance with the federal
17 regulations, which in effect are 0654 and the requirements
18 for testing and so forth. And they clearly understand that
19 and have agreed to it.

20 MS. GAIL BRADFORD: Can you tell me -- I think I
21 understand what you mean by the growl test. But would
22 somebody operating that within the county courthouse know
23 which ones had growled?

24 MR. ROGAN: He won't, except they will show on the
25 digital counter the same as the silent test. But one can

1 selectively again go out and actually listen.

2 MS. GAIL BRADFORD: So the county personnel cannot
3 tell from the county courthouse, without going around to the
4 sirens?

5 MR. ROGAN: That's my understanding. It will be
6 much the same as the Saturday firehouse exercises that we
7 have here frequently. They make arrangements, the local
8 fire department tells them, and so on.

9 MS. GAIL BRADFORD: And it's your agreement or it
10 will be your agreement with the counties that the Licensee
11 will go around to the sirens to check on them?

12 MR. ROGAN: We will periodically throughout the
13 year on a continuing basis check the counters, check the
14 sirens themselves. And we will do this in coordination with
15 the county. However, it is the county's responsibility to
16 actually conduct the required tests. And in fact a very
17 important part of that is to agree that should we have an
18 emergency at Three Mile Island that they would in fact use
19 the sirens in support of that emergency. A very subtle
20 point, but nevertheless a very necessary one to have it in
21 writing.

22 CHAIRMAN SMITH: Anything further of Mr. Rogan?

23 MR. ROGAN: There was another question it might be
24 useful to clear up with regard to radio control equipment.
25 Three of the counties had compatible equipment and required

1 no additional equipment within their EOC's. Their equipment
2 was their existing equipment, which we just added our sirens
3 to and that was no problem.

4 In Lancaster County we did require a complete new
5 encoder device because we needed to operate on a separate
6 frequency. They had a little problem with the existing
7 civil defense frequency. So in order to change frequencies
8 we provided them a complete new encoder device, which has
9 just in the last few days, it's my understanding, been
10 installed in the Lancaster County EOC and it's there now.

11 We have just run into an interesting little nuance
12 with regard to Lebanon County and we have made the necessary
13 procurement arrangements to put a new encoder in the Lebanon
14 County EOC, and that will be for a two-siren system. So for
15 the two that need it we are providing.

16 MS. GAIL BRADFORD: Well, I don't know whether
17 this question is for Mr. Rogan or Mr. Chesnut. But I'll ask
18 Mr. Chesnut since he is the one on the stand.

19 BY MS. GAIL BRADFORD: (Resuming)

20 Q Is it true that the TMI plan now is for the
21 licensee to directly notify all five risk counties?

22 A The current TMI plan calls for the lower three
23 categories of events to -- that is, unusual event, alert,
24 and site emergency -- to notify first Dauphin County and
25 then the state, and the state would then notify the

1 remaining counties in the plume exposure emergency planning
2 zone.

3 In the general emergency case the TMI plan calls
4 for notifying each of the five risk counties in addition to
5 the state. That is consistent with NUREG-0654.

6 Q In your earlier explanations about Licensee's
7 commitments for distributing and printing the public
8 information, did you mean that September 1st was a date for
9 printing or for final completion of distribution of the
10 pamphlets?

11 A From the letter it is not entirely clear exactly
12 -- the letter from Mr. Gifford indicated it was a target, or
13 possibly refers to achieve the objective of printing and
14 distributing.

15 Q Does it describe the distribution system, how many
16 copies or to whom?

17 A No, it doesn't. There will be cooperation between
18 the Licensee, the state and counties to achieve a proper
19 distribution.

20 Q Did the agreement describe distributing copies to
21 transients?

22 It doesn't describe it at all, or what does it
23 describe?

24 A This particular agreement that I was talking to
25 was really more in the form of an offer from Three Mile

1 Island to print and distribute, at no cost to the state or
2 the counties, this information to facilitate this
3 distribution. The plans themselves which Mr. Bath and the
4 remaining FEMA witnesses have discussed are still current as
5 far as I am aware as to the distribution of education and
6 information material.

7 Q I couldn't hear that. Are still what?

8 A Are still current plans. It is just that now the
9 printing and the postage costs for achieving the
10 distribution will be absorbed by GPU.

11 (Pause.)

12 MS. GAIL BRADFORD: I think that's all the
13 questions I have of this witness.

14 CHAIRMAN SMITH: Ms. Straube?

15 BY MS. STRAUBE:

16 Q I think this one's already been answered, but I'll
17 ask it. Is it acceptable to the NRC for Dauphin to notify
18 the other risk counties?

19 A Yes. However, my understanding is that is not the
20 normal sequence of notification. That is a backup system.

21 Q That's right, I've got that as a contingency
22 notification.

23 A Yes, ma'am, that is acceptable.

24 Q Do you know whether that was part of the
25 exercise?

1 A I don't believe that was. I was in the control
2 room for part of the exercise and my understanding was that
3 the sequencing of notification was from the Licensee's
4 control room to Dauphin County and the state. Also during
5 the notification of the general emergency I was not in the
6 control room, and the report I received on that was in that
7 case it was directly from the Licensee to the counties and
8 the state.

9 I guess to answer your question directly, I do not
10 believe that the contingency procedures were tested in that
11 exercise.

12 Q Do you know whether the physical mechanism for
13 Dauphin County to notify the other risk counties is in
14 place?

15 A I am aware that Dauphin County has agreed to do it
16 and the details of implementation have been addressed by
17 FEMA.

18 Q You can tell me if you don't have the answer to
19 this last question. What assurance do you have that Dauphin
20 County can do it within 15 minutes?

21 A I guess I have no assurance. But I feel that it
22 is physically possible, because if it is physically possible
23 for the Licensee to do it in 15 minutes from the control
24 room it is also physically possible for someone else to do
25 it. But that is my only basis for that, except I know that

1 Dauphin County has agreed to do it.

2 Q Okay. Moving on to public education and
3 information. Do you know whether -- well, am I correct in
4 stating that the five county brochures are still to be
5 revised based on the revised county plans?

6 MR. ZAHLER: I'm sorry, I didn't hear the very end
7 of that question. Based on?

8 BY MS. STRAUBE: (Resuming)

9 Q Revised county plans.

10 A I am not personally aware of any such requirement
11 arising currently.

12 Q I wasn't necessarily asking about a requirement.
13 Are you aware that the five county brochures are going to be
14 revised based on revised county plans?

15 A No, I wasn't aware of all of that.

16 Q Will there be a review by NRC or FEMA before the
17 distribution of the six pamphlets, in other words including
18 the state pamphlet, for completeness of information prior to
19 distribution?

20 A As this is new to me -- you just informed me right
21 now that all the pamphlets are being revised -- my position
22 would be that I would expect the Licensee to forward copies
23 of those pamphlets to the NRC. We have also -- you know, we
24 have also looked at the draft pamphlet, which was mainly
25 what we asked for during the review of the public education

1 and information program, and found them to be acceptable
2 pamphlets, or at least FEMA reported that to us.

3 Q Okay. I just wanted to clarify something that is
4 in supplement one. I think you stated that distribution
5 would be for a ten-mile radius around TMI-1. Did you mean
6 the ten-mile EPZ?

7 A Yes, ma'am.

8 Q Okay. Is the Licensee going to implement the
9 distribution plans?

10 A I don't have the specifics on that. I'm just
11 aware that the Licensee and the state are working together
12 to accomplish that distribution by September 1st and that
13 the Licensee will assist by either providing the printing
14 and distribution costs or whatever methods to accomplish
15 it.

16 Q And I believe you stated under Ms. Bradford's
17 cross-examination that September 1st is a target date. Am I
18 correct in stating that that is the date that has been
19 stated by Met Ed?

20 A Yes, that was the date that was in the letter by
21 Met Ed to the state, and I have no firm commitment from the
22 state that that is the final date, the drop-dead date, so to
23 speak, on the accomplishment of that goal.

24 Q That is the point I was going to make. You don't
25 know whether the state has agreed to that date or said

1 whether that date is feasible or not?

2 A No. My only recollection is from the previous
3 day's testimony, is that they were going to plan to
4 distribute the information before restart. I don't have a
5 certain date. That was already in the plans, from my
6 understanding.

7 Q And the plans also provide for periodic
8 redistribution and updating of the public information; is
9 that correct?

10 A Yes, ma'am, the plans do.

11 Q Do you know whether Licensee's commitment extends
12 to that, to the periodic redistribution and updating of the
13 information?

14 A I couldn't state specifically. The letter does
15 not make that crystal-clear.

16 Q Okay. Also in supplement one, you discuss
17 Licensee's program, public information program which was set
18 forth in an April 30th, 1981, letter. My question is
19 whether NRC or FEMA have reviewed the content of that
20 program?

21 A Well, I reviewed the letter when I received it.
22 The majority of that information -- I guess I'm not
23 answering your question directly. I have not reviewed, for
24 instance, the outlines or speeches or the presentations. I
25 just reviewed that April 30th letter, which indicated in a

1 general summary form the types of public education and
2 information activities, both in the past and under way
3 currently. So I reviewed only in a summary fashion those
4 items.

5 Q Has NRC made any review of the coordination
6 between Licensee's information program with the state and
7 local public information programs?

8 A Well, I think really it's been a FEMA review. As
9 I stated in previous testimony in March and April, the
10 overall public education and information program is a
11 coordinated effort, and the goal is to get the proper
12 information out. And the NRC rules, regulations, and
13 criterion in 0654 all specify exactly which organization is
14 responsible for distributing and disseminating the
15 information.

16 We have some utilities, for instance, where a
17 utility doesn't take part in very many public education
18 activities because there is an active state program in the
19 same area. Conversely, we have some areas where the state
20 has relied entirely on the Licensee to accomplish the bulk
21 of the program.

22 So the answer is, we have looked at the overall
23 program and FEMA has reported to the staff that the overall
24 program appears adequate.

25 Q Okay. On evacuation time estimates, am I correct

1 in saying that Licensee has incorporated the
2 Parsons-Brinkerhoff study, the entire study, into its plan,
3 its emergency response plan?

4 A The Licensee's emergency response plan indicates
5 that it will use the evacuation time estimates as a basis
6 for protective action decisions. That Parsons-Brinkerhoff
7 study is not physically attached to the plan. The
8 Parsons-Brinkerhoff evacuation study was submitted under a
9 separate letter to a docket in the NRC.

10 Q Did I hear you correctly to say that the Licensee
11 would use that study in making protective action decisions?
12 Is that what you meant to say?

13 A I should more properly have said recommendations
14 to the state.

15 Q Was that study used by Licensee during the
16 exercise, do you know?

17 A I believe it was factored into the overall
18 decision. I can't state the extent to which it was used.

19 Q Has there been a review by the NRC of the
20 assumptions and the validity of the numbers in the
21 Parsons-Brinkerhoff study?

22 A No, there hasn't.

23 Q What assurance do you have that the times are
24 accurate and feasible?

25 A My assurance is based on both my review of the

1 plan and the criteria, and also the review done by a
2 consultant to the NRC staff who also testified on the
3 validity of that evacuation time estimate. So essentially,
4 I relied on my consultant's opinion and report and
5 testimony. And also, FEMA has reviewed that evacuation time
6 estimate study and found it to be an acceptable study.

7 Q On potassium iodide, do you know where the onsite
8 stock of potassium iodide was obtained?

9 A I didn't hear the first part. Did you say where
10 or when?

11 Q Where?

12 A No, I am not aware of that.

13 Q And am I correct in stating that that stockpile is
14 presently in place on the Island?

15 A Yes.

16 Q Do you know what the shelf life of it is?

17 A No.

18 Q On containment leak rate assumptions, has Licensee
19 made the necessarily modifications to EPIP-1004.7?

20 A I am not aware that that change has been made
21 yet.

22 Q Do you know when it is going to be made?

23 A I would have to check the Licensee's submittal
24 letter. I believe there was a commitment in that letter
25 forwarding a new containment leak rate assumption. I'd have

1 to retrieve that letter and check.

2 Q Is that letter a part of the record? I just don't
3 know whether it's in the record or not.

4 MR. ZAHLER: The letter is not an exhibit. It was
5 handed out to all of the parties and to the Board, I
6 believe. But it is not an exhibit in the proceeding.

7 THE WITNESS: I could check after the break and
8 report on the data on that.

9 BY MS. STRAUBE: (Resuming)

10 Q Well, let me ask you this. Are those
11 modifications of requirements for restart?

12 A I did not include that as a necessary requirement
13 for restart. It is my understanding it is a fairly simple
14 task, and the Licensee was going to do it before restart.
15 That was my understanding. I could check for that and
16 verify that to you.

17 Q But that doesn't answer the question of whether it
18 is a requirement for restart. Should it be included on the
19 list?

20 A Yes, it should be included.

21 Q On EOF staffing, is the NRC aware of the fact --

22 CHAIRMAN SMITH: Excuse me. I suggest that
23 questions on EOF staffing be reserved until Mr. Zahler
24 proffers it on his cross-examination, and then we will have
25 the new commitment and then we can cover that as one subject

1 matter. Or is your area something different?

2 MS. STRAUBE: That's fine.

3 Can I check my notes to see what I wanted to ask
4 on the piece of paper we got this morning?

5 (Pause.)

6 CHAIRMAN SMITH: If you prefer to ask the
7 questions now.

8 MS. STRAUBE: It doesn't matter. I can wait on
9 those. I just wanted to check on the other questions I
10 wanted to ask. I'm ready to go forward.

11 CHAIRMAN SMITH: You're ready what?

12 MS. STRAUBE: I'm ready to go on with my other
13 questions.

14 CHAIRMAN SMITH: Okay. All right, go ahead.

15 BY MS. STRAUBE: (Resuming)

16 Q Did NRC do an independent review of comparing the
17 offsite emergency response plans with NUREG-0654?

18 A I'm sorry, would you repeat that one more time?

19 Q I could give it to you as a choice, I guess. Did
20 the NRC do an independent review comparing the offsite
21 emergency response plans to 0654, or are you relying
22 entirely on FEMA's review?

23 A We are relying on FEMA's review.

24 CHAIRMAN SMITH: That wasn't totally responsive.
25 She gave you an alternative: Did the NRC do an independent

1 review against NUREG-0654, or are you relying entirely on
2 the FEMA review? Now, is your answer one of those two
3 alternatives? I don't believe it is.

4 THE WITNESS: I guess my answer was incomplete.
5 One, I am relying on the FEMA review of the offsite plans.
6 However, I participated to various extents in the reviews of
7 the plans, offsite plans. I did not go through each offsite
8 plan against each criteria of NUREG-0654, however.

9 BY MS. STRAUBE: (Resuming)

10 Q The deficiencies that were identified by FEMA, I
11 guess in attachment 1, does NRC envision any time frame for
12 correction of those deficiencies?

13 A The NRC has requested FEMA that in the event that
14 the offsite emergency response plans have not received a
15 formal FEMA approval in accordance with, I guess it is, 44
16 CFR 350 as of January 1st, '82, we would request them to
17 give us a status report on the progress on those remaining
18 items. And Mr. Dickey from FEMA has assured me that they
19 would do that.

20 Q Have any of those deficiencies been identified by
21 NRC as prerequisites for full power operation of TMI-1?

22 A No.

23 Q Did NRC do an independent assessment to determine
24 the effect of those 72 deficiencies on the protection of
25 public health and safety?

1 A No.

2 Q My last couple of questions is on the condition, I
3 guess, number one, which is on your NRC staff position,
4 relating to the requirement to demonstrate the ability to
5 implement the York County emergency plan. Does that mean
6 that the drill which has been described for York County has
7 to be undertaken?

8 A Yes. The drill or an exercise involving York
9 County would be necessary to demonstrate that ability.

10 Q And is it proper to conclude after that that York
11 County has to pass the drill? In other words, they have to
12 come out with a good rating after the drill?

13 A Yes, they would have to demonstrate an adequate
14 performance. I think it would be unwise to say that
15 demonstrating an inadequate performance would be
16 satisfactory.

17 Q Well, I just wanted to be sure you said that. And
18 would York County have to correct the deficiencies that were
19 identified after the drill before restart?

20 MR. TOURTELLOTT: Mr. Chairman, I am not certain
21 that this is the witness to be asking these questions. The
22 deficiencies -- the York County plan is going to be
23 evaluated by FEMA. And as I recall, the testimony of Mr.
24 Dickey is that their overall assessment does not necessarily
25 rest on whether there may or may not be outstanding

1 deficiencies, but rather quali'atively what those
2 deficiencies might be.

3 CHAIRMAN SMITH: That is consistent with my memory
4 of his testimony, too. But it does not bar Ms. Straube, if
5 she wishes, to inquire into what the staff viewpoint is. I
6 think you already have pretty much the answer.

7 MS. STRAUBE: Well, I would also point out that
8 Mr. Dickey said he couldn't state whether York County was
9 prepared or not. So as to York County Mr. Dickey wasn't
10 giving an opinion necessarily on its preparedness. And he
11 also consistently refused to say what would be required
12 before restart and deferred to NRC, which is why I'm asking
13 this witness the question.

14 MR. TOURTELLOTTE: With that understanding, he can
15 go ahead. I have no objection. I withdraw the objection.

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1 THE WITNESS: My answer to that question would be
2 in the event that the deficiencies in the exercise with York
3 County result in a finding by FEMA that the preparedness,
4 the overall preparedness of York County is inadequate, the
5 NRC would require some corrective actions. If the overall
6 finding was that the preparedness was adequate or similar to
7 that which was reported to the State and the other four
8 counties, I would anticipate that York County would be
9 treated similarly to the other four counties.

10 BY MS. STRAUBE: (Resuming)

11 Q Just to complete your answer. If it was found
12 inadequate, some corrective action would have to be taken
13 before restart? Is that what you mean to say?

14 A Did you say if it was found inadequate?

15 Q Inadequate.

16 A Yes. If it was found inadequate, the NRC, FEMA
17 would have reported that as a significant deficiency to the
18 NRC, and the NRC's own preparedness regulations dictate what
19 we should do.

20 MS. STRAUBE: May I have just a moment to consult
21 with Mr. Hippert? Thank you.

22 (Pause.)

23 MR. TOURTELLOTTE: Mr. Chairman, could we take
24 about five minutes -- I am supposed to make a phone call --
25 if it is convenient?

1 CHAIRMAN SMITH: This is a good time.

2 (Brief recess.)

3 CHAIRMAN SMITH: Ms. Straube.

4 MS. STRAUBE: I have no further questions until
5 the EOF issue comes up.

6 CHAIRMAN SMITH: Yes. Now, before the EOF comes
7 up, is there any more questioning of Mr. Chesnut except for
8 that?

9 MR. ZAHLER: I have one question of Mr. Chesnut
10 that is not related to the EOF.

11 CROSS EXAMINATION

12 BY MR. ZAHLER:

13 Q Am I correct that when you testified the NRC had
14 not reviewed the assumptions of the Parsons, Brinckerhoff
15 study, that you did not include in that response the review
16 conducted by Mr. Urbanek as a consultant to the NRC?

17 A I think what I was referring to is I did not make
18 a detailed comparison between the Urbanek -- correction --
19 between the Parsons, Brinckerhoff study and the off-site
20 emergency plans. Mr. Urbanek did review those assumptions
21 to see if they were consistent with general population
22 behavior, and to that extent he indicated they looked
23 reasonable to him.

24 Q And he reported the results of his review in his
25 testimony in this proceeding; is that correct?

1 A Yes, he did.

2 MS. LOUISE BRADFORD: Could you explain what you
3 just said about Mr. Urbanek reviewing the assumptions with
4 respect to the general population behavior?

5 THE WITNESS: Well, Mr. Urbanek, when he was on
6 the stand, was cross examined in detail on the comparison of
7 the assumptions in the Brinckerhoff study and those
8 characteristics of either the plans or the population in the
9 Three Mile Island area. And he indicated there that he was
10 not aware of either particular problems and had not
11 identified himself any particular problems associated with
12 this area or he had not gone into a detailed review of the
13 emergency plans

14 What he was referring to when he says "the
15 assumptions appeared reasonable" was that in his review, in
16 his understanding of other incidents such as evacuations in
17 a hurricane or something like that, that they appeared to be
18 reasonable assumptions. He was not purporting to be, you
19 know, an expert in population behavior or in the plans
20 themselves.

21 MS. LOUISE BRADFORD: Can I just ask are you
22 reporting this information from your recollection of Mr.
23 Urbanek's testimony here?

24 THE WITNESS: It is my recollection, yes.

25 MS. LOUISE BRADFORD: Not from some other

1 conversation with him?

2 THE WITNESS: No.

3 MS. LOUISE BRADFORD: Okay. Thank you.

4 CHAIRMAN SMITH: Are you prepared for your cross
5 examination on the EOF'?

6 MR. ZAHLER: Yes. Let's go ahead.

7 BY MR. ZAHLER:

8 Q Does 10 CFR Section 50.47B require that the EOF be
9 fully staffed and functional within one hour?

10 A No.

11 Q Does 10 CFR Part 50 Appendix E require that the
12 EOF be fully staffed and functional within one hour?

13 A No.

14 Q Does Supplement 1 to the emergency planning
15 evaluation, NUREG-0746, contain any reasoning supporting the
16 Staff position that the EOF be fully staffed within one hour?

17 A It only indicated other documents which explained
18 in more detail the Staff position.

19 Q What were those documents?

20 A NUREG-0654 and 0696, the functional criteria of
21 emergency response facilities.

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1 Q Does 0654 contain an evaluation criteria that in
2 and of itself requires a full functional EOF within one
3 hour?

4 A No.

5 Q It refers to 0696?

6 A Yes. It also has table B-1, which indicates that
7 an EOF director should be stationed in one hour, within one
8 hour of declaration of an emergency.

9 Q But 0654 does not itself explain the reasoning
10 supporting that position, does it?

11 A No.

12 Q Does NUREG-0746, that is the emergency planning
13 evaluation for TMI itself, contain any reasoning supporting
14 the staff position that the EOF be fully staffed within one
15 hour?

16 A No.

17 Q Does 0696 contain any site specific information to
18 TMI supporting the staff conclusion that the EOF be fully
19 staffed within one hour?

20 A No.

21 Q Is the only basis for the staff position that the
22 EOF be fully staffed within one hour that which you and Mr.
23 Grimes testified to earlier in this proceeding?

24 A I believe that was fairly complete.

25 Q I am just trying to identify the universe of

1 places where the staff has supported its position and the
2 only one I could identify was that testimony. I am not
3 commenting on whether it is complete or incomplete.

4 Am I correct that that is the only place to date
5 where the staff has supported its position?

6 A There may be other documents that involved,
7 whereby the NRC indicated its reasoning for requiring or the
8 reasons for its criteria, which would specify that the
9 emergency operation facilities be functional fully within
10 one hour. I cannot specifically name them right now.

11 Q And those documents would not have been site
12 specific to TMI, would they?

13 A No, they would not, except perhaps that they were
14 derived as a result of the accident at Unit 2 and that was
15 one of the reasons for the change of requirements.

16 Q But the authors of those documents did not know,
17 for example, the concept of operation described in the TMI-1
18 emergency plan or the staffing levels at TMI-1 to respond to
19 an emergency?

20 A No. That criteria was meant to be applicable to
21 all reactors, operating reactors and near-term reactors.

22 Q When you say "that criteria was meant to be
23 applicable," do you correctly mean that that criteria was
24 meant to be guidance for all reactors?

25 A Yes.

1 Q Has the staf performed any studies which indicate
2 that during the early hours of an emergency, emergency
3 response would be enhanced if overall management of the
4 emergency was moved out of the plant to an EOF?

5 A I personally belief from discussions with other
6 colleagues on the staff is that that was one of the problems
7 in the accident at TMI and one of the purposes to have the
8 emergency operations facility functional early is to remove
9 a lot of those nonplant mitigating functions from the
10 control room, perform those functions in a facility such as
11 the emergency operations facility.

12 Actually, performing some of those functions from
13 the control can actually tend to clutter a response and make
14 them more complicated, and that was the reason for doing
15 that.

16 Q But my question asked whether the staff has
17 documented that analysis in any way in a study that has been
18 published or released or is available?

19 A I don't know.

20 Q You don't know of any?

21 A I don't know of any.

22 Q Has the Licensee committed to the staff to revise
23 its emergency plan to accelerate the staffing of the EOF
24 from that which is included in the emergency plan that has
25 been marked as an exhibit in this proceeding?

1 A Yes.

2 Q And is that commitment contained in a letter from
3 myself to Joseph Gray?

4 A Yes.

5 MR. ZAHLER: I request the reporter to mark as
6 Licensee's Exhibit No. 58 a two-page document dated July 8,
7 1981, from Robert E. Zahler to Joseph Gray, Esquire.

8 (The document referred to was
9 marked Licensee Exhibit No. 58
10 for identification.)

11 (Pause.)

12 BY MR. ZAHLER: (Resuming)

13 Q Mr. Chesnut, is this document that has been marked
14 as Licensee's Exhibit No. 58 the commitment letter that was
15 just referred to?

16 A Yes.

17 MR. ZAHLER: Mr. Chairman, I request that
18 Licensee's Exhibit No. 58 be received into evidence.

19 (Pause.)

20 CHAIRMAN SMITH: If there are no objections, we
21 receive Licensee's Exhibit 58.

22 (The document referred to,
23 previously marked for identi-
24 fication as Licensee Exhibit
25 No. 58 was received in

1 evidence.)

2 BY MR. ZAHLER: (Resuming)

3 Q In what ways do Licensee's commitments contained
4 in Licensee Exhibit 58 not follow the guidance set forth in
5 NUREG-0654?

6 A It does not follow the guide in that essentially
7 this plan calls for staffing emergency operations facility,
8 but that facility really has no useful function is the way I
9 see it described in this letter. This letter calls for a
10 function with no decisionmaker, no one who can really have
11 an impact on the management of the accident. Therefore, it
12 is, in my opinion, it is impotent. It cannot perform its
13 function until that emergency operations director or
14 emergency support director gets there.

15 He will arrive, in fact, in an improved situation
16 over what was the emergency plan before, in that this
17 facility will contain an up to date status, will contain
18 technical people who are familiar with the situation in the
19 plant, so he can be readily briefed and come up to speed
20 much more rapidly than the six-plus hours that was
21 originally indicated in the plan.

22 Q Well, let me just take your last sentence there.
23 Was there any place where Licensee ever committed to
24 six-plus hours? Wasn't the original commitment that it
25 would be fully staffed and operational by six hours?

1 A Well, my impression of what was in the emergency
2 plan was that they were going to man, that these people were
3 going to arrive on site within six hours. It takes time to
4 get a facility organized, to get the people who are
5 operating the facility up to speed with the technical
6 situation and the emergency conditions that are in that
7 plant.

8 Q Isn't it true, Mr. Chesnut, that in discussions
9 between the staff and Licensee the Licensee had explained to
10 the staff that the original commitment was to have a full
11 operational facility within six hours?

12 A I believe in some of the testimony and discussions
13 that that is true. From reading the plan itself, it was not
14 obvious. Regardless of whether it's six hours or five
15 hours, that is not the significant issue here. Both of
16 those times are too long. Even if you were to say they
17 would be functional within four hours, I still maintain that
18 that is too long.

19 Q The present commitment is now that it is going to
20 be fully operational within four hours; is that correct?

21 A My understanding is now, yes, within four hours.
22 Perhaps a little longer. For example, it would take the
23 emergency support director some time to be briefed as to the
24 situation before he could really announce to all of the
25 parties who are mitigating the accident that he has assumed

1 the functions of the emergency support director.

2 In other words, he cannot walk in and instantly
3 become the emergency support director. He has to be briefed
4 and understand the situation before he can make an
5 intelligent recommendation to offsite authorities.

6 Q Now let me go back to the thrust of your answer,
7 which was that you didn't think a function was being
8 performed at this facility. That is not entirely consistent
9 with the testimony that you and Mr. Grimes gave earlier, is
10 it? I thought one of the things you testified there was
11 that a very useful function of the EOF was to provide a
12 facility where the state, local and federal officials could
13 meet with Licensee representatives early on in the
14 accident.

15 A Yes, you are correct there. There are some
16 functions that could be performed in the emergency
17 operations facility. However, one of the primary functions
18 is the accident management I was talking about before.
19 Another important function, yes, is to serve as a liaison
20 and point of information for the NRC and state or local
21 officials.

22 However, the plan of operation is that all those
23 communications to these offsite agencies is still going to
24 originate from the control room.

25 Q Let's talk about that for a second. Is it not

1 true that the radiological line, for example, includes drops
2 in the control room, the EOF, and BRP?

3 A Yes.

4 Q And that is a conference line, so that anyone on
5 that line, they all talk together?

6 A Yes, it can.

7 Q And isn't that the primary line over which
8 Licensee tends to make protective action recommendations to
9 the state?

10 A Yes. So when we get back to the recommendations,
11 however, the recommendations are still originating from the
12 control room. The emergency director is the one making it.

13 Q In essence, then, the difference between Licensee
14 and the staff at this point is that the emergency director
15 -- strike that -- that the person making protective action
16 recommendations will pick up the telephone in the control
17 room rather than the EOF and still speak to the same people,
18 make the same recommendations over that conference line?

19 A Would you state the first part of that question
20 again?

21 Q I will try. Isn't it true, then, that the only
22 difference between the Licensee and the staff at this point
23 is that the person making protective action recommendations
24 will pick up the telephone in the control room rather than
25 picking it up at the EOF, but that he will be speaking to

1 the same people over a conference line and making the same
2 recommendations as if he was in the EOF?

3 A No. The difference is that not only -- my
4 understanding of your question is that the only difference
5 was that a different person was going to do the
6 communicating. I also consider it another difference that
7 the emergency director is also doing all of the work or
8 supervising all of the work for arriving at the protective
9 action decisions.

10 And now, in addition to monitoring the in-plant
11 and mitigating the accident on site, he is responsible for
12 making offsite recommendations, for instance considering
13 evacuation times or other things in making recommendations.
14 He is also not able to interface with the state and local
15 people who are in the EOF. He would only be communicating
16 with the person on the radiological line that is located in
17 the EOF.

18 Q He would have the advantage when he interfaced
19 with this person in the EOF over the radiological line. He
20 would have face to face communications with the people
21 actually in the plant, who are operating the plant and
22 making the dose assessments at that time; is that correct?

23 A Yes.

24 Q Let's see if we can address for a second this
25 question of a burden on the emergency director. In making

1 those conclusions, have you considered the site-specific
2 staffing at TMI in the control room in the functions
3 performed by those people?

4 A Yes.

5 Q Let me ask you just hypothetically, if we were to
6 modify the Licensee's emergency plan in the following
7 manner, whether that would be acceptable to the staff. Take
8 the operations coordinator. We designate him as the
9 emergency director in the control room. We take the
10 emergency director, we move him out of the control room,
11 move him over to the EOF and designate him the emergency
12 support director.

13 Would that plan satisfy all of the NRC's
14 requirements for onsite and offsite staffing?

15 A Assuming that the responsibilities for making
16 protective action decisions is transferred along with that
17 emergency director who now is at the EOF, and assuming that
18 both of those individuals, the operations coordinator as
19 well as the emergency director, had indeed received the
20 training performing their new functions, I would consider
21 that adequate.

22 Q And in this situation where we have now gotten an
23 emergency support director in the EOF, what would be the
24 primary responsibilities of the new emergency director in
25 the control room, the former operations coordinator?

1 A He would be concerned -- he would have to be
2 concerned with the in-plant mitigation of the accident,
3 protection for his onsite emergency workers. There's a
4 myriad of functions he would be performing. But he would be
5 primarily concerned with what is going on onsite and he
6 would be relaying or assuring that the information is
7 relayed to the emergency support director, to effect a good
8 protective action recommendation.

9 The new emergency support director would also be
10 -- who is also communicating with the state and local
11 authorities, who are well aware of the state of readiness
12 and the discussions and opinions of the offsite officials,
13 would then be in a better position to make a good protective
14 action recommendation.

15 Q Let's be careful about a little hyperbole here.
16 You indicated that the emergency director, former operations
17 coordinator, would have a myriad of responsibilities. You
18 defined two. That was operation of the plant, concern for
19 inplant radiological control of his emergency workers.

20 Aren't those the primary two responsibilities that
21 he would have once control shifted to the emergency support
22 director?

23 A Well, I am hesitant right now to be able to list
24 every function that the emergency director would perform.
25 And I wasn't trying to use excessive hyperbole there. I

1 believe the TMI emergency plan is consistent with NUREG-0654
2 guidance for the emergency director, except for that the
3 emergency director is assuming all those protective action
4 functions for six hours in the plant as it stands now, or
5 four hours according to your new proposal, rather than one
6 hour, which is the staff position.

7 Q And I think we had identified last week that the
8 operations coordinator in the TMI emergency plan is
9 something that is not required by 0654. It is something
10 that Licensee has added on his own; is that correct?

11 A That is correct.

12 Q Now what weight did you give to the existence of
13 this operations coordinator in deciding that the emergency
14 director could not remain in the control room and make
15 protective action recommendations under the existing plan
16 and as proposed to be modified in my commitment letter?

17 A I don't understand the question. Would you say it
18 again?

19 Q Let me give you some background. What we have
20 just gone through, it seems to me, established that if we
21 designated the operations coordinator as the emergency
22 director, move the guy that we now call the emergency
23 director to the EOF, called him emergency support director,
24 everything would be acceptable to the staff. The only
25 difference in that relationship is that we have moved

1 someone from the control room to the EOF. There is no
2 difference in staffing, there is no difference in resources,
3 there is no difference in capability.

4 Now, the question I am posing to you is, go back
5 to the situation Licensee is proposing. Instead of having
6 this emergency support director in the EOF, we have got him
7 in the control room. We call him emergency director. But
8 we have still inserted an additional layer there. We call
9 him the operations coordinator.

10 My question to you is, what weight did you give to
11 the existence of this operations coordinator when you said
12 there would be too much responsibility on the emergency
13 director to make protective action recommendations in the
14 control room?

15 A Well, you reached a somewhat different conclusion
16 than I did. I will say, to directly answer your questions,
17 I did give weight to the operations coordinator and I
18 considered that a very good staffing arrangement for the
19 control room. It really does improve the ability of that
20 emergency director to perform his task in the control room.

21 And I believe I also stated in testimony last week
22 that that individual was not required by any of our
23 regulations or criteria. I would also like to add, however,
24 that the only difference is not the transfer of a man; it is
25 the transfer of functions, too. Those functions transfer

1 with that emergency director. Without that emergency
2 director, all you have in the way of interface --
3 correction. Without the emergency support director, in that
4 absent period between the one and four hours who do the
5 state and offsite NRC people have to interface with?

6 They essentially have a bunch of technical
7 phone-talkers.

8 Q Don't you think the "

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1 Q Do you not think that technical phone talkers is a
2 little hyperbole? Do you know the qualifications of the
3 people that Licensee is committing to provide?

4 A Well, I cannot state. What I observed in the
5 exercise, the qualification of the technical people in the
6 EOF were very good, but the decisions were all being made by
7 an emergency support director who had the overall big
8 picture and could coordinate the individual technical talent
9 that was in the control room -- correction -- in that EOF.

10 Essentially, for the NRC now or the State to get
11 the big picture, we would have to sort of assume the role
12 almost as an extension of the emergency director and have to
13 go around and sound each one of those technical people. He
14 would have to talk to the radiological man, he would have to
15 talk to the technical man, the environmental man to get the
16 big picture.

17 Q I understood you to testify that what you
18 perceived to be the difference was that the functions were
19 transferred to another facility. Those functions, however,
20 are still being performed by the same person. Is that
21 correct? It is not like we are adding an extra person if we
22 have an emergency support director there to do those
23 functions?

24 A What you are doing is you are taking the
25 protective action, that decisionmaking function and that

1 overall accident management function and you are moving that
2 along with the individual from the control room. As a
3 result, the control room is now concentrated on the
4 in-plant, and that is what the control room was designed to
5 do.

6 It wasn't designed to be a management center for
7 an overall interface with numerous groups. It was designed
8 to monitor the plant and to control the plant and the plant
9 personnel. So now those additional functions are moving
10 from the control room to the emergency operations facility,
11 which alleviates some of the confusions in the control room
12 and alleviates the multiple duties as performed by one
13 individual.

14 Q I do not understand this part about the multiple
15 duties. We have not added any people. All we have done is
16 move one person from one place to the other. The duties he
17 is performing are presumably the same.

18 A I think the fault of that logic is you are
19 assuming that the emergency director had no functions in the
20 control room. He did have some functions in the control
21 room. He has some functions, and the operations
22 coordinator has some functions.

23 Q And the functions that the emergency coordinator
24 had in the control room are the functions that he would have
25 if he were standing in the EOF; are they not?

1 A No.

2 Q What other functions did he have when he was in
3 the control room?

4 A When he was in the control room, he was also
5 monitoring and assisting in directing the overall plant
6 response, the in-plant response. Now, when he is in the
7 emergency operations facility, he is not directing those
8 functions; he is monitoring those functions and receiving
9 information from them on them from the emergency director.
10 But he is not actually performing them. He is not
11 responsible for them.

12 Q In practice as you observed it in the control
13 room, does not the operations coordinator assume primary
14 responsibility for operating the plant in the control room?

15 A I believe those are among his primary duties, yes.

16 Q I could understand your position if somewhere
17 along the line we had added a person. But in the two
18 scenarios I have given you, the total number of people are
19 the same, which indicates to me that the distribution of
20 responsibilities is likely to be very much the same. Would
21 you not agree with that?

22 A The distribution for those two people would be
23 different. The operations coordinator now becomes
24 responsible for more tasks in the control room. The
25 emergency support director gains some new functions and is

1 not responsible for some other functions that he had when he
2 was in the control room.

3 Q Let us be careful what your response is. If you
4 remember a while back when I talked about the hyperbole of
5 myriad of responses, the two functions that we identified
6 for the new emergency director in the control room -- that
7 is, the former operations coordinator once an emergency
8 support director had been designated -- was operating the
9 plant and in-plant radiological controls. Those are his
10 functions primarily when the emergency director is also in
11 the control room also; are they not?

12 A Well, my understanding of your scenario was that
13 the -- correction -- that the operations coordinator became
14 the emergency director and that the emergency director, the
15 previous emergency director, became the emergency support
16 director. Is that correct?

17 Q That is correct.

18 A Well, the functions of those people are different.

19 Q I understand the functions of those titles are
20 different. What we also established was that when the
21 operations coordinator became the emergency director and
22 management of the emergency shifted out of the control room,
23 his primary function was going to be operating the plant and
24 in-plant radiological controls.

25 And what I am suggesting to you is that whether

1 there is someone in the control room who also has overall
2 management of the emergency or whether that person is in the
3 EOF, the operations coordinator's responsibilities are very
4 similar. It is still operating the plant and in-plant
5 radiological controls; is that not correct?

6 A I guess I am getting kind of confused here with
7 the complicated description.

8 Let me say this: The emergency director is the
9 NRC guidance, and 0654 and 0696 would state the emergency
10 director is responsible for the overall plant emergency
11 actions, the sort of in-plant emergency actions. That would
12 include, as we stated before, the operation of the plant,
13 the plant mitigation, the emergency maintenance procedures,
14 or whatever.

15 And the way I perceive the emergency plan, as
16 written, stated that the emergency director does not do
17 those things, and also he performs the protective action
18 decisionmaking.

19 Q Does not the plan, while it assigns a whole host
20 of responsibilities to the emergency director, also have a
21 list of those that are nondelegable, and does not the plan
22 also have a provision that talks about the responsibilities
23 of the operations coordinator? And, in practice, was it not
24 your observation that the person primarily responsible for
25 operating the plant and in-plant radiological controls was

1 the operations coordinator, not the emergency director?

2 A Well, my observation of the exercise was not that
3 the operations coordinator really worried about the in-plant
4 radiological controls; it was more the radiological
5 assessment coordinator that did that.

6 Q Someone other than the emergency director?

7 A Yes.

8 Q In essence, is not the difference between the
9 Licensee and the Staff whether the person performing the
10 functions of overall emergency management should during the
11 early hours of the accident stay in the control room or stay
12 in the EOF?

13 A Yes.

14 Q Is it your testimony that the difference between
15 this person stays in the control room or stays in the EOF
16 affects whether there is reasonable assurance that
17 appropriate protective measures can and will be taken in the
18 event of a radiological emergency at TMI?

19 A No, I wouldn't say that the Staff position is that
20 the whole assurance that protective actions can and will be
21 taken would hinge on the fact that this individual performs
22 his function from the control room or the emergency
23 operations facility.

24 The Staff position is, however that it is a much
25 preferable method to do that from the emergency operations

1 facility. And that was one of the lessons the NRC sees it
2 learned from the accident at TMI Unit 2. So we are trying
3 to improve on that. And that is why we called that as a
4 criteria for establishing all nuclear power plants in that
5 fashion.

6 Q But the lesson learned from TMI Unit 2 was that
7 there was more control that was necessary in the control
8 room. There is no way that you are comparing the present
9 staffing and organization and procedures at Unit 1 with what
10 existed on the day of the accident?

11 A Well, only indirectly, in that the criteria
12 changes resulting from the accident. I didn't do a
13 comparison. I am not trying to do that.

14 Q And the Staff position is that overall management
15 should be in the EOF. Is that a general industrywide
16 position that the Staff is taking?

17 A The Staff is taking a position that it should be
18 performed industrywide.

19 Q But in this instance, what we have identified is
20 that the number of people and the responsibilities are
21 essentially the same whether the guy is in the EOF or he is
22 in the control room. And that may not be true at all of the
23 plants; is that not the case?

24 A Well, as I stated before, the functions, the NRC
25 seems to be very desirable to perform those functions from

1 the control room, from the EOF. I have also stated that the
2 staffing arrangement at TMI-1 is well in excess of NRC
3 criteria. In fact, it is almost in excess of other nuclear
4 power plants I have reviewed.

5 Q How much weight does the Staff give in deciding
6 whether this person should be located in the control room or
7 the EOF to the fact that the considered decision of the
8 responsible Licensee was that they would prefer this person
9 to be in the control room?

10 A I did not go ask the considered person.

11 CHAIRMAN SMITH: What was that answer?

12 MR. ZAHLER: It was not responsive. I do not
13 think he understood it. Let me rephrase it. The answer was
14 he did not ask the considered person.

15 THE WITNESS: You asked me what weight I placed to
16 the opinion of the considered person that he should perform
17 his functions in the control room. Is that correct?

18 BY MR. ZAHLER: (Resuming)

19 Q If that is it, why do you not give me an answer.
20 Otherwise, I will rephrase it, because I think the word
21 "considered" is giving us unnecessary trouble.

22 A I really did not place any weight on that, because
23 I wasn't really aware from my reading of the plan that was
24 in fact the case.

25 Q Let me make sure you understood the question. Let

1 me simplify it. The question was how much weight does the
2 NRC Staff give to the fact that the Licensee in developing
3 its emergency plan and its concept of operations has decided
4 that it would prefer to station this person in the control
5 room rather than the EOF?

6 A We didn't give any weight to that, really. Some
7 Licensees would consider not even having an emergency
8 director. You know, we set a criteria, and we felt that
9 that was the way to best manage the accident.

10 MR. TOURTELLOTTE: Mr. Chairman, I note that the
11 hour is getting late, and you indicated earlier that we
12 would make some oral arguments on a motion that was made by
13 TMIA. And I wonder whether, in view of the fact that the
14 cross examination is going long and there are others who
15 wish to cross examine on the same subject, if it would not
16 be advisable to go on and argue the motion and then resume
17 in the morning with cross examination?

18 CHAIRMAN SMITH: That will depend entirely upon
19 whether Mr. Zahler wishes to allow his cross examination to
20 be interrupted at this point. We would give some deference
21 to that. We have discussed with Ms. Louise Bradford, she
22 plans to be here tomorrow, and the argument could be made
23 then. But the Board has no preference one way or the other.

24 MR. TOURTELLOTTE: I understand. I certainly do
25 not want to -- it is absolutely of no consequence to me one

1 way or the other. I would understand if Mr. Zahler does not
2 want his cross interrupted. I could assure him if he is
3 concerned about my discussing the matter with Mr. Chesnut
4 this evening, I would not do so in any way. But it has been
5 a long day, so I would leave it more or less to Mr. Zahler.

6 MR. ZAHLER: One second, Mr. Chairman.

7 (Pause.)

8 MS. LOUISE BRADFORD: I would put in for
9 continuing now, if I may.

10 CHAIRMAN SMITH: Ms. Louise Bradford, do you have
11 a preference?

12 MS. LOUISE BRADFORD: No, Mr. Chairman. I would
13 note that Mr. Blake had expressed a preference for a written
14 reply to him to the motion. And that might solve it.

15 CHAIRMAN SMITH: The Board has indicated now that
16 we would prefer to have oral replies.

17 MS. LOUISE BRADFORD: In that case, I have no
18 preference.

19 CHAIRMAN SMITH: You can be here tomorrow as
20 easily as this evening?

21 MS. LOUISE BRADFORD: Yes, I can.

22 CHAIRMAN SMITH: How about you, Mr. Adler?

23 MR. ADLER: We do not plan to participate in the
24 TMIA argument. However, we do plan to participate in this
25 subject, and it is somewhat difficult to predict how long it

1 will take to get out the details that we need. It might be
2 a half-hour or longer.

3 CHAIRMAN SMITH: Oh, yes, I am expecting that Mr.
4 Chesnut is going to have to return tomorrow, in any event.
5 I am just wondering about whether we should break it up for
6 the arguments or not.

7 My preference would be to, as soon as you have a
8 logical breaking point, to quit for this evening and come
9 back tomorrow.

10 MR. ZAHLER: That is acceptable to Licensee.
11 Moreover, for Mr. Tourtellotte's benefit, I have no
12 objection if counsel discusses it with his witness and his
13 upper-level management.

14 CHAIRMAN SMITH: Mr. Adler, the Board might also
15 have questions on the 2-plus-2 commitment. So I think you
16 would want to be here in any event tomorrow.

17 MR. ADLER: I will.

18 CHAIRMAN SMITH: Now, are you at a good breaking
19 point in this cross examination?

20 MR. ZAHLER: Yes, sir.

21 CHAIRMAN SMITH: Now, is there any advantage of
22 having the argument this evening? We can do it. We could
23 have it this evening if we wanted to get it out of the way.
24 If not, it is late enough that unless there is advantage, I
25 would just as soon break for this evening. But if there is

1 any advantage to it, feel free, whatever the parties wish.

2 MR. TOURTELLOTTE: Insofar as the Staff is
3 concerned, there is no advantage or disadvantage.

4 CHAIRMAN SMITH: All right. Then let us adjourn
5 until --

6 MS. LOUISE BRADFORD: Mr. Smith, it would be
7 really helpful to me if I could know approximately what time.

8 CHAIRMAN SMITH: We could, if you would schedule
9 it at 9:00 a.m., if that would be helpful to everyone.

10 MS. LOUISE BRADFORD: That would be helpful.

11 CHAIRMAN SMITH: And again, if you have any strong
12 preference to do it tonight, we can go ahead and hear it.

13 All right, let us go ahead and schedule it then.
14 That is the only time we can make it more or less definite.
15 So let us schedule it for 9:00 a.m., the arguments on the
16 motion.

17 MS. STRAUBE: Chairman Smith, do we have any other
18 off-site emergency planning other than the municipal plans,
19 which are not quite done yet? I am not asking as much for
20 myself as for Ms. Bradford, but I would also like to know
21 whether I should come back tomorrow or not.

22 CHAIRMAN SMITH: I did not hear your entire
23 question. Do we have any off-site emergency planning?

24 MS. STRAUBE: Things left to do tomorrow, in other
25 words, to the people who are only interested.

1 CHAIRMAN SMITH: I am not aware of any, except the
2 completion of Mr. Chesnut's examination.

3 MS. STRAUBE: The only thing I have is the
4 municipal plans, which Ms. Bradford has asked for. And I do
5 not have them -- well, they are copied but not stapled yet.
6 I could put them on the record tomorrow if Ms. Bradford does
7 not mind my doing it while she is not here, assuming she is
8 not here.

9 CHAIRMAN SMITH: Then we also want to know this.
10 Let us do this now. Notice the Title 35 -- well, what are
11 we noticing?

12 MS. STRAUBE: The Pennsylvania Emergency
13 Management Services Code.

14 CHAIRMAN SMITH: This you gave to us and to the
15 parties for convenience. We will notice that the only thing
16 that we should have is a representation from the
17 Pennsylvania Council, members of the Bar, that this is in
18 fact the prevailing law in Pennsylvania.

19 MS. STRAUBE: I will make that representation
20 now. It is the prevailing law in Pennsylvania.

21 CHAIRMAN SMITH: And then would you identify
22 exactly what it is we are noticing? You did?

23 MS. STRAUBE: I would like to have notice taken of
24 the entire Code. I did make notice previously to the
25 specific section I was referring to right then. But I would

1 like the Board to take official notice of the entire -- not
2 the entire section -- entire title. The statute, I guess
3 you just call it the entire statute.

4 CHAIRMAN SMITH: Which would be Chapter 71, 73,
5 75, and 77 of Part 5, Title 35.

6 MS. STRAUBE: Yes.

7 CHAIRMAN SMITH: Okay. We notice.

8 We will adjourn then until 9:00 a.m. tomorrow.

9 (Whereupon, at 5:38 p.m., the hearing was
10 adjourned, to reconvene at 9:00 a.m., Thursday, July 9,
11 1981.)

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