

NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

THREE MILE ISLAND
SPECIAL INTERVIEWS

DEPOSITION OF CHARLES A. CROWE

Place - Harrisburg, Pennsylvania

Date - Friday, September 28, 1979

Pages 1 - 30

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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In the Matter of: :
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THREE MILE ISLAND :
SPECIAL INTERVIEWS :
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DEPOSITION OF CHARLES A. CROWE

Holiday Inn Town Motel
2nd and Chestnut Streets
Harrisburg, Pennsylvania

Friday, September 28, 1979
1:00 p.m.

BEFORE:

For the Nuclear Regulatory Commission:

MALCOLM ERNST
FREDERICK HERR
PETER SICILIA, JR.

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C O N T E N T S

<u>WITNESS:</u>	<u>EXAMINATION</u>
Charles A. Crowe	2

E X H I B I T S

<u>EXHIBIT NUMBER:</u>	<u>IDENTIFIED</u>
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2	3
3	7

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P R O C E E D I N G S

(1:00 p.m.)

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MR. ERNST: Let's go on the record.

Whereupon,

CHARLES A. CROWE

was called as a witness and, having been first duly sworn,
was examined and testified as follows:

EXAMINATION

BY MR. ERNST:

Q Please state your full name and title for the
record.

A I am Charles A. Crowe, nuclear civil protection
officer, Pennsylvania Emergency Management.

Q I want to put on the record the fact that you have
received this letter from us earlier asking you to attend
this deposition.

A Yes.

MR. ERNST: I will mark that Exhibit 1.

(Exhibit 1 identified.)

BY MR. ERNST:

Q I will note that inadvertently this said, "Dear
Mr. Williamson," even though Mr. Crowe was identified as the
earlier addressee. This was a clerical error.

Mr. Crowe, this Exhibit 1, this letter, is a photocopy of
a letter sent to you by us confirming your deposition. Have

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2 A I have.

3 Q Do you understand the information set forth in the
4 letter including the general nature of the inquiry, your
5 right to have an attorney present as your representative,
6 and the fact that information you provide here may
7 eventually become public?

8 A I do.

9 Q Is counsel representing you personally today?

10 A No.

11 Q I would like to note for the record the witness is
12 not represented by counsel. If you feel like you would like
13 to be represented by counsel at any time during this
14 deposition, please advise me and we will adjourn and give
15 you time to have counsel.

16 Is this procedure agreeable?

17 A Absolutely.

18 Q Mr. Crowe, is this a copy of your resume that you
19 brought to us today?

20 A Yes.

21 MR. ERNST: I will mark this Exhibit 2.

22 (Exhibit 2 identified.)

23 BY MR. ERNST:

24 Q Does this resume accurately summarize your
25 educational and employment background?

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1 A Yes, generally it does.

2 Q The first question I have today is: I wonder if
3 you would describe your routine assigned duties at PEMA?

4 A Routinely, I am assigned as the nuclear civil
5 protection officer. That particular position involves
6 planning concerning crisis relocation and the in-place
7 shelter program of the State of Pennsylvania.

8 Q When you say nuclear, is that just fixed facility
9 or is that any —

10 A The title has to do with the civil defense aspects
11 of Pennsylvania's emergency management agency. The nuclear
12 civil protection program is a specific program which DCPA
13 has sponsored. OCPA, of course, FEMA now. I am on a
14 contract through DCPA for the state. That essentially is
15 one of the nuclear civil protection officer. It does not
16 involved itself specifically with fixed facilities but
17 rather with the war potentiality, having to do with nuclear
18 war.

19 Q In PEMA, is there a difference between what you
20 would do in the event of an emergency that might involve
21 evacuation of people from a nuclear occurrence as opposed to
22 something like a flood or chemical spill or something like
23 that? Is there a difference in your responsibilities there?

24 A Obviously, in a time of emergency, the
25 professional expertise available in PEMA is utilized in the

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1 most appropriate role. Since there are a variety of
2 circumstances which might involve evacuation, I could be
3 involved or not depending on the situation. A hazardous
4 spill, for instance, a tornado potentiality, a flood, one
5 thing or another, all have some evacuation aspects, whereas
6 the crisis relocation plan, which I am working on, is a long
7 range program involving the possible evacuation of
8 two-thirds of the citizens of Pennsylvania.

9 Q With regard to TMI, I wonder if you might now
10 describe your assigned duties during the first week or two
11 of the TMI accident and how these might be different from
12 your routine duties.

13 A Very well. I was in Pittsburgh on March 28
14 briefing Allegheny County civil defense personnel on the
15 crisis relocation program and associated matters. I
16 returned to PEMA in Harrisburg around midday on Thursday,
17 which was essentially the second day of the incident. At
18 that time we had no indication of a requirement for
19 evacuation radii greater than five miles. We did not
20 receive an indication this would be required in the
21 following day.

22 In the late afternoon or early evening, there was an
23 indication that a 20-mile evacuation plan should be
24 prepared. At that time I had the people who worked for me
25 in the nuclear civil protection section prepare a rough

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1 recommendation thjat would take into account population
2 densities and appropriate routes for evacuation of such a
3 radius.

4 Obviously, since the counties prepare the real
5 implementing plans for such an eventuality, this was a guide
6 in the event the counties had nothing better to start with.
7 A position from which coordination and other considerations
8 having to do with possible evacuation, this might be a
9 starting point for such considerations. This is the item
10 which I considered background information which will explain
11 how this was done. It's merely a recitation of 1970 census
12 track data by township, borough, et cetera. Then an
13 analysis of roadmaps to take into account what density we
14 believe the roads could handle expeditiously and which
15 routes people from these townships might follow.

16 With this information in the hands of the county planners
17 and the coordination efforts of the Pennsylvania state
18 police, Pennsylvania Department of Transportation and
19 National Guard, a detailed plan by county could be worked
20 out. The problem is to assure that with some 600,000 plus
21 population to be moved, that there were no ambiguous
22 assignments of routes, no duplication, no failure to take
23 into account best available routes. Yet this remains a
24 recommendation only.

25 MR. ERNST: I would like to note for the record

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1 Mr. Crowe has given us a document of some 27 pages which
2 apparently consists of population centers around TMU and a
3 map of the area. I will mark this Exhibit 3.

4 (Exhibit 3 identified.)

5 MR. ERNST: I would also like to note for the
6 record that Exhibit 2 consisted of two pages.

7 BY MR. ERNST:

8 Q You mentioned that this was a guide to the
9 counties. Were these routes that you provided as guidance
10 worked out just within PEMA or were they worked out in
11 conjunction with the state police before they went to the
12 counties or what was the interaction before the information
13 was sent to the counties?

14 A This information was handcarried to the counties
15 by county representatives of PEMA who were assigned to
16 assist the counties. It was made known by me to each one of
17 those who had a copy of this the fact that it was an initial
18 position from which planning could proceed further, that
19 Penn DOT and state police plus the National Guard as
20 appropriate would work with the counties in coordination.

21 Now, after the county plan had been analyzed, if this was
22 to be helpful, fine. If the county plan was adequate
23 without that, fine. But it was a matter for coordination
24 and the result is in the additional map which we can discuss
25 later, which was a confirmation of a coordinated position

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1 between the six counties involved, PEMA, Penn DOT, and the
2 state police as to what would be the best routes for an
3 orderly movement of the risk area.

4 Q And this larger map you referred to, this was
5 generated about when?

6 A This was worked on from the time the document
7 which you have called Exhibit 3 was distributed. We
8 continued to work with the counties and state police and
9 Penn DOT in correlating the information and we came up with
10 a final position which was printed on April 4. This
11 reflects for particularly state agencies what the plans of
12 the various counties were. Obviously, they already
13 confirmed their plans along before this but we wanted a
14 coordinated document so particularly the state police, when
15 assigned to do traffic control work, would have a copy of
16 this and would understand what population densities to
17 expect on which specific routes.

18 100 copies of this were made available to the state
19 police. Additional copies were made available to counties
20 for planning purpose. Much more information could be
21 included but from a state view, this was a position which
22 was a basis from which other agency and department
23 activities could be developed. Whatever information they
24 wanted to put on, they could put on. Traffic control
25 points, location of any type of vehicle, or any other

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consideration that a planner might want to have.

So the distribution was sufficient that we had a piece of paper which was a common tool for those working directly with the problem.

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1 Q On April 4th, I believe you stated was the time this
2 document was prepared. About what kind of time frame would you
3 say that the route decision had been made, the decision that
4 fed into their document?

5 A The decisions had been made from the time the
6 counties were apprised of the fact that we were going on a
7 20-mile route. They were refined. This is a representation
8 of a refined position; not a first position, but a refined
9 position and a coordinated position.

10 Q As I remember, there was a document sent to the
11 counties with recommended routes -- guidance, I believe it was
12 -- that subsequently some problems were identified regarding
13 one-way traffic and things of that nature. Could you describe
14 this particular document, when it went out, and what some of
15 the interactive kinds of problems it uncovered, and what their
16 resolution was?

17 A Well, we developed some initial positions, and the
18 specific instance you are referring to, I believe, has to do
19 with the use of the pattern pick by Dauphin County and
20 Cumberland County in their planning. It was done somewhat
21 independently. There did develop a matter of ambiguous utiliza-
22 tion of the highway. It was exactly the purpose for which we
23 sent people down to coordinate the matter and exactly what we
24 wanted to preclude should the event take place.

25 I look at this as a positive product of the coordination

1 process rather than a glitch in the guidance.

2 Q About what kind of time frame was this sent out, and
3 this glitch discovered?

4 A I believe you are still talking about this document
5 right here, Exhibit 3, and the ongoing planning the county
6 was doing independently, each of the six counties, on the use
7 of their own routes. So I am not sure that we are talking
8 about the same document. You refer to one. There could easily
9 have been another one that you are referring to, but I am
10 not quite sure what it might be.

11 Q Having not studied this document, I am not at all
12 sure I can resolve that point either at this time. You also
13 worked on a simulated evacuation time.

14 A Yes.

15 Q Could you describe to me the process of simulating
16 the time required to evacuate the 20-mile area and what the
17 results were?

18 A Again, we get back to a detailed technical analysis
19 of the population in the risk area, the routes available, and
20 the pressure on what might be called traffic choke points.
21 Their analysis was done for us by Pennsylvania Department of
22 Transportation.

23 With that information and the judgment of myself and other
24 people, a representative's signature, together with Penn DOT,
25 a time frame for evacuation was developed.

1 The time frame was based on a total population within the
2 area to be evacuated. Further, it was based on the assumption
3 that there would be adequate prior warning time to appropriate
4 county and state officials that a precautionary evacuation
5 might be recommended.

6 The reason I put the assumption in is this: Evacuation
7 times under most ordinary condition will require that we
8 mobilize the functional forces throughout the state necessary
9 to assist in the evacuation; that is, call in State Police,
10 National Guard perhaps, for security; getting school buses or
11 other transportation available for those without personal
12 transportation; provide for ambulances and other facilities
13 for hospitals and nursing homes where nonambulatory patients
14 will be moved; all these things considered and time enough to
15 start.

16 Then we, using those assumptions, developed time frames
17 that would be under relatively good conditions.

18 Now, with less time, we would not have as orderly an
19 evacuation. On the other hand, at certain stages in the TMI
20 incident, a large percentage of the population close in to the
21 installation had spontaneously evacuated; so this, too, is
22 considered a judgment thing that is time oriented as far as
23 situation development.

24 So specific times are related to specific situations. At
25 the time these figures were developed, there was obviously a

1 sense of urgency in the community. The functional staffs of
2 counties and state will be mobilized to a great degree in the
3 sense of organizationally ready. They still have to move to
4 positions, et cetera. But at that time, with the sense of
5 urgency that we had, we believed it could be accomplished with
6 minimum disorder.

7 Q And what times did you come up with in this evalua-
8 tion?

9 A We came up with seven hours for the 10-mile radius
10 and 10 hours for the 20-mile radius; again, the assumption
11 being that there was sufficient time to mobilize, et cetera,
12 prior to this event, not just out of-the-blue recommendation
13 or order to evacuate.

14 Obviously, it would take longer under those circumstances.

15 Q What assumptions, other than the state of readiness,
16 were used in simulating this evacuation and arriving at the
17 7- and 10-hour figure?

18 A What other assumptions? I think we might call some
19 of the thing assumptions and some facts bearing on the problem,
20 population density by township, assumption that vehicles would
21 move at 35 miles an hour, with a total population, three per
22 vehicle, moving over the routes, Penn DOT's professional know-
23 ledge or road capacity, State Police professional knowledge of
24 traffic control problems, all contributed to the findings
25 having to do with movement.

1 Now, an assumption of three persons per vehicle does not
2 take into account vehicles like school buses which would take
3 more people. Again, I said we knew that there was at one time
4 a rather large percentage of spontaneous evacuees. There
5 were a large number of spontaneous evacuees. All these pulled
6 together, we still thought it was a pretty good estimate to
7 hold the total population because other considerations: A,
8 sense of tension and urgency, perhaps a few wrong turns and
9 cracked fenders, stopping by to get Aunt Millie who might be
10 in another direction from the direction we would prefer to go.
11 All these contributed to an overview that still at that time
12 would be a good planning basis to go on.

13 Q If you had to make a statement of the time period
14 for 10-mile and 20-mile evacuation as of midnight Friday night,
15 as opposed to the assumption that everything was ready to go
16 for this magnitude of an evacuation, what times do you think
17 would be reasonable and more appropriate?

18 A Well, for Friday night for 10-miles, if we had 10 to
19 12 hours of advance notice, I think we could have executed --
20 not certainly in as orderly a fashion as later, as the items
21 were refined -- but we could have executed in a quite adequate
22 manner with 10- to 12-hours' notice. I am not saying 10 to
23 12 hours total. 10- to 11-hours notice, we could have executed
24 in the time involved. Let's say something in the area -- this
25 is strictly conjectural. It has to be a personal opinion. I

1 would say for 10 miles, let's start at around 15 hours is how
2 long we could think it might be done in an orderly manner.
3 Less than that time, you will have accomplished the evacuation
4 of a number of people.

5 Where I have given you the time of about 15 hours, that's
6 saying, "Okay, we have also made the majority of the arrange-
7 ments to do the whole thing in an adequate manner. That is
8 concerned with hospitals and nursing homes and public school
9 transportation and a number of other things.

10 Obviously, on Friday night, the plans were in sketchy form
11 as far as written material. But we have got to understand that
12 many of the people who are involved in doing such have done it
13 under other circumstances for other programs, hazardous spills,
14 floods, and other matters.

15 Therefore, we must give consideration to the personal
16 capabilities of the people who, by word of mouth, have set up
17 something that is a currently urgent problem, and then we get
18 it down into a more refined written form that is understandable
19 to the outsider who has not been personally involved in the
20 functional development of implementing capabilities.

21 Q But your initial judgment still is 15 hours, give or
22 take some number of hours I am quite sure, but on the order of
23 15 hours to complete an evacuation including your hospitals
24 and nursing homes, some of which would be orderly --

25 A It's getting a bit difficult right here. We are

1 talking about several hundred patients. At this time we have
2 got to bring in ambulances from outside counties. Our planning
3 recognized we are looking at 20 miles. We were looking at 20
4 miles by Friday night; 10 miles was an inside capability.
5 Our plan had to be predicated on 20 miles.

6 So you're asking me for an opinion on Friday night that has
7 to do with a matter we had already pushed out to; our concerns
8 and considerations involved a much greater number of people,
9 more than four times as many are involved. So that was what
10 we were thinking about, better said, than we were thinking 10
11 and then thinking 20. We jumped through to 10 very rapidly
12 and started thinking 20.

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s 3 13 Q What would your judgment be for a 20-mile evacuation
14 of Friday night?

15 A Interestingly enough, I don't think there is as much
16 more time involved as might be considered necessary with that
17 greatly increased number of people. More time means we had
18 more time to bring in outside resources, particularly transpor-
19 tation assets for hospitals, such things as that.

20 I would say if we could go with a 15-hour as a first
21 estimate here of the situation, having to pull all of the
22 facts together again, I would say another three to four hours
23 we could have done the whole thing. The work is going in all
24 directions at once, not just in one little area.

25 Q Getting back to the planning aspect before

1 Three Mile Island, I assume that one of your responsibilities
2 was to review or coordinate, or whatever the best words might
3 be, the county plans.

4 A No, that is an erroneous assumption.

5 My duties had to do with the nuclear self-protection pro-
6 gram which was in place, shelter, and crisis relocation plan-
7 ning, not nuclear effects; had facility plans and not hazard-
8 ous spill plans.

9 Q But you did pick up the responsibility after TMI of
10 coordinating these plans?

11 A Yes.

12 Q In your view, what was the state of adequacy of the
13 county plans that existed at the time of TMI?

14 How much upgrading was necessary, as opposed to
15 desirable?

16 A Well, I am going to qualify --

17 Q The five-mile plan I am now talking about.

18 A All right. When I became interested in the problem,
19 we had already passed the five-mile plan. The five-mile plan
20 dealt with about 25,000 people roughly. The five-mile plan had
21 been judged adequate, but we already escalated into five times
22 that many people at 10; 25 times that many people plus at 20
23 miles. So the adequacy of five-mile plans is -- or was not a
24 matter of great concern to me then. We were in a whole new
25 ball game.

1 MR. ERNST: Off the record.

2 (Discussion off the record.)

3 MR. ERNST: Back on the record.

4 BY MR. ERNST:

5 Q Are you aware of the Daupin County emergency prepar-
6 edness plan dated April 6, 1979, signed by Kevin Molloy and
7 John Minich?

8 A Yes, I am.

9 Q Was that plan and the other county plans developed
10 subsequent to TMI reviewed or commented on or concurred
11 in between counties by PEMA?

12 A Let me answer that question by saying our role at
13 PEMA in development of these plans was to ensure there was
14 coordination, county-to-county, and to assist the counties
15 as far as planning goes.

16 Now, we also had in the counties representatives of our
17 office -- that is, area directors plus DCPA personnel to pro-
18 vide assistance.

19 Now, in each case, the personnel -- outside personnel as
20 well as inside personnel, speaking of counties -- assured me
21 personally that their view was that plans in each case, for
22 six counties, was that they were adequate for the problem.

23 Q We have heard several times that when you get to the
24 20-mile evaluation area, you are talking not just the six
25 counties, but you are talking numerous host counties.

1 A Yes.

2 Q Is it fair to infer from that that these host
3 counties were part of that planning process and were aware of
4 what would be called upon in the way of mass care, stores,
5 and things of that nature in the event of that kind of an
6 evacuation?

7 A Yes, it is fair to say they were aware of this.

8 Now, the approach used was again that PEMA act as a coordin-
9 ating agency for assistance. DCPA provided representatives to
10 the great majority of the so-called lost counties to ensure
11 that the planning was adequate in the sense of when additional
12 assistance was needed or not. These representatives of DCPA,
13 as they completed their effort, they came back through our
14 office and we debriefed, plus they provided us materials having
15 to do with the written aspects of the problem and any problem
16 areas that were involved.

17 The counties, however, in the initial instance, had made
18 direct contact with other counties to ensure that their citi-
19 zens could be accommodated in the host counties. As an example,
20 a county north of Dauphin County would be contacted by a repre-
21 sentative of Dauphin County with an inquiry: Can you take, for
22 mass care purposes, some of our citizens? If so, how many?

23 In this manner then arrangements were made. Now we assisted
24 as we could. We correlated the information to include resource
25 requirements. And with the debriefing materials that we had

1 from the mass care counties or support counties, host counties,
2 as you will, we coordinated this and made it a little better.

3 Now we are dealing with a number of counties, 26 to 30,
4 depending on last-minute arrangements, whether or not Lancaster
5 still is going to evacuate, and other considerations.

6 This was not the highest priority in the beginning. The
7 highest priority was to ensure orderly, safe evacuation of the
8 risk area. The second priority was to assure there were
9 adequate resources available to care for the people on the
10 other side. I am not saying it is not a highly important
11 matter, but the first concern is to ensure an orderly evacua-
12 tion of the risk area.

13 Q In the area of response by DCPA, was there response
14 in accordance with pre-planned criteria or the numbers of peo-
15 ple they sent down and things of that nature? Was that pretty
16 much in accordance with state-federal agreements?

17 A I think I am really not the source for the best
18 judgment on that. I was planning -- from my view, DCPA was
19 extremely helpful. They did a fine job in providing person-
20 nel and assistance. But as far as judgment from the state
21 as to state and federal arrangements, I had a piece of the
22 information only working with the paper.

23 Q In your view, was this assistance in this situation
24 critical?

25 A It proved to be extremely important to have some of

1 the very fine planning assistance that we received from DCPA on
2 the scene.

3 Q Could you describe what has happened since TMI
4 regarding the upgrading of county planning and local planning?

5 I understand you are still in this area, actively working on
6 the upgrading of county and local plans.

7 A Yes. I am working with the counties with a team, if
8 you will, representing various state agencies and our own
9 FEMA offices trying to provide assistance to the counties in
10 upgrading the written portions of the county plans to meet the
11 new criteria that we believe NRC has decided on.

12 Q How about local plans?

13 A Local plans essentially are a matter of county to
14 municipality, borough or township. Obviously, they are of
15 importance. Yet the state, with well over 2500 municipalities,
16 would find it quite difficult to monitor each municipal plan.
17 It's a county function. County commissioners, as elected
18 officials, and then the municipal officials, as elected
19 officials, we believe have that responsibility -- not to say
20 we would not provide assistance as required.

21 Q Have you provided the counties or the locals any
22 upgraded guidance as to what should a good plan consist of
23 and how should it be structured, and who should be responsible
24 for what, and what kind of time frame, things of that nature?

25 A We are working with the counties in upgrading their

1 plans. We have not distributed a model in the sense of each
 2 county having certain unique concerns and considerations. We
 3 have sample materials that are available. represented by vari-
 4 ous county plans from TMI, for example.

5 We are working with the individual plans to ensure that they
 6 are adequate for the populations in those counties. Our
 7 priorities are Beaver Valley, Peach Bottom, TMI, Berwick, and
 8 Limerick.

9 Q In your efforts to upgrade county planning for 10-
 10 and 20-mile evacuations, are you aware of any groups or persons
 11 either appointed by the Governor or perhaps some other agent
 12 whose task was to also assess qualities and state of prepared-
 13 ness during this -- say, the time frame of Saturday, Sunday --

14 A You are talking March --

15 Q March 31, April 1, what kind of time frame.

16 A I was not aware at that time of anything having to
 17 do with evaluation of plans.

18 Now, other aspects, remembering _____ I was not
 19 privy to particularly -- in other words, what were the county
 20 commissioners doing, or one thing or another? It wasn't
 21 necessary that I know if such things were going on. That was
 22 not part of what I was charged with doing.

23 Q What level of detail do you believe should be con-
 24 tinued; state plans, county plans, and local plans?

25 A I think you will have to be a little more specific on
 than that.

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1 Q All right. The state plan basically has
2 assignments of general responsibilities. The county plans
3 before TMI consisted largely of assignment again of
4 responsibilities and appeared to contain little detail
5 except for perhaps notifications, telephone numbers for
6 notification.

7 And, as I understand it, there were very few, if any,
8 formal local plans. Since TMI, there have been county
9 documents produced that go into quite some detail, such as
10 the Dauphin Country plan of April, that goes into quite some
11 detail as to who to call and what evacuation routes and who
12 puts up what signs, where, how many vehicles should be
13 available and where should they go.

14 A very great amount of detail as to who should do what
15 and when and how. My question is; what kind of level of
16 detail in your judgment is felt to be necessary or useful,
17 one or the other, for the three levels of planning?
18 Namely, state, county and local.

19 A Well, I will answer your general question in a
20 general way. The state plan should provide necessary
21 guidance to the counties, particularly in the manner of
22 coordination. It should also provide for a general
23 description of state agency involvement, and if appropriate,
24 relationships with Federal agencies.

25 The county plan obviously would be more specific. Yet,

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spnLRW 1 if you are dealing with tens of thousands of people,
2 obviously the implementing instructions that would move Joe
3 Doe from 123 Main Street through a particular route to a
4 reception center where he could be cared for would be too
5 much detail for the county plan. That is a trade-off.

6 A plan that is too detailed at a given level is not a
7 good guide for the managers who must take that plan and
8 adapt it to the specifics of the given situation. Each
9 situation will be somewhat different.

10 So if you provide exhaustive detail in the county plan
11 that goes all the way down to the individual, have you taken
12 into account weather, have you taken into account time of
13 day, have you taken into account a particular hazard
14 analysis for the plant, which, by the way, we don't have?

15 Each of these situations will dictate an adjusted
16 response. If the detail in your plan at the county level
17 addresses a particular situation and the situation as it
18 develops is somewhat different, you may have a plan that is
19 not as useful as you would like. It might not be useful at
20 all. So I think we must be a little wary of believing that
21 a piece of paper can provide an exact response to the
22 multitude of shaded situations that could develop.

23 Now that was by comment everything to do with the county
24 side. Now the municipal plan I think should provide
25 particularly for the notification of individuals in the

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1 area for which this local governing body is responsible.
2 That is a particular thing. We could have published,
3 however, general plans for the country that could be adopted
4 and state plans and what not that would provide for
5 assistance and coordination, but when it gets down to
6 individual notification, that being an important aspect of
7 the matter, perhaps it is the fire company that will have to
8 knock on doors in a certain rural area, you wouldn't want to
9 detail that in a county plan. That is more appropriate to a
10 municipal plan.

11 I don't know whether I have answered your question, but
12 in general that is my view of the planning approach.

13 Q Is this kind of detail, wherever it may occur --
14 we are assuming now it occurs in the local plan, or more
15 appropriate in a local plan -- is this kind of detail
16 critical to effective evacuation?

17 A Let me say that whether it be in writing or not,
18 it is critical, but the problem to be considered at every
19 level of elective authority, from the local to the Federal,
20 is that hopefully a functional organization exists which
21 could respond to the situation at each level. That detail,
22 whether it is in writing in a voluminous document, or
23 whether it is an arrangement which can be made which might
24 easily be that fire company A will contact all personnel on
25 this route and from this street to this street without

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1 going down to Joe Doe individually — this again is where
2 the unique considerations of planning in each community come
3 to bear and where it becomes difficult to design a model
4 that will fit each situation without taking the risk of not
5 considering unique problems in one area.

6 As an example, school children in an urban area as
7 opposed to school children in a rural area. A situation or
8 incident which occurs during school or after school. How do
9 you handle that? Each community has to be satisfied that
10 that is handled adequately. But it is a community decision.

11 BY MR. HERR:

12 Q I would like to get a little bit more specific
13 information on how you coordinated the county plans. As I
14 understand it, you held a series of meetings on Saturday
15 with — let me ask the question. Were there a series of
16 meetings held on Saturday and who were they with?

17 A Well, you understand our operation in the
18 emergency operation center of people and where we have
19 response team representatives from various state agencies
20 there. You also understood we had direct lines to each
21 county concerned.

22 There was, of course, communication by telephone with the
23 counties directly. There was communication with the state
24 agencies involved in meetings either with representatives of
25 the agency who came in or where their response team

/218 04 05

sonLRW 1 representative, who are capable of making decisions for the
2 agency concerned. This particular document, which is
3 Exhibit 3, was explained in meetings on an individual basis
4 with various agencies and various county representatives or
5 our own representatives of people and who were sent to the
6 counties.

7 They weren't so much called for a particular hour, but
8 they were done as the opportunity presented itself to
9 provide information to agencies and activities that needed
10 this information.

11 Q I understand that a specific meeting was held with
12 the state police. I believe three representatives of the
13 state police. It is my understanding that that meeting was
14 to coordinate the overall state police response and to
15 provide coordination of the various county plans.

16 Is it fair to say that the individual people and
17 representatives and the individual representatives of the
18 state police that were assigned to each of the counties were
19 doing extra county coordination and that these meetings with
20 you or the discussions with you were the intercounty
21 coordination mechanism?

22 That the state police and counties weren't expected to
23 coordinate between counties?

24 A Well, I don't want to say that they weren't
25 expected to. State police can talk to their state police

1218 04 06

spnLRW 1 counterpart in the next county. If it was a
2 Dauphin-Cumberland County problem, there is a phone there.
3 Call up and say it doesn't look like this particular traffic
4 artery should be utilized their way.

5 The meetings on Saturday, I met at 10:15 with Jim Cox
6 from the police and gave him a briefing on the approach we
7 thought was appropriate. 4 p.m. I briefed other state
8 police officials on this same matter. We hoped to have by
9 this arrangement representation from the state police in
10 each concerned county to be sure that the police approach
11 was recognized and their assistance was incorporated into
12 the county's effort.

13 If there were problems, that is what we are for, with the
14 response team capability 24 hours a day in our EOC from the
15 state police. They had this, for example, as did other
16 agencies. We had, as I recall, a specific instance where
17 there was a misinterpretation in one of the counties by the
18 state police representative who went down. I talked to that
19 state police representative and we got an understanding of
20 what was hopefully to be accomplished. There was no
21 difficulty.

22 There were multitudes of telephone calls to be sure that
23 everything was going without difficulty. That again is the
24 purpose of coordination. Why we had good communications
25 with the county and we used the response teams and met with

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sbnLRW 1 their management personnel as appropriate to ensure these
2 others were coordinated.

3 Q Was your primary communications link with counties
4 the phone?

5 A Mine was.

6 Q The two-way communication?

7 A Mine was. And as the opportunity presented
8 itself, visits from the county to talk over whatever I had
9 if there was a representative from the county who could get
10 away, and they were quite easily as busy or busier than we
11 were, trying to put their plans together.

12 So it amounted to telephone communication. For me, in
13 the planning business. Now obviously the TWX, cable
14 business and what not, was utilized. Mine was really trying
15 to put the plans together. Operations going on at the same
16 time and a multitude of other things.

17 Q Did you experience any difficulties in your effort
18 because of the communications system, because the phone
19 lines were overloaded, where you couldn't get through in
20 communicating with the counties?

21 A I wouldn't say it was always without problem, but
22 I can't recall a time when an essential thing couldn't be
23 accomplished given a little more time.

24 BY MR. ERNST:

25 Q Do you have anything else you would like to state

1213 04 08

sonLRW 1 for the record at this time regarding any aspect of TMI that
2 might help our inquiry?

3 A No, I can't think of anything at the moment.

4 Q Any recommendations, lessons learned?

5 A No, I think not. I am sure you have access to the
6 various hearings that are in progress or have been completed
7 and studies and what not. Many of these have had
8 contributions from various representatives of people and I
9 think a great amount of detail can be obtained from those.
10 Things which have already gone on the record.

11 Q In conclusion, let me say this is an on-going
12 investigation. Although I have completed the questions I
13 have for you today, it is possible, however unlikely, that
14 we would have to bring you back. I will certainly make
15 every effort not to, unless it is necessary.

16 For that reason, however, I will recess this deposition
17 rather than conclude it. I thank you very much for your
18 time and trying to help us out.

19 (Whereupon, at 2:00 p.m., the taking of the deposition
20 was adjourned.)

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