

ROUTING AND TRANSMITTAL SLIP

Date

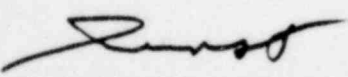
TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2.		
3.		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Supplemental info. for
 the Robert Wilburn
 Deposition file

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
	Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
 Prescribed by GSA
 FPMR (41 CFR) 101-11.206

☆ U.S.GPO: 1978-0-261-647 3304

8001160633

T



COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
HARRISBURG

ROBERT C. WILBURN
SECRETARY OF BUDGET AND ADMINISTRATION

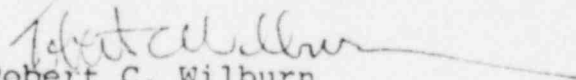
October 10, 1979

Mr. Malcolm L. Ernst
NRC/TMI Special Inquiry Group
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Ernst:

Thank you for giving me an opportunity to review the transcript taken on September 19, 1979. As you will note, I have made some minor revisions and grammatical corrections in the text.

Sincerely,


Robert C. Wilburn

1 drafted by the counties. In addition ~~to that~~, at that point
2 in time, the Pennsylvania Emergency Management Agency was in
3 the process of developing a 20-mile plan -- both a 10 and 20-
4 mile plan. So, they were all in ~~the~~ process as of that
5 morning.

6 Q What deficiencies did you find in the original five-
7 mile plans?

8 A The original five-mile plans by county differed
9 greatly in the level of specificity. ~~By that time~~, While the
10 written plans ~~did~~ ^{were} not ~~reflect a completeness~~, I think that the
11 actual plans that people were dealing with ~~with did~~ ^{were} ~~had~~ ^{They} come
12 a long way ~~over the last~~ ^{during} over the prior three days.

13 My role was one of doing, I suppose, what the
14 Governor would do ~~had~~ ^{if} ~~he~~ ^{had} the time to ~~go down and~~ ask questions
15 and trying ~~to~~ to get answers ~~and trying~~ to get a degree of confi-
16 dence in the plans, ~~how~~ ^{We wanted to feel} comfortable ~~we felt~~ with the plans.
17 I tried to cross-examine the plans and poke holes in them to
18 ~~see that~~ ^{insure that} they were ~~attempting~~ ^{ed} to address all the questions.

19 I asked questions like, "Well, who is going to drive
20 the school buses now that we have them?" In some cases, the
21 answers were not as good as I would have liked ~~to have thought~~
22 ~~they would be~~. But, of course, as soon as the question was
23 raised, ~~then~~ ^{was} it ~~is~~ checked and double checked in ~~going out to~~
24 the counties. ~~And in some counties, response would be better~~
25 ~~than others.~~

1 The questions -- I tried to question each aspect of
2 the plan concerning -- questions like, "Who would drive the
3 school buses? Are there any difficulties in the transit routes?
4 Are they sure that ~~they have in fact~~ that they don't have
5 ^{one} ~~any~~ ^y ~~counties~~ being evacuated in one direction and another
6 county going in the other direction?" ~~I think~~ logical ques-
7 tions, ^{to insure} ~~making sure~~ that they were looking at the forest and
8 not just the trees.

9 My initial reaction ^{on} ~~in the morning of~~ -- Saturday
10 morning was that the plans were reasonably good, that there
11 were a lot of answers that people in the Emergency Management
12 Agency did not have, ~~and~~ I had some concerns about the traffic
13 flows and ^{similar} issues, ~~like that~~.

14 Subsequently, during the day I continually called
15 various people to try to ~~get~~ crosschecks ~~on~~ what was being
16 done. I had discussions with General Scott who is the
17 Adjutant General of the Pennsylvania National Guard, ~~or the~~
18 ~~General in charge of the National Guard~~; discussions with
19 Dan Dunn, who is the Commissioner of the State Police; dis-
20 cussions with Gordon MacLeod, who is the Health Secretary, in
21 ^{an} attempting to ~~do~~ crosschecks ~~on~~ evacuation plans to make sure
22 that they were comfortable with their functional areas ^{as} ~~and~~
23 ~~how they were being~~ handled in the plans.

24 I found in that process that the questions that
25 PEMA was not able to answer ^{were} ~~was~~ being addressed very carefully

1 by each of these cabinet secretaries, ~~and~~ I felt ^{by} the
 2 evening much more comfortable, ~~than I did in the morning.~~

3 Q This is on Saturday?

4 A On Saturday. And by Saturday night, I felt reason-
 5 ably comfortable that we could conduct certainly a five-mile
 6 evacuation, and ^{also} ~~with~~ a 10-mile evacuation with a reasonable
 7 degree of success and minimal amount of loss as far as injuries,
 8 property damages, personal damage of all kinds. ~~Which again,~~
 9 ~~you know,~~ ^I It was a gradual process through the day of asking
 10 questions and making sure that at least somebody was in
 11 charge of that particular area and that we were not going to
 12 run afoul.

13 ~~Just as~~ ^a specific example would be ~~with~~ the
 14 Transportation Department, ~~in the fact that the Transportation~~
 15 ~~Department,~~ ^{that} While many of the questions could not be answered
 16 by PEMA in the morning, as the day progressed, I found out ^{the}
 17 Transportation Department was running simulated models of
 18 traffic flows; that they knew what the traffic would likely
 19 be in all directions; ^{and} that they had actually stationed barriers
 20 and roadblocks ⁱⁿ ~~and~~ maintenance sheds ~~and brought them in~~ from
 21 surrounding areas to make sure that they would have the
 22 equipment available. They had placed the maintenance people
 23 on standby ~~and~~ so that they could be called ~~in~~ to rearrange
 24 barriers if massive traffic ^{flow} changes were required. ~~So, I~~
 25 ~~think that is one example.~~

1 I found the same kind~~s~~ of response with the National
 2 Guard; the same kind of response with the state police.
 3 As the day went along, I was giving more positive responses
 4 to the Governor. I also gave an evaluation of our evacuation
 5 plans to ^{Gene}~~General~~ Eidenberg at the White House and also to
 6 Jack Watson who is Mr. Eidenberg's boss. All of this was done,
 7 unfortunately, orally. We weren't thinking of ~~making~~ ^{writing} reports
 8 at that particular point in time. And other than the plans
 9 that we were working on, there is very little documentation
 10 ~~of that.~~

11 Q So, you went from agency to agency then, or did the
 12 agencies communicate with each other? Like the State Police
 13 and the National Guard, did they talk to each other?

14 A Yes, we have what is called a PEMA Council ^{on} ~~in~~ which
 15 all the ^aaffected cabinet members sit. There ^{was} ~~is~~ a meeting of
 16 that group that I attended the previous day on Friday at --
 17 I believe it was 1:30 or 2:00 o'clock in the afternoon.
 18 Although I am not a member of that council, the Governor asked
 19 me to go as his personal representative to that council.

20 The role that I played from Saturday and subsequently
 21 through this incident -- ^{to insure that} ~~I mean~~ the pieces ^{of the evacuation plans} (were falling in
 22 place ~~as they were supposed to fall in place.~~ The protocol
 23 was being followed. There was coordination among the depart-
 24 ments. But the Governor, recognizing his ~~kind of~~ unique
 25 responsibility ^{to insure} ~~of making sure~~ that everything comes together

1 as it is supposed to come together, did not want to leave any-
2 thing to chance. ^{He} ~~and~~ asked that I go in and ~~kind of~~ make sure
3 that all these pieces were coming together in the ways they
4 were supposed to be coming together. ~~And~~ ^{It} was ~~really~~ a
5 double checking of everything.

6 We were very careful that in no way would we inter-
7 fere with the ^{operation of the} Emergency Management Agency and very careful to
8 be as invisible as possible ^{so} ~~as far~~ as not to in any way weaken
9 the authority of the director of the Pennsylvania Emergency
10 Management Agency or, ~~you know,~~ the counties, ^{organizations.} ~~And tried to be~~
11 ~~as invisible to the county structure as possible.~~ I think we
12 were successful. I don't think they really knew that ^{this review} ~~was~~
13 ~~going on~~ ^{being completed} for the Governor.

14 Q Do you happen to know the responsibilities that were
15 delegated from the Council to the PEMA director?

16 A The responsibilities that were delegated?

17 Q I think the state law, if you don't know it -- we
18 will -- but I think the state law talks about responsibilities
19 of PEMA, which is the Council, and then also it says the
20 Council shall delegate whatever authority -- not the delegation
21 of responsibility but the delegation of authority as appro-
22 priate to the director.

23 Q I really can't answer those questions. I didn't do
24 a management review. I was just there trying to say, "Are we
25 missing anything? Are there big holes in this plan?"

1 And frankly, as far as the Pennsylvania system is
2 concerned, I had very little involvement before that point and
3 probably ^{will}~~would~~ have little involvement afterwards unless --

4 Q Fine. You mentioned PEMA could not answer some
5 questions. Do you have a specific on -- of the kinds of ques-
6 tions that you found most difficult to work out or find
7 answers to?

8 A Most of them were traffic related questions, traffic
9 flow questions. I mentioned the one about the bus drivers,
10 and it was one simply that the answer was in the counties. It
11 wasn't that the answer wasn't available. They just didn't
12 have it centrally.

13 At that time there ^{were}~~was a layer of~~ concerns that ^{were}~~was~~
14 ~~being~~ overlaid on the ~~whole~~ plans because of the uncertainty
15 about the radius of evacuation, ^{This}~~and that~~ was causing great
16 concern ~~I think~~ on everybody's part about whether we were
17 going to be asked to do a five or 10-mile evacuation. ~~And~~ ^{At}
18 ^{one}~~that~~ time there was even speculation about a 20-mile evacuation,
19 which was heightened ^{on Saturday}~~that day~~ by Washington, ^{by comments} that there could
20 be a 20-mile evacuation. ~~You know,~~ we spent a considerable
21 amount of time asking questions about the interaction of a
22 five, 10 and 20-mile evacuation. If we had a five-mile
23 evacuation, could we then go to a 20-mile evacuation, or will
24 we have evacuated everybody from the five miles into a 10-mile
25 radius? Those kinds of sequential questions.

1 I don't know if they had been addressed ~~in part~~ or
2 had been raised before or if that was the initiation of ~~their~~ ^{these}
3 ^{questions} being addressed. It is difficult for me to assess. But
4 certainly, during the day we became very attuned to these
5 ~~kinds of~~ issues.

6 Q Is it fair to characterize then that the existing
7 emergency plans were rather general in nature, did not have
8 too many specifics as to people and exact routes and --

9 A Yes.

10 Q -- and detailed responsibilities, and this was the
11 area that you were checking into?

12 A Yes.

13 Q PEMA didn't have those details either, and you had
14 to --

15 A I think it is important to keep in mind that there
16 were two sets of emergency plans. There ~~is~~ ^{were plans} the ~~ones that were~~
17 developed by the Radiation Bureau and the Department of
18 Environmental Resources, which ~~is~~ ^{provide} a protocol for calling ^{of an}
19 evacuation. PEMA has the execution phase, if you will, of
20 that evacuation.

21 The degree of specificity, I think, was fairly good
22 in terms of the Department of Environmental Resources' ~~kinds~~
23 ~~of~~ ^{given} response to ~~five~~ levels of radiation and so forth.

24 The counties are charged with -- the principal
25 responsibility in evacuations, as I understand it, and PEMA

1 serves as the coordinator over all ^{those} agencies. The level of
 2 detail varied considerably by county, and ~~I think~~ to a large
 3 extent it depended upon the individuals that were in those
 4 counties.

5 ~~And~~ I would hasten to add that I don't think that
 6 those plans ~~really~~ -- the written plans ^{are} reflective of the
 7 capabilities of the individuals and what can be done in a
 8 crisis. ~~I think~~ If you looked at the plans or if you looked
 9 ⁱⁿ ~~at~~ the counties, you might find little ~~coordination~~ ^{correlation} in that
 10 regard. But nevertheless, I think it is fair to say that
 11 certain counties are very vague in exactly how they would
 12 evacuate and in what direction and --

13 Q Did you talk to the coordinators of each of the
 14 counties in this review process, or did you have big meetings,
 15 or how --

16 A No, what was done with the counties was really done
 17 through the National Guard. I requested that the National
 18 Guard be sure that they had at least one representative in
 19 each county that would ~~at least~~ serve as ~~sort of~~ an independent
 20 check ~~and that~~ ^{who} would report back to General Scott ^{and give} an inde-
 21 pendent assessment of how well the county ^{plans were progressing.} ~~was being~~ ~~that~~
 22 ^{This} ~~was being~~ done in a manner not to interfere or in any way
 23 question the authority of the ~~kind of~~ people who have the
 24 ^{responsibility} ~~authority~~ to evacuate. And we relied on that information flow,
 25 and ~~that was~~ through General Scott to me as ~~just~~ an independent

1 crosscheck on their plans.

2 Those reports were coming in late Saturday and
3 through -- well, through the remainder of the incident and
4 were generally very positive as far as the~~se~~ capability of ⁱⁿ ~~what~~
^{the countries.}
5 ~~work was being done.~~

6 Q You mentioned the 10-mile and 20-mile plans.

7 A Yes.

8 Q Did you review this as time went on and these plans
9 were developed, or did you stay in this review process for
10 the next several days and get familiar with the 10 and 20-mile
11 plans?

12 A Yes, in fact on Saturday we were reviewing the five,
13 10 and 20-mile plans all day long. It wasn't just focusing
14 on the five and 10. We were looking at the 10 and 20-mile
15 plans through Saturday and Sunday, I would say, culminating
16 ^{on} ~~by~~ Sunday afternoon, ^{At that time,} we reached the conclusion that there was
17 little use in planning for a 20-mile evacuation because we
18 were unable to determine scenarios under which a 20-mile
19 evacuation would be required.

20 We then focused all of our attention on the five
21 and 10-mile plans and dismissed the 20-mile plan. I shouldn't
22 use the term dismissed because what we found in this process
23 was that it made no sense to talk about a five and 10-mile
24 plan without recognizing the consequences beyond ^{the selected} ~~that~~ radius.
25 We began to focus on what we called a 10-mile plan with 20-mile

consequences.

I think I could explain that very easily. One of the problems that we were ~~having~~ concern^{ed} about ~~-- having con-~~
~~cern to a certain extent~~ -- was checking on the institutions in the area to make sure they were continually being^{adequately} staffed. There were a lot of rumors -- the rumors were incredible about institutions being without staff and getting calls from various responsible people saying that we had to close certain hospitals because there ^{were} ~~was~~ no staff^{members present} there. One example -- and I do not remember the name of the hospital -- ^{it was} ~~but they~~ ^{reported that} ~~said there was~~ only a third of the staff had showed ~~up~~ -- ^{had not reported} professional staff ^{showed up} to take care of the patients. We ^{were} ~~fold we~~ ^{and that we} had to close the hospital.

After doing an investigation of ^{the facts,} ~~that~~, we found that it was true, that ^{the staff was} ~~they were~~ down by two-thirds ~~as far as the~~ ~~staff was concerned~~, but they also had released patients so that a third of the patients ^{remained.} ~~were left~~ and it was not an imminent problem but one that h. b. be ~~watched and~~ monitored very closely.

Q How did the chicken and egg work on this? Did they reduce staff because the patients were reduced because they were going elsewhere, or did they have to release the patients because the staff was not available?

A No, this was a decision made early ~~on~~ to reduce ~~down~~ ^{easily} to only those patients that could not be released. And I

1 think that was a very wise decision because that meant if you
2 had an evacuation, it would proceed more smoothly.

3 ~~The staff problems~~, I can't respond to ^{why the staffing shortage} ~~why they~~
4 occurred. You can speculate as well as I. ~~The~~ ^{What} I
5 started to talk about, ^{a ten mile} ~~this~~ radius and the consequences ^{into}
6 the 20 miles, ~~as the~~ ^{were} hospitals happened to be located at, I
7 ~~think~~, between 10 and 20 miles, ~~and~~ ^{in anticipation of} we were having problems
8 prior ~~to~~ an evacuation in that 10 to 15-mile area. We were
9 convinced ^{that} if we ordered a 10-mile evacuation we would also
10 have to evacuate those hospitals, even though they were
11 technically outside that 10-mile radius.

12 So, we began to talk about a new concept, a radius
13 of evacuation with consequences going out considerably further
14 than that radius. And I think that is something that is going
15 to be very important for future planning ~~in these events~~. One
16 lesson ~~I think~~ that was learned is that it is important to
17 establish different ^{radii} ~~radiuses~~ and ^{not} ~~don't~~ change them during the
18 process. And it is, ~~I think~~, a very inexact science, ~~and~~ ^{expected} ~~It~~ ^{in the government}
19 is hard to argue the difference between a 10 and 15-mile
20 radius. ~~And~~ ^I It would be better to stick with a 10-mile radius
21 -- or whatever the radius is that the experts decide ~~is~~ ^{will be}
22 appropriate.

23 ~~And the second thing is,~~ ^{once} that radius is deter-
24 mined, you had better prepare for ^{expanding} the perimeter. ~~And~~ ^{If} you
25 have major installations on the perimeter, you had better be

1 prepared to evacuate those.

2 Q You mentioned criteria or scenarios of consequences.

3 A Yes.

4 Q Where did you get these scenarios or types of
5 consequences? What was your source of information?

6 A Well, a principal source of information was Mr.
7 ~~Denton~~ Harold Denton. We met with him at least once a day
8 and talked with him on the phone periodically ^{each} ~~during the~~ days.
9 We relied on him to give us those scenarios.

10 We also had input from ~~a man named~~ Doctor Wald, who
11 is, as I understand, a leading expert in nuclear medicine.
12 And he worked with us on what the ^{Health} effects ~~on human beings~~ are
13 ^{and} -- ~~how~~ -- what those ~~radiuses or~~ ^{radii} ~~can~~ ^{should} be.

14 ~~And it was on Sunday that~~ -- By Sunday we had
15 determined, largely through input from Mr. Denton and Doctor
16 Wald, that the 10-mile radius was the worst possible case that
17 we could logically plan for. And it was confirmed Sunday
18 evening in a meeting with ~~Mr.~~ ^{who} Doctor Hendrie ~~came~~ and met
19 with the Governor ~~that night~~. ~~And~~ ^{a potential} his conclusion was ~~really~~
20 ~~a 10-mile~~ 10-mile radius of evacuation. ~~Now~~ ^{He} he did talk
21 about, again, consequences beyond a 10-mile radius, but he
22 was talking about ^{such precautions as} ~~making it~~ a warning to stay indoors or some-
23 thing to that effect.

24 ~~But~~ There was no scenario that he presented or dis-
25 cussed at that meeting which would have ^{necessitated a radius greater than} ~~The worst case~~ 10 miles

1 plan called for a 10-mile evacuation.

2 So, we were very pleased that at least we were
3 coming together on what the appropriate ~~radiuses~~ ~~or~~ radii
4 were for consideration.

5 Q You mentioned a good deal of coordination with the
6 National Guard.

7 A Yes.

8 Q A couple of things. Number one, in the meeting that
9 we had in Harrisburg a few months ago with General Carroll,
10 I believe his name was, he indicated some concern I think on
11 his part as to whether guardsmen would easily go into areas
12 of high radiation because of the lack of equipment to monitor
13 radiation.

14 I also understand that sometime back there was
15 another review of General Scott, I think, where there was some
16 statement that guardsmen will never go into areas of dangerous
17 radiation.

18 Do you have any observations on whether or not the
19 Guard -- what kind of consequences might be -- exist and would
20 still have a Guard that would be willing to go in and perform
21 emergency services? Is that a problem?

22 A I really have no way of answering that. ~~I can't~~
23 ~~make~~ -- I can make a few comments about my feelings with the
24 total population ^{with whom} ~~that~~ we were dealing ~~with~~, and ^{to} ~~to~~ the extent
25 that spills over in the National Guard. When people make

1 flippancy comparisons between something like this occurring and
 2 floods and other kinds of national disasters, ~~I think~~ they
 3 really do not understand the degree of fear that existed in
 4 the general population and how that had to impact ~~on~~ everything
 5 that we did, everything from whether or not deciding to close
 6 additional schools or to open additional schools. ~~That you~~
 7 ^{We} ~~wanted~~ ^{wanted} in no way to communicate that anything was not correct
 8 ^{concerning} ~~as far as~~ whether ~~or not~~ the degree of crisis had heightened,
 9 ~~or~~ stayed the same or lessened. And we tried to make sure
 10 that all of our actions ~~were~~ portraying ^{ed} the ~~fact that that~~
 11 ^{appropriate} ~~was the~~ level of ^{the} crisis at that particular point in time.

12 It is difficult to pinpoint specific things that
 13 occurred that gave one ^{the} ~~this~~ sense that ~~the~~ people were in such
 14 a state of emotional frenzy, ~~but~~ There were little things
 15 that happened throughout that kept reminding you.

16 There was a news story that came out on Saturday
 17 night ^{cautioning that} ~~about~~ the bubble might explode, ^{-- and} ~~and~~ it was flashed across
 18 ~~the~~ TV ^{screens.} ~~and~~ It was only a matter of minutes ^{before} ~~that~~ we were
 19 getting reports of some traffic jams on a Saturday night in,
 20 ~~you know,~~ a portion of the greater metropolitan area. And you
 21 had those kinds of indications from time to time that people
 22 really were frightened, ~~and that~~

23 ^{this} So, you know, ~~how that~~ spills ~~over~~ into the National
 24 Guard, ^{their response} ~~I think~~ -- ~~it~~ has to be a concern because these people
 25 are human beings. But whether or not they would perform their

1 mission, I have no way of answering that.

2 Q Your comments are enlightening. Thank you.

3 This may be related to the first question, but maybe
4 not. On August 31st, Governor Thornburg testified before the
5 President's Commission that he had requested you to monitor
6 the performance of PEMA. Is this a separate action from the
7 review of plans or an additional responsibility?

8 A No, this was referring to the review of the plans, --
9 ~~you know~~, how they were being carried out at that particular
10 point in time.

11 Q I see.

12 A It was not a long-term charge.

13 Q You did mention one council meeting, I believe you
14 said --

15 A Yes.

16 Q -- on Friday afternoon.

17 A That's right.

18 Q Was that the first council meeting, or can you
19 describe to me the activities or actions of the Council itself
20 during this time period.

21 A Okay. ~~The only~~ ^A All that I am aware of is the
22 meeting that I attended. I do not know if there had been a
23 council meeting prior ~~to that time~~. It was clear at that
24 meeting there had, at least, been prior discussions among
25 individual members. Whether they had met as a group, I am not

~~sure~~
~~aware of~~

At that meeting, it was principally going through each department and discussing what their particular responses had been ^{we} and were ~~being~~ ^{during} planned to be ~~for~~ the incident.

It was very clear at that meeting that this was not the first informational meeting. I don't know if they had met as a group or if they had been contacted individually. But they were at that meeting prepared to respond to what was being done in each department, ~~and~~ ^F everyone seemed to be ~~be~~ ^{on} ~~would say~~ reasonably well aware of the consequences ~~of~~ ^{of} their department ~~and~~ what had happened.

Q Were there any subsequent meetings to your knowledge of the Council?

A Not that I am aware of.

Q You say there is no written report. And you mentioned some actions you were taking. Did you have any overall recommendations to the Governor or anyone else regarding preparation for emergency as a result of your work?

A Yes, we did come up with recommendations for executive orders that would have to be promulgated in the event that an evacuation occurred. Some of these are quite minor but were details to be covered.

These included such things, as taking over the turnpike, for example. ^{A, but important, step is} ~~Minor thing~~ to make sure that no one tried to collect tolls ^{on the Turnpike} Taking over the gas stations to make sure

1 ^{pumps were running.} that ~~we~~ We assumed that we would have to have the National
 2 Guard actually operate many of the gas stations and be pre-
 3 pared to make sure that the National Guard had equipment to
 4 cut off locks ^{on} ~~of~~ the pumps ~~and so forth~~ and actually get the
 5 cars moving. ^{Automobiles} ~~because Cars~~ would be the principal means of
 6 evacuation.

7 We had coordinated with the oil companies to ~~make~~
 8 ^{m-} sure that they were moving in extra reserves. ~~This was during~~
 9 ~~the energy shortage.~~ There was at least an energy shortage at
 10 that time, if you remember. We were moving ~~in~~ tanker trucks ^{into}
 11 ^{the area} at this ~~particular point in~~ time. I had ^a ~~this~~ series of
 12 executive orders that would have to be promulgated simultan-
 13 eously with a declaration of emergency. We communicated those
 14 to the Attorney General. I assume that they were drafted. I
 15 never saw them. But I assume that they were drafted in
 16 preparation for evacuation.

17 Q Did you determine the consequences of an evacuation
 18 from a liability standpoint or maybe a health and safety stand-
 19 point might be a significant problem or --

20 A I never heard anyone address really the liability
 21 concerns. The health and safety were paramount I think to
 22 everything that we did.

23 The great concern about an evacuation as far as
 24 health and safety is the -- if you think about it for a moment,
 25 ^{at institutions} ~~the hospitals were down to a third -- the population was down.~~

Since institutional staffs in some cases were down to one third,
to almost a third to what they had been. And the only patients
that were left were the ones that it would be difficult for
them to go home on their own. You have a large number of
people on life-support systems. You have people that have
undergone surgery recently and some in intensive care.

You have children, ~~the~~ babies in incubators. These
are things that I never thought of before, the potential loss
of life in ordering an evacuation that isn't necessary.

~~And when~~ ^{is the case} you can't contain the evacuation when we
were convinced -- It is one thing to -- if we ~~would have~~
~~ordered a five or 10-mile~~ ^{the} ~~or the~~ Governor would have order-
ed a five or 10-mile evacuation ~~at some point~~ ^{this} ~~that~~ would have
immediately heightened ~~the~~ concerns. We already had people
leaving within considerable distances because of this fear of
the unknown.

That is just difficult to anticipate, What would have
happened in the hospitals? Could we have kept them? Would we
have been forced to continue the evacuation out some distance?
Would we have lost lives in moving these people? Those are
great concerns. And we discussed them ^{at great length.} ~~considerably~~.

We tried to make sure if an evacuation became
necessary that we would have the ambulances available, the
litters, ^{etc.} We were working very closely with Mr. Adamcik to
get federal assistance.

Q Would it have required a substantial federal response

from a resource standpoint to evacuate 10 miles or more?

A The 10-mile evacuation, if I remember correctly, did not require a substantial amount of resources in the near term. In the long term, of course, ^{the longer} ~~is~~ these people would be at the evacuation centers, the more difficulty we ^{would} have.

The biggest requirement was for ambulances, and those were being moved into position, as I understand it, by the federal government.

A 20-mile radius, of course, would have required a considerable ^{number} ~~amount~~ of blankets and beds and so forth ^{beyond} what we could get from the American Red Cross and other ^{present} agencies. ~~But~~ ^{however} the Red Cross was able to supply most of the equipment that was required, with the exception of the ambulances.

Q I assume you were at most if not all of the press conferences and major meetings and so forth held by the Governor, at least from Friday on if not before?

A Right. Prior to Friday I had intentionally stayed away from the Governor's office. I thought at that point there were enough resources involved. ~~And I think~~ ^{however} the magnitude of the crisis ~~certainly~~ ^{when I became involved} escalated between Wednesday and Friday morning. ~~So~~ I am relatively unaware of what happened other than what I read on Wednesday and Thursday.

From Friday morning through the following Wednesday ^{of the following week} or Thursday I was, with a few notable exceptions, present at

1 those meetings.

2 Q At these meetings, was Colonel Henderson or his
3 representative present for most of them?

4 A Most of the meetings, he was present.

5 Q He was present?

6 A Yes.

7 Q Apparently, the Governor decided at some time early
8 on, I guess, to rely primarily on his press conferences to
9 disseminate information to the public. And there was some
10 concern, apparently, at the county level and even at PEMA,
11 apparently, that they were getting information late or after
12 the press and public.

13 We were wondering why there was not maybe a simul-
14 taneous information release to the counties or PEMA or other
15 state agencies at or about the same time as the press con-
16 ferences.

17 A If you look at press conferences for what ~~I think~~
18 they were ~~was~~ a public statement of exactly what the ^{situation} ~~position~~
19 was at that point in time. ~~And~~ If you look at the time lapse
20 between ^{obtaining} ~~the attainment~~ of the information and the statement to
21 the press, you will find in almost every case it was a matter
22 of minutes.

23 One thing that impressed me throughout this ^{entire} ~~whole~~
24 series of meetings was the fact that virtually everything was
25 released to the press and everything was released publicly

Also
1 very shortly after it was received by the Governor, ~~and that~~
2 Mr. Denton ~~certainly~~ maintained a complete flow of information
3 both to us ^{and the Press} ~~and normally~~ We would hear ^{in regard} ~~it~~ and ^{the Governor} ~~he~~ would walk
4 out and give it to the press.

5 The same ~~thing~~ ^{is} was true ~~with the Governor as far as~~ ^{concerning}
6 all the information that we had. I suppose if we would have
7 addressed those releases perhaps differently, it would have
8 made people feel differently. I am not sure it would have
9 changed the flow of information.

10 I think the information was there as soon as it
11 possibly could have been there. It was maybe the means of
12 communication that bothered people ~~as far as~~ -- I think it was
13 almost more -- I don't want to say it -- how do I want to say
14 it? ^{this} ^{concerning availability of information} A feeling ~~that just~~ had no substantiation, ~~that~~ ⁺ there was
15 ^{not} more information than they were getting. It just wasn't true.
16 Maybe that feeling could be ameliorated by taking some other
17 action.

18 Q I was wondering about the timing of what one might
19 call a normal official established means of communication
20 through PEMA and the counties, if that could have been done
21 simultaneously, or if there was a decision to do it --

22 A It was being done simultaneously, but it was being
23 done through the vehicle of a press statement. And, you know
24 -- under normal times, one would tell all concerned parties
25 before the press statement was ^{released} ~~made~~, but there really wasn't

1 ~~that kind of~~ time lapse.

2 Q Was PEMA and the other state agencies -- maybe
3 Dauphin County -- advised as to the time of the press confer-
4 ences ahead of time?

5 A PEMA certainly would have been. ~~At least I say they~~
6 ~~were.~~ To the best of my knowledge they were.

7 Q Apparently, the Governor established what one might
8 call a command center to collect and evaluate information.
9 I guess it was staffed by Mr. Waldman, yourself and several
10 others. Could you identify the others that were customarily
11 involved in this process.

12 A Yes. I am not sure the term command center -- I
13 don't know if that is the right terminology ~~or not~~. Some of
14 us were in the presence of the Governor more than others. ~~And~~
15 ~~maybe~~ I don't think there was any kind of designation as
16 such.

17 The people that were present most of the time were,
18 ~~certainly~~, the Lieutenant Governor, myself, Mr. Waldman, Paul
19 Critchlow and Jim Seif.

20 The next level ^{of involvement in terms of presence -- those} ~~or degree of contact which was maybe~~
21 ~~who were~~ not there quite all the time but almost ^{-- included} ~~was~~ Gordon Macleod,
22 ^{and} Secretary of Health, Secretary of Environmental Resources, ^{Cliff Jones}

23 ~~And when I say these people,~~ They would bring different aides
24 ~~with them.~~
~~and have different aides with them and some of their staff.~~

25 ~~But~~ They were ~~sort of~~ the focal points.

1 And not quite as often as those two, but toward
2 as the incident began to develop, Mr. Penrose Holowell,
3 Secretary of Agriculture. ~~Certainly Gordon MacLeod and Cliff~~
4 ~~Jones were involved.~~ The Secretary of Environmental Resources
5 and Secretary of Health from the very beginning were present,
6 I would say, at almost all major meetings.

7 Q Did you mention a Mr. Seif?

8 A Yes, he is Special Assistant to the Governor. He
9 was present at a lot of meetings. Mr. Henderson was present
10 at almost all the early meetings. He was present at most of
11 the meetings.

12 Q When did this group sort of come into being?

13 A There was no specific time. It evolved. When I
14 became involved on Friday morning, ~~certainly it was -- for all~~
15 ~~practical purposes,~~ it had already come together.

16 Q What were the basic sources of information supplied
17 to this group? On whom were you basically relying?

18 A It really depended on the issue. ~~There was --~~ The
19 Lieutenant Governor was clearly responsible for the ~~all of~~
20 ~~the~~ PEMA operations, ~~and~~ PEMA does report to the Lieutenant
21 Governor. All the information on radiation levels, on the
22 environment, of course, was coming through Secretary Jones.

23 When we got into the problems -- ~~with~~ potential
24 problems with water and milk and so forth, the Secretary of
25 Agriculture also became involved, particularly with the milk.

The information principally came ~~the~~ technical information came from Mr. Denton, ~~once he was~~ ~~And it really~~ became almost a sounding board for Mr. Denton. Believe me nothing he said was accepted at face value. It was examined and cross-examined and turned inside out, upside-down, until we believed -- first that we understood what he was saying, and secondly, that there was some faith in what he was saying.

Secondly, we relied in the early stages on Chairman Hendrie. ~~in calling him~~ I believe if you look at the itinerary, ^{on Friday alone} we probably had three phone calls -- three very long phone calls. And most of them were on the speaker phones with most of the people I have mentioned in the room.

Q Friday morning --

A There was one, I believe, Friday morning at 10:00 o'clock. There was one at 11:45, and one later in the afternoon. We had a call with Mr. Denton on the speaker phone in the afternoon, a meeting with Mr. Denton that evening.

~~You know, those~~ ^{The} information was coming in, and it was a question of filtering the information, of making sure that you believe the information and making sure that you are asking the right questions so that you are getting full information. And not even necessarily that these people are trying to keep information from you, but ~~it is just~~ what is important to ^{us} ~~you~~, they may not ^{be} appreciated. And so that was the role played by this group, if you call it a group, to

1 serve that function.

2 Q So, is it fair to say that basically the cognizant
3 state agencies you were relying on was the NRC?

4 A For substantive information.

5 Q You did mention Doctor Wald. Were there any other
6 consultants, so to speak, or outside --

7 A No. And Doctor Wald was brought in at the suggestion
8 of the Secretary of Health, and, as I understand it, he was
9 largely responsible for drafting the guidelines for the NRC.
10 So, he was a very credible source.

11 Q You mentioned one lesson that might be learned from
12 TMI, namely that while one might plan for a specified, such
13 as a 10-mile radius of evacuation, one should also plan for a
14 ripple effect. Are there any other lessons that you think --

15 A Well, that is certainly one lesson. Another lesson
16 is the need for NRC or the appropriate agencies to re-think
17 what those ^{radii} ~~radiuses~~ are prior to an accident and develop some
18 ~~consistent planning assumptions,~~
19 ~~--you know, if~~ you read the guidelines as I understand they
20 existed before, it wasn't even really a five-mile radius. It
21 was, I believe, a radius of low population density, which in
22 the case of Three Mile Island was ^{about} two and a half miles.

23 So, you have all these conflicting kinds of numbers.
24 You have a two and a half mile-radius, you have a five-mile
25 radius. Then, we get into the discussion of this crisis and
numbers were flippantly thrown around. There was a press

1 interview ~~in~~ ^{on} Saturday in Washington in which Chairman
2 Hendrie said it might be 10 to 20 miles. And that one small
3 statement and the problem that it caused in trying to put the
4 lid back on the population in Pennsylvania, it is hard to
5 exaggerate.

6 It seems to me if we had some reasonable basis for
7 ~~what the difference in those areas are and we established some~~ ^{ing}
8 ~~kind of radiuses~~ and then stuck with them when we get into a
9 problem, we would be a lot better off. Plus the fact that you
10 can't draw the line clearly and you have to be prepared for
11 the consequences, I think is important.

12 ~~The other thing I think is important~~ ^{should} In emergency
13 preparedness, ~~for people to address is the whole concept of~~
14 fatigue and what it means to get into a crisis which is not
15 of a limited duration. They all approached this as they do
16 a hurricane in which the ~~thing~~ ^{incident} is over in 24 or 48 hours.
17 ~~And I have~~ ^{had} been on the periphery of some of these operations
18 in the Defense Department. I at least ~~have~~ ^{had} observed ~~some~~
19 previously in long-term vigils, if you will, incidences that
20 were occurring around the world, ~~and~~ ^{and} the discipline that is
21 required in situations like this to make sure that you get a
22 certain amount of sleep every day, ~~and that~~ ^{had} Important decisions
23 may not occur in the first 48 hours but may occur three or
24 four days ~~down the road~~ ^{later}. ~~I think they weren't~~ ^{many} prepared to
25 deal with that kind of a situation, and that is something that

1 as we train people to deal in emergency preparedness, it is
2 very important that people ^{appreciate. Some} ~~people~~ looked very shell shocked
3 ^{by} Saturday.

4 It was a discipline that we established in the
5 Governor's office almost immediately. There was always some-
6 body around that was responsible. But they made sure that we
7 didn't extend ourselves to the point that we became disfunc-
8 tional. I don't think that same principle was being applied
9 in the emergency management center. By Saturday the people
10 looked overfatigued. ~~And we tried to~~ ^{ed} insist that schedules
11 be established ~~that~~ because you don't know when the impor-
12 tant decisions were going to be made. And you had to have ^{maintain}
13 some reasonable degree of performance ^{over a long period of time}. ~~You know, those are~~
14 the kinds of lessons that I ~~suppose~~ ^{were learned.} Had we had an evacua-
15 tion, I suppose we would have learned much, much more.

16 Q Are there any ways in your mind that perhaps the
17 federal or even state agency response could have been a little
18 more effective?

19 A Yes.

20 Q Pragmatically effective?

21 A Yes. Mr. Denton's arrival ^{ed} on Friday afternoon. ^{if} ~~had~~
22 ^{had} he arrived -- a person of that level and that credibility --
23 ~~had he arrived~~ ^{that} two days earlier, would have made a fairly
24 important difference. Second, had we had the same response
25 as visibly on the evacuation ^{side} ~~site~~ would have helped. Mr.

Adamcik was detailed by the President and was given that authority. It wasn't communicated as clearly as it may have been.

~~And had we known~~ ^{It} took time to understand and realize ^{his role.} ~~It took also~~ ^{from} the very beginning I don't believe that Mr. Adamcik understood what his charge was and ~~that we really clarified~~ ^{that} we had to ^{be} clarify ^{ed} ~~that~~ through calls to Mr. Watson. ~~Had you had a similar response on the~~ ^{at the} ~~outside of the issue and had it occurred on Wednesday, let's~~ ^{say} I think we could have had a very coordinated and smooth running operation if we had had a federal advisor ^{on} ~~an~~ evacuation plan ^{ing} and a federal advisor on the technical aspects on site on Wednesday.

Of course, it is easy, obviously, to ^{Identify} ~~do~~ these ~~things~~ in retrospect. And for the future I think it is important, ~~and~~ ^{quickly detail these} ~~to very clearly~~ identify their responsibilities.

Mr. Denton came knowing that he was the President's special representative on the scene and had all kinds of authority. It took a little longer for Mr. Adamcik. I don't think he was given as clear a mandate as he could have been given.

And the other thing I think that was important was to make sure that these advisors know each other and, you ^{coordinated} know, are ~~prepared~~ -- not that that was a problem here, but ^{there} ~~it~~ could have been. That they know each other and are prepared

1 to work together. I think that would have helped. ~~It would~~
2 ~~have helped immeasurably in this particular thing.~~

3 Are you asking the questions as far as response to
4 an incident?

5 Q Yes. Yes. I think the same question might be asked
6 as far as planning for an incident, but the question was with
7 regard to response.

8 Did the state suffer from perhaps the same kind of
9 a problem, a coming together? You seemed to come together
10 once you realized that you had a serious event, and that is
11 human nature.

12 A Yes, we did have the advantage. I think the advan-
13 tage in the state is that it is smaller ^{and} ~~than~~ or focused on
14 the scene and that the Governor is in charge. ~~And, of course,~~
15 ^{Concerning} you don't have ~~these~~ problems ~~as far as~~ who is responsible.
16 Everybody knows who is responsible. Everybody was cooperating
17 and working together. I don't think we had that problem.

18 I am not sure -- it seems difficult to analyze your-
19 self as easily as it is to analyze others. Maybe I will let
20 somebody else analyze our response.

21 Q You mentioned a difference between the response
22 per se and the planning. Do you have any observation or more
23 effective planning or readiness?

24 A Well, I -- a large part of the plans that exist
25 really do depend upon the plan itself and the operators of the

1 plan. You know, ^{the} your protocols ^{regarding levels of} ~~as far as the radiation side~~
 2 ^{and} ~~of it~~, the evacuation ^{response} ~~side of it~~, ^{is} are all triggered by infor-
 3 mation received from the plant.

4 It seems to me that somebody has to have clear
 5 responsibility for making sure that the resources ^{that} exist within
 6 the plant ^{are adequate. This must} ~~and there~~ is either ^{be} the state government or the
 7 federal government. I believe at the current time, it is the
 8 federal government that has that responsibility. ~~And I think,~~
 9 ~~you know, you can't start talking about evacuation plans from~~
 10 ~~the time -- you know, down the road. You have to get back to~~
 11 ~~the very first day.~~

12 And I think one of the major shortcomings -- and
 13 again I hate to be in a position of pointing the finger at
 14 everybody else -- but the capability ^{at the plant} from my observation just
 15 simply wasn't there. Again, I am not an expert.

16 Q That is Met-Edison at the plant?

17 A As far as early response, the technical expertise
 18 that existed -- and that is the first step in all the evacua-
 19 tion plans as well as it is in the prevention of an accident
 20 occurring. So, I think -- that is very important.

21 Apart from that, one could talk about having much
 22 better, more detailed plans. I think it is an important
 23 exercise, but it is an exercise. And when ~~you get into~~ the
 24 actual incident occurring ², you really have to adjust those plans
 25 dramatically ~~anyway~~. I am not sure we can do all that much

1 better as far as it really being prepared if you have a change
2 of wind ~~and~~ ^{and} -- you know. But a better understanding,
3 obviously, ~~it~~ would help a lot. Just a better understanding
4 of things I mentioned before and how the cycles change.

5 Q In your judgment -- and it is a judgment question,
6 I recognize -- but since you were rather heavily involved in
7 the plans themselves, and pragmatically involved rather than
8 a paper exercise, as you say, how long do you think that it
9 might have taken from the time of notification, say, on
10 Wednesday to conduct a five-mile evacuation?

11 A Again, it is very subjective. Let me work back-
12 wards. On Saturday I think that ^{it} could have been done in two
13 to three hours. on a five-mile evacuation. All I could say,
14 it would be several times that amount, I believe, on Wednesday
15 morning. You had more people in the area. You had institu-
16 tions -- at least a very large nursing home that had not been
17 evacuated. It had been by Sunday. You also did not have the
18 psychological preparation for ~~it~~ ^{an evacuation.}

19 It is very difficult for me to answer it other than
20 saying what it was by Saturday. And Saturday, I think two to
21 three hours is a reasonable estimate. So, we are talking about,
22 oh, pick a number as far as what it might be on Wednesday.

23 Q To your knowledge, did anyone look at the cost of
24 evacuation? I don't really mean just the financial institu-
25 tional cost but all the other kinds of costs, too, and maybe

37
1 the cost to society, loss of business and things like that.

2 Were there any estimates made of the balance on
3 evacuation costs versus health and safety benefits of an
4 evacuation?

5 A You know, it is interesting. We kept looking at the
6 health and safety costs of an evacuation. I don't think we
7 really looked at the economic cost of an evacuation. I don't
8 remember it being a ^{part of the} discussion, but we continually talked
9 about what was likely to be the cost of evacuation in terms
10 of human life; how we could control that.

11 Q Were there any documents that you are aware of giving
12 estimates of this nature, perhaps from some of the hurricane
13 evacuation or statistics of that nature?

14 A No. No, but you know, in a hurricane evacuation,
15 if I understand correctly, usually a lot of people are not
16 evacuated from the hospitals. And the reason they are not
17 evacuated from the hospitals is the risk of moving them is
18 greater than the risk of leaving them there.

19 We did have considerable discussions with the
20 Secretary of Health and others as to whether we could have
21 that kind of a situation. I was not convinced you could.

22 I really am not sure people would have stayed behind.
23 People are very heroic and -- Nurses and lab technicians in
24 staying behind who are threatened with their life. But they
25 know what they are dealing with. And it is interesting -- it

1 is like the question with the National Guard. I think there
 2 is no question that you could send the National Guard into a
 3 flooding situation or hurricane situation. What the response
 4 would be in this kind of situation is very difficult to say
 5 because it has not been dealt with before.

6 But I don't believe you ^{would} ~~could~~ take everybody out of
 7 hospitals ~~in a hurricane evacuation. simply because we are~~
 8 ~~talking about~~ ^{However,} ~~we were really~~ talking about a total evacua-
 9 tion. ~~And~~ ^a persons walking into ~~that~~ hospital -- ^{when they don't} ~~and he doesn't~~
 10 know if ^{they are} ~~he is~~ being exposed ~~or not~~ -- ^{quite different.} ~~is one thing.~~ ~~It is a~~
 11 ~~lot different~~ ^{which} than a situation in ~~going in~~ a boat ^{is used to get to the} ~~at the~~
 12 second floor.

13 Q The state law of 1978 -- I believe it was passed
 14 last year -- on emergency response appears to hinge emergency
 15 response on the Governor's declaration of a disaster emergency.
 16 Did the lack of such a declaration have any substantial effect
 17 on state agencies and their ability to respond or react or
 18 whatever is necessary?

19 A Not that I am aware of. I think everybody responded
 20 with the utmost capability to respond. Certainly nobody held
 21 back. This was discussed ~~certainly~~.

22 Again you have to remember the population was one
 23 that was consumed with fear, at least from my interpretation,
 24 during that period of time. Anything that heightened that
 25 fear caused a response that was difficult to control. And that

1 was always in the back of our minds.

2 The same thing with declaring ~~it~~ a state of ~~national~~
3 emergency. We discussed that with President Carter. It was
4 discussed with Mr. Watson ^{with} ~~and it was~~ the same ~~kind of~~ conclu-
5 sion. That, steady as you go and try to be able to control
6 response of individuals to the extent that we ^{could} ~~came as~~ to what
7 the real danger ^{was} ~~is~~. ~~And~~

8 Q Is it fair to say then that was the controlling
9 reason why the emergency disaster was not declared by the
10 Governor?

11 A That and the assurances that were received from Mr.
12 Watson that we would receive an identical degree of federal
13 assistance if it were not declared. And statewide, we really
14 had the capability, I believe, to do everything we could do.
15 There was nothing to be gained, and there was a risk.

16 Q Anything else at this time that you would like to
17 state personally for the record that would enlighten us as to
18 your activities or suggestions or observations regarding the
19 TMI incident?

20 A I don't think so. I think we pretty well covered
21 my limited involvement.

22 MR. ERNST: Any questions from the Board?

23 MR. HERR: No.

24 MR. SCHAMBERGER: No.

25 MR. CHIN: Doctor Wilburn, you have been referring