

ORIGINAL

UNITED STATES
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

PHILADELPHIA ELECTRIC COMPANY
(LIMERICK GENERATING STATION)

DOCKET NO:

50-352
50-353

LOCATION: PHILADELPHIA, PA

PAGES: 21,020-21,039

DATE: WEDNESDAY, JULY 17, 1985

TR-01
0/1

ACE-FEDERAL REPORTERS, INC.

Official Reporters
444 North Capitol Street
Washington, D.C. 20001
(202) 347-3700

8507190121 850717
PDR ADOCK 05000352
T PDR

NATIONWIDE COVERAGE

SueWalsh 1

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

2

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

3

-----X

4

In the Matter of: :

:

5

PHILADELPHIA ELECTRIC COMPANY : Docket Nos. 50-352-OL

:

50-353-OL

6

(Limerick Generating Station, :

Units 1 & 2) :

7

-----X

8

9

10

Old Customs Courtroom

Room 300

11

2nd & Chestnut Streets

Philadelphia, Pennsylvania

12

Wednesday, July 17, 1985

13

14

The hearing in the above-entitled matter convened,

15

pursuant to recess, at 1:10 p.m.

16

BEFORE:

17

HELEN F. HOYT, Esq., Chairperson
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D. C. 20555

18

19

20

RICHARD F. COLE, Member
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D. C. 20555

21

22

JERRY HARBOUR, Member
Atomic Safety and Licensing Board
Nuclear Regulatory Commission
Washington, D. C. 20555

23

24

25

1 APPEARANCES:

2 (As heretofore noted.)
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

SueWalsh

C O N T E N T SORAL ARGUMENTS:

Mr. Conner	Page 21,024
Ms. Ferkin	Page 21,030
Mr. Otto	Page 21,038
Mr. Love	Page 21,047
Mr. Hassell	Page 21,067
Mr. Conner	Page 21,078

E X H I B I T SIdentifiedReceived

Graterford Exhibits 2,
3, and 5.

21,085

Graterford Exhibit No. 4 (Withdrawn) Page 21,084

Commonwealth Exhibit G-1 (Withdrawn) Page 21,086

(1:10 p.m.)

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

JUDGE HOYT: Our hearing will come to order. Let the record reflect that all the parties to the hearing with the exception of Mr. Michael Hirsch from the Federal Emergency Management Agency are again present in the hearing room.

Have the parties decided which order they would like to go in? Or, do you have any preference? We had intended to take the Applicant first, since they are the only ones that will have a rebuttal opportunity here.

MR. CONNER: I understood we were to go first.

JUDGE HOYT: Exactly.

MR. CONNER: Yeah.

JUDGE HOYT: Mr. Hassell.

MR. HASSELL: I have one preliminary matter.

JUDGE HOYT: Very well.

MR. HASSELL: The NRC staff has I guess in effect decided to change its position with respect to filing written proposed findings of fact and conclusions of law. The staff will do so.

The written proposed findings of fact and conclusions of law are in the process of being transmitted to Philadelphia at this time.

JUDGE HOYT: Are they being thermofaxed in?

MR. HASSELL: Yes. That is where Nathene Wright is.

#1-2-SueWall

As soon as that is complete, she will bring the requisite copies here. As a consequence, I will just summarize my oral argument as to the staff's position.

JUDGE HOYT: All right, Mr. Hassell. Then we will, as we customarily do in these hearings, take the staff last in which event you may have those ready to be filed.

We will not recess the hearing, however, until such -- or, close the hearing in this case until such time as you do have those here and they are presented to all of the parties.

Ms. Ferkin, would you like to go second?

MS. FERKIN: Yes, the Commonwealth will go second.

JUDGE HOYT: Mr. Love, you will go third. And, of course, as we have indicated the staff will go last. And I think the times have been agreed upon yesterday. We are not going to be very rigid in that time. If you feel that you need more in order to summarize than the time that we have previously indicated to you that you may have, the Board will liberally interpret that.

All right. Mr. Conner, if you will, sir, begin.

MR. CONNER: If the Board please, in accordance with the Board's Order of June 18th, 1985, the Applicant will present its brief oral argument on the contentions of the Graterford inmates and written proposed findings of fact and conclusions of law, which Mr. Nichols will pass out to

#1-3-SueWal,

the people simultaneously with the beginning of my oral argument, as the Board's Order suggested.

As is customary in these cases, we have presented our findings in the form of a proposed Partial Initial Decision for, in this case, the Fourth Partial Initial Decision. These proposed findings consist of twenty-one pages and track the format previously used in this proceeding.

Given the fact that we believe it covers all of the pertinent points, I have no intention of repeating the whole thing here and will only touch on what I consider to be the highlights of this phase of the case as we see them.

I would first like to note the question of the training of drivers. I think at the outset it is important to emphasize that the responsible official of PEMA, Mr. Taylor, its Director of Training and Education, testified that the training offered to these drivers was not necessary for them to perform their function.

I think it is equally as important to focus on the testimony of James Asher, the responsible official of FEMA, Region 3, to the same vein. When asked a question on cross-examination, Mr. Asher testified that the drivers could function without such training.

Nevertheless, the Commonwealth has offered to provide the comprehensive training for emergency personnel as set forth in its Plan of Instruction Number 7 for

#1-4-SueWal

dosimetry and decontamination for these drivers who, of course, are not emergency workers under NUREG 0654.

Finally, I think it's important to note that if for some reason it were to provide the dosimetry training to these drivers, Mr. Taylor testified that they could be quickly instructed at the time of the emergency. And this, of course, is just like the case of, say, the farm workers who might have to reenter the EPZ who would be given training in the proper use of dosimetry and so forth in that event.

The only thing offered by the Intervenors was Major Case's speculation that the drivers might not attend training unless given some incentive. He expressed no basis for believing they would not accept training other than just his generalized idea. He had no concrete basis for that opinion.

On the emergency time estimate, we believe that the evidence presented to the Commonwealth clearly establishes that it has met the FEMA/NRC requirements set forth in NUREG 0654. The testimony from FEMA experts confirm this fact.

On travel time, Superintendent Zimmerman testified that the travel time estimates that he had incorporated was based on the actual times for which the vehicles routinely travel from the other prison facilities to Graterford. The Graterford plan provides coordination with FEMA so that

#J-5-SueWal

incoming vehicles will not be interfered with by the traffic exiting the EPZ in the event of an evacuation.

On that basis, there is no reason to believe that the Graterford plan is not reasonable in its time estimates. The Intervenor offered the testimony of Robert L. Morris. As pointed out in our findings in more detail, Mr. Morris has never prepared an evacuation time study estimate, is not familiar with the NRC emergency planning regulations in Annex E or with NUREG 0654.

He testified in the Indian Point case, where his testimony was rejected. The thrust of Mr. Morris' testimony, rejected in Indian Point and presented here, is that evacuation time estimates should include a combination of worst case situations. He believes you must consider a panic situation, the increased probabilities of highway accidents, the likelihood that roads would be closed, the worst case meteorology such as a very severe snowstorm, and all of these assumptions.

As Dr. Urbanik explained, and as found by the Board in the Third P.I.D., such "worst case" factors and analyses are not utilized under NUREG 0654 because they do not yield reliable, realistic time estimates which responsible officials can use in an actual emergency in recommending protective actions.

Mr. Morris completely failed to understand this

#1-6-SueWdl

basic point. Instead, he assumed that the EPZ population might be ordered to evacuate even though there was a risk of an off-site release which would expose the evacuating populace to radiation.

In effect, he sees an evacuation as a race. He does not understand sheltering as an alternative. Mr. Morris has no knowledge or expertise in preparing or critiquing an evacuation time estimate. And his layman's theories as to the consideration of a worst case scenario provides no relevant probative evidence.

Regarding inmate control, we submit that the State has fully shown that it has developed an excellent plan for evacuating the Graterford inmates if it were necessary. The basic questions raised by the Intervenor have primarily to do with the cooperation of prisoners, particularly in the initial lock-down time.

The only real meat, if there is any, in this proceeding was that sometimes it took a long time to lock prisoners down in situations, particularly where there was power failure.

Now, as Superintendent Zimmerman testified Graterford now has an auxiliary power system which has, in fact, worked when there have been power outages at the prison. He added, by the way, that Graterford is getting a new power plant, too, in addition.

#1-7-SueWal

The Intervenor's own witness, Major Case, established what I think is the clear evidence for accepting the validity of the ETE. He stated that if the prisoners were educated in the reasons for the evacuation they would cooperate, as it would be in their interest. He testified that the time estimates for inmate control were reasonable if the education were provided.

Superintendent Zimmerman established that such indoctrination would be provided to all prisoners and would be provided in the future.

Specially, an addendum will be provided to the inmate handbook explaining the facts relating to an evacuation.

Major Case's testimony found this acceptable. In our view it is clear, therefore, that the Graterford emergency plan meets all the requirements of the Commission's regulations and NUREG 0654.

Finally, as the counsel for FEMA succinctly stated yesterday, the Intervenor has not shown that training will not be offered to the drivers, that drivers for the companies are going to decline training, or that the evacuation time estimate is inadequate or deficient in any way.

Thank you.

JUDGE HOYT: Thank you, Mr. Conner. Now, Ms.

#1-8-SueWal

Ferkin and Mr. Otto, if he wishes may share your time.

MS. FERKIN: Thank you, Your Honor. If the Board please, the Commonwealth will divide its oral argument on the Graterford contentions into two parts. I will present the Commonwealth's argument on the training contention of the inmates. My co-counsel, Mr. Otto, will present argument with respect to the evacuation time estimates contention.

The Commonwealth will not be presenting the Board with written proposed findings of fact and conclusions of law. This is due principally to the lack of physical resources here in Philadelphia to prepare such findings and the time constraints in this proceeding.

We attempt to cover thoroughly the record on both of these contentions with references to written testimony and transcripts of cross-examination where appropriate.

With that introduction, I will begin the oral argument on the training contention of the Graterford inmates. The Graterford inmates contend that there is no reasonable assurance that emergency response training will be offered to civilian personnel who will be involved in the implementation of the Graterford radiological emergency response plan.

The Commonwealth submits that this record demonstrates this contention to be unfounded and that this Board, therefore, should find such reasonable assurance in fact does exist.

#1-9-SueWal,

In response to the inmates' contention, the Commonwealth presented the testimony of Donald F. Taylor, Director of Training and Education with the Pennsylvania Emergency Management Agency, also known as PEMA.

The Board, in its Third Partial Initial Decision in this proceeding found Mr. Taylor, along with other Commonwealth witnesses, to be knowledgeable, competent and credible.

END #1

Simons flw

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Sim 2-1

1 As has been established in earlier proceedings,
2 PEMA is the agency responsible for coordination of emergency
3 response in Pennsylvania.

4 This responsibility includes helping State
5 institutions such as the State Correctional Institution at
6 Graterford prepare to respond in a radiological emergency.
7 The responsibility to provide emergency response training
8 to personnel who will help in such a response is set forth
9 in the Commonwealth's Disaster Emergency Response Plan For
10 Fixed Nuclear Facility Incidents, also known as Annex E in
11 Appendix 19.

12 Appendix 19 of Annex E states that the Common-
13 wealth has overall responsibility for providing radiological
14 emergency response training in Pennsylvania.

15 In fulfillment of that responsibility, Mr. Taylor
16 testified that PEMA is offering training in radiological
17 emergency response to the employees of bus and ambulance
18 companies with which the Pennsylvania Department of Correc-
19 tions has arrangements to provide vehicles and drivers in
20 an evacuation of Graterford.

21 These bus and ambulance drivers are the "civilian
22 personnel" who could be called upon to implement the
23 Graterford plan in the event of a radiological emergency
24 at Limerick.

25 Mr. Taylor testified as transcript page 20,880

Sim 2-2

1 that PEMA has adequate staff in terms of numbers and qualifi-
2 cations to provide this training.

3 With respect to the drivers of buses, Mr. Taylor
4 made an offer by a letter to the six bus companies with
5 which the Department of Corrections has arrangements on
6 April 4th, 1985 with respect to training.

7 With no response having been received to date,
8 Mr. Taylor will in the next several weeks, i.e., in late
9 July or early August, visit each of these bus companies and
10 personally urge each company to take advantage of the offer
11 of training.

12 With respect to the ambulance companies with
13 which the Department of Corrections has arrangements to
14 respond in a Graterford evacuation, again Mr. Taylor testified
15 that he will write to each company and will pay the company
16 a visit to offer the training program.

17 With respect to both the bus and the ambulance
18 companies, Mr. Taylor testified that he will make every
19 effort to persuade these companies to accept the PEMA
20 training. Any training sessions that are conducted will be
21 scheduled in a place and at a time convenient to the drivers.

22 Furthermore, the training will not be a "one-
23 time only" offer. Mr. Taylor testified that PEMA will make
24 the training course or refresher training as appropriate
25 available annually to the drivers of each bus and ambulance

1 company.

2 In sum, the record shows that PEMA in its role
3 as coordinator the Commonwealth's response to an emergency
4 at Limerick is making available training for civilians who
5 will transport inmates from the State Correctional Institution
6 at Graterford in a radiological emergency at the Limerick
7 Generating Station.

8 Now the Commonwealth's position is supported
9 further by the testimony on this record of FEMA witnesses
10 James Asher and Richard Kinard. The record shows that FEMA
11 approves the State's plan for offering training in emergency
12 response to these bus and ambulance drivers. As Messrs.
13 Asher and Kinard testified, and as Mr. Taylor noted on
14 cross-examination at transcript 20,857, the training contemplated
15 has been given at other sites in Pennsylvania in the
16 vicinity of nuclear power plants.

17 The FEMA witnesses also reviewed the PEMA Plan
18 of Instruction and Mr. Taylor's plan to make this instruction
19 available to the bus and ambulance drivers.

20 FEMA testified that PEMA's training program is
21 "site specific" to Graterford and the Limerick facility. Based
22 on the review of the materials involved in the training
23 program and the fact that such training has been given
24 previously, FEMA concluded "There is reasonable assurance that
25 emergency response training will be offered to civilian

Sim 2-4

1 personnel expected to be involved in the implementation of
2 the Pennsylvania Department of Corrections' Radiological
3 Emergency Response Plan."

4 In summary, the record amply establishes that there
5 is reasonable assurance that emergency response training has
6 been, will be and will continue to be offered by PEMA to
7 civilian bus and ambulance drivers who may be involved in
8 implementation of the Graterford emergency response plan.

9 Several additional matters with respect to this
10 contention bear mention.

11 The first has to do with the nature of the training
12 being offered to these vehicle drivers, the question being
13 is this training comprehensive enough.

14 The inmates contend the training is not so, that
15 it is somehow lesser than the training offered through the
16 auspices of the applicant to school bus drivers in the several
17 risk counties around Limerick. That training is discussed
18 in detail on this Board's third partial initial decision.

19 Contrary to the inmates' opinion, the record shows
20 that the training PEMA is offering to the bus and ambulance
21 drivers adequately prepares these drivers to participate in
22 the Limerick plan.

23 The plan of instruction provided by Mr. Taylor
24 indicates the course will provide these personnel with informa-
25 tion about radiation principles, what are acceptable levels of

Sim 2-5

1 radiation during an incident at a fixed nuclear facility,
2 instruction in how to monitor personal exposure to radiation
3 using dosimetry, if such exposure should occur, and if there-
4 fore the use of dosimetry were to become necessary and how
5 to conduct decontamination monitoring procedures that would
6 be undertaken in reception and mass care centers.

7 Such information will provide these personnel
8 with a thorough background in the nature of a radiological
9 incident and what they should do to protect themselves should
10 the unlikely occurrence of radiation exposure occur.

11 And as both Mr. Taylor and the FEMA witnesses
12 testified, to the extent issues arise outside the precise
13 lesson plan during the training course, PEMA will be respon-
14 sive to these issues.

15 This is outlined in Mr. Taylor's testimony and
16 acknowledged by FEMA in both its written direct testimony
17 and by Mr. Kinard at transcript page 21,000.

18 In addition, Mr. Taylor testified on cross-
19 examination at transcript pages 20,861 and 20,862 that the
20 course being offered by PEMA is in essence the "same course"
21 offered to school bus drivers in the Limerick risk counties.

22 Indeed, as Mr. Taylor testified, he approved
23 the course offered in the risk counties and certified the
24 instructors of that course who were employed by applicant's
25 consultant, Energy Consultants.

Sim 2-6

1 The inmates are also concerned that the bus and
2 ambulance companies will not accept the training. Indeed,
3 inmate witness Case, who, incidentally, the record shows is
4 not an expert in the area of radiological emergency response
5 training, intimates that some sort of financial inducement
6 or incentive must be provided in order for this training to
7 in fact occur. The Board should reject the argument.

8 First, as FEMA witness Asher testified at
9 transcript 20,001, there is nothing in NRC regulation or the
10 guidance of NUREG 0654 which directs that remuneration be
11 provided to individuals who receive emergency response
12 training.

13 Second, it is likely that both the bus and the
14 ambulance companies, once approached in the manner Mr. Taylor
15 has outlined, will accept training. Mr. Taylor testified
16 at transcript page 20,868 that based on his professional
17 experience with other ambulance drivers, it is likely that the
18 ambulance drivers in this case will accept training.

19 Mr. Taylor also testified that there was no reason
20 to believe the bus companies in this case will not accept the
21 training absent some financial inducement, and that may be
22 found at transcript page 20,869.

23 Most importantly, no party here has presented
24 evidence that any one of these bus or ambulance companies
25 will not accept PEMA's offer of radiological emergency

Sim 2-7

1 response training absent financial inducement.

2 Finally, as Mr. Taylor explained at transcript
3 page 20,864, to the extent any bus or ambulance company raises
4 the issue of financial reimbursement for its employees for the
5 time they spend in the training course, the matter would be
6 reviewed on an individual case basis by PEMA in conjunction
7 with the Department of Corrections.

8 Based on the evidence of record presented by
9 competent witnesses from responsible State and Federal
10 agencies, the Commonwealth submits this Board should find
11 reasonable assurance that emergency response training will
12 be offered to civilian personnel who will be involved in
13 implementation of the radiological emergency response plan
14 for the Craterford Institution.

15 I will now turn the microphone over to Mr. Otto.

16 ORAL ARGUMENT BY THEODORE G. OTTO, III

17 ON BEHALF OF THE PENNSYLVANIA BUREAU OF CORRECTIONS

18 MR. OTTO: Good afternoon.

19 May it please the Board, I will address the
20 estimated time of evacuation methodology issue before the
21 Board.

22 The contention was admitted by this Board in
23 its June 12th, 1985 order and was limited to the sufficiency
24 of the methodology used to arrive at the estimated time
25 of evacuation.

Sim 2-8

1 In the testimony received by the Board, all the
2 witnesses testifying on this issue used the same "components
3 of evacuation" if you will. By this I mean that none of the
4 witnesses disagreed that to evacuate Graterford one needs
5 to lock down the institution, take a population count, summon
6 additional manpower, have buses arrive from support
7 institutions, restrain and load the inmates and then have
8 the loaded buses evacuate the EPZ.

9 There is really no disagreement also as to what
10 events should and could take place at the same time. Buses
11 should be called, the institution should be locked down and
12 the additional personnel should be summoned all essentially
13 at the same time.

14 There are five loading areas, each loading
15 inmates at the same time, and buses could arrive, be loaded
16 and leave as soon as they were loaded and could depart.

17 The real disagreement in the adequacy of the
18 eight to ten-hour time estimate is due to disagreement
19 in how long each of these components should take. Even
20 this disagreement is not properly characterized as a disagree-
21 ment between the experts in the field of corrections, but
22 more accurately is characterized as a disagreement as to
23 whether to include a Murphy's Law factor, a "Jesus" factor
24 or evaluate the situation from a worse case scenario point
25 of view.

Sim 2-9

1 Turning to the testimony of Superintendent
2 Charles Zimmerman, who provided a flow chart to better
3 explain the methodology used to come up with the eight to
4 ten-hour estimate, he testified that the method used was
5 really the only method available. It is the method used
6 by Commissioner Jeffes when he developed an estimated time
7 of evacuation in January 1985 and it is the methodology
8 used essentially by Major Case when he was reviewing our
9 plan and the estimated time of evacuation.

10 The time allowed for the lock-down of population
11 count is based on experience. The Superintendent and his
12 staff do this a few times a day.

13 Some mention has been made regarding emergencies
14 where lock-downs took longer than 30 minutes. The emergencies
15 referred to were situations where the inmates really had
16 no significant personal interest in complying with the
17 lock-down order.

18 In a nuclear emergency they will know what is
19 in their best interest due to the annex to their Inmate
20 Handbook, and they will cooperate.

21 It is reasonable to assume that the inmates
22 are going to act in their best interest and that locking
23 down is in their best interest.

24 The time allowed for vehicles to arrive from
25 the support institutions is also reasonable. The Department

Sim 2-10

1 of Corrections regularly runs vans from the support
2 institutions to Graterford and back to the support
3 institutions.

4 The two to four-hour time estimate is really
5 not an estimate, but is based on actual experience. The
6 concerns raised regarding outgoing traffic hampering the
7 inflow of the buses is not accurate since PEMA, the
8 Pennsylvania Emergency Management Agency, has coordinated
9 the routes to protect and prevent this.

10 The adverse weather time frame is also based
11 on an actual experience when we have run the vans in other
12 than ideal weather.

13 The off-duty personnel response time is also
14 reasonable since it is based on experience. We test the
15 call-in procedure twice a year. It is the same procedure
16 we used to call in personnel when we have other non-
17 radiological types of emergencies at the institution.

18 Although people begin to respond immediately,
19 due to the number of people required for the loading teams
20 and the other functions, a one to two-hour period is
21 realistic.

22 The evacuation portion of the flow chart covers
23 the time estimated to restrain the inmate, move the inmate
24 off the cell block to the loading area and loading him
25 or the bus.

Sim 2-11

1 Our corrections officers are trained in the
2 use of security restraints and use them on a regular basis.
3 With teams of officers going to various cells and restraining
4 the inmates and having the inmates follow a line of
5 corrections officer to the loading area, the evacuation
6 process can run in a smooth, orderly way.

7 The evacuation begins portion of the flow
8 chart and the total evacuation time estimate are a combina-
9 tion of the above factors allowing for the factors that
10 can take place at the same time and adding a period of time
11 to travel the approximately one-and-a-half miles from
12 Graterford to the end of the EPZ.

13 Major John Case testified regarding the estimated
14 time of evacuation and, as I stated earlier, did not so
15 much disagree with the analysis of the events inside the
16 prison, but the events outside the prison.

17 Major Case acknowledged the professionalism
18 of Superintendent Zimmerman and his staff. He further
19 acknowledged that the estimated time of evacuation that
20 was developed by Superintendent Zimmerman was the best
21 estimate that was possible at the time, except that it was
22 based on, as he stated, "ideal conditions."

23 Major Case testified at page 59 of his deposition,
24 which is a part of this record, that the times in the flow
25 chart were reasonable and obtainable.

Sim 2-12

He testified that with the inmates' cooperation,

a 30-minute lock-down time could be achieved. He offered
a worse case scenario time of approximately four hours for
the lock-down.

end Sim
Joe fols

1 As to the vehicle arriving portion of the
2 chart, his concern was not with the fact that the two to
3 four hour time could be achieved in normal conditions, but
4 was concerned that during an evacuation, car accidents,
5 panic outside the institution and such factors would slow
6 the buses arrival.

7 He offered an estimated time of evacuation
8 of twelve to twenty hours as a worst case scenario, and
9 this included the Jesus Factor and Murphy's Law factors
10 that were raised before.

11 We would propose that the testimony offered
12 by Mr. Case regarding the panic factors, the car accidents
13 slowing the buses arriving, and his twelve to twenty hour
14 worst case scenario ETE be given essentially no weight by
15 this Board, since it directly conflicts with the Board's
16 third partial decision on the estimated time of evacuation
17 methodology, and also with NUREG 0654.

18 The advisability of a worst case scenario
19 analysis was also the subject of testimony of Dr. Thomas
20 Urbanik. He specifically rejected the worst case
21 scenario analysis in favor of a reasonable and realistic
22 approach to the decision -- to give decision makers at the
23 time of an evacuation the best possible information with
24 which to make their decision regarding protective actions.

25 The testimony of Edward Lieberman, a traffic

1 enginner, who is only expert as to the traffic issues.

2 As he readily admitted, he was not an expert
3 in prison matters, and only used figures that he thought
4 were reasonable, for the other factors in his testimony.

5 He did confirm that two to four hour arrival
6 time used by Superintendent Zimmerman in the flow chart, and
7 we would propose that the Board give little weight to the
8 testimony other than the confirmation of the two to four
9 hour estimate, since the other matters he really was not
10 an expert upon.

11 The testimony of Robert Morris submitted by
12 way of deposition, should be given no weight by the Board.
13 It is clear he has no understanding of NUREG 0654, and
14 rejects the NRC guidelines on evacuation time estimates.

15 He would plan for the worst case scenario,
16 and presumes people would violate traffic laws. He
17 offered no probative testimony on the limited issue before
18 this Board regarding the evacuation time estimate, and
19 attempted to resurrect an issue resolved in the Board's
20 third partial initial decision regarding evacuation of the
21 populace in general.

22 We propose that the Board adopt the testimony
23 of Superintendent Zimmerman in its entirety, based upon
24 his experience in the field. His testimony should be adopted
25 in its entirety because it complies with the requirements

1 of NUREG 0654, and is in compliance with this Board's
2 third partial initial decision, especially the portion
3 regarding methodology and validity of evacuation time
4 estimates.

5 For all the above reasons, we would ask this
6 Board to find as a matter of law the ETE developed by the
7 Department of Corrections as an adequate basis for the
8 planning of appropriate protective actions for the
9 Graterford personnel and inmates, and that the Graterford
10 inmates have not proven the insufficiency of the methodology
11 used in arriving at the ETE.

12 Thank you.

13 JUDGE HOYT: Mr. Love?

14 MR. LOVE: Yes. I would like to begin my
15 presentation by passing out my proposed findings of fact and
16 conclusions of law.

17 JUDGE HOYT: Very well.

18 (Mr. Love passes out documents.)

19 JUDGE HOYT: Would the reporter hand one of
20 those up to the Board, please?

21 (Reporter hands document to Board.)

22 MR. LOVE: If I might also, I do have that
23 additional copy of the Morris Deposition. I will give it
24 to you at this time.

25 (Reporter hands document to Board.)

1 MR. LOVE: If the Board pleases, I would like
2 to review the testimony at these hearings, and summarize
3 our position with respect to the radiological emergency
4 response plan for the State Correctional Institute at
5 Graterford.

6 I would also like to briefly touch upon the
7 history of this issue, and certain procedural problems
8 that have developed.

9 Although the parties arguing in favor of
10 adoption of the radiological emergency response plan for
11 the State Correctional Institute at Graterford appear to
12 far outnumber those objecting to the plans, such numbers
13 should not be allowed to sway the panel as to the merits
14 of the case.

15 Many of the parties in favor of the -- approval
16 of the plan as is have a vested interest in the outcome of
17 this case.

18 The Applicant, Philadelphia Electric Company,
19 has stated publicly that the expected cost of the Limerick
20 facility is 7.23 billion dollars. Until they receive a full
21 power license, this amount cannot be passed on to the rate-
22 payers, so their interest are clear.

23 The Commonwealth of Pennsylvania and the
24 Department of Corrections, the Governor's Energy Council,
25 and PEMA, all have helped in the development of the plan,

1 so their bias is obvious.

2 The NRC Staff can't help but be influenced by
3 its prior mandate to promote nuclear power while it was
4 functioning under the title of the Atomic Energy Commission.

5 FEMA's role in this proceeding was very limited
6 by law to a mere assertion that training would be offered
7 to bus companies, an offer requiring the writing of one
8 form letter and sending it to six bus companies.

9 Against these formidable odds and resources,
10 stand the inmates of the State Correctional Institute at
11 Graterford.

12 Their only concern is their safety. These
13 are individuals who are most likely going to spend the rest
14 of their natural lives at the facility, and thus their
15 concerns are also obvious.

16 With the assistance of two exceptionally well
17 qualified experts who have donated their time and expertise,
18 they have presented testimony that many inadequacies exist
19 in the current planning. The two experts to which I refer
20 to are Major John Case, a former major in the United States
21 Marine Corps, in which he served for 22 years.

22 After that, he was the Director of the Bucks
23 County Correctional System, and Warden of the Bucks County
24 Prison for 12 years, and is currently the field director
25 of the Pennsylvania Prisons Society, an organization that was

1 formed for the betterment of prison conditions in 1787 by
2 Dr. Benjamin Rush.

3 Also donating their services to the inmate cause
4 was Robert L. Morris, a traffic control expert, whose previous
5 experience includes planning for the District of Columbia
6 Metro Subway Syatem, and the routes of engress and egress
7 for the Baltimore Harbor Revitalization Project.

8 Among the deficiencies cited by these experts
9 are the confusion surrounding what the actual estimated time
10 of actuation is, and its overall reliability. The failure
11 to include many potential hazards that incoming vehicles such
12 as buses, vans, ambulances and the automobiles of the
13 correctional officers will face. The unreliability of
14 certain time frames mentioned in the flow chart.

15 The lack of a guarantee that civilian bus training
16 will be adequately -- that civilian bus drivers will be
17 adequately trained so as to carry out their respective
18 tasks.

19 With respect to the history of this issue, the
20 inmates briefly point out that they entered the proceeding in
21 September of 1981 with the filing of a petition to intervene.

22 This petition was accepted in 1982 after an
23 additional filing of 18 affidavits from inmates serving
24 long term sentences at the State Correctional Institute
25 at Graterford.

1 No further movement occurred on this matter
2 until December 14, 1984, when the RERP for Graterford
3 was received by inmates counsel.

4 Unfortunately, the document was heavily censored,
5 and curtailed in length. The inmates, after consultation
6 with Major Case, moved for further disclosure. However, their
7 request was rejected by this Board.

8 At the Appeal's Counsel suggestion, a compromise
9 was worked out. The inmates attorney and expert reviewed a
10 second plan, which was over three times in length of the
11 first plan, and contained very little censorship.

12 Said plan was reviewed at the State Correctional
13 Institute at Graterford in March of 1985.

14 When the inmates sought to revise their
15 contentions based upon a review of the second plan, the
16 Board ruled against them and dismissed them as a party to
17 this proceeding.

18 Once again, the Appeals Court intervened,
19 reinstating the inmates and giving them until May 15, 1985
20 to file their contentions.

21 A footnote in that decision indicated that any
22 delays in this proceeding cannot be laid at the feet of the
23 Graterford inmates.

24 On May 9, 1985, a few days before the contentions
25 were due, this Board granted the Applicant's motion for an

1 exemption from these proceedings.

2 Yet another appeal followed by the inmates,
3 and the Nuclear Regulatory Commission in its ruling in early
4 June found that important questions regarding the hearing
5 rights of the inmates had not yet been resolved.

6 In accordance with this ruling, the Appeal Board
7 denied the exemption request, and the Licensing Board
8 scheduled these hearings.

9 Although the hearing schedule proposed did not
10 give the inmates many of the procedural time frames suggested
11 by Chapter 10 of the Code of Federal Regulations, the inmates
12 reluctantly agreed to an expedited hearing schedule.

13 Several problems arose regarding discovery and
14 deposition schedules. All but three procedural concerns
15 were resolved.

16 These matters include discovery request to the
17 State which resulted in a lack of information being brought
18 forth regarding seven prior emergencies at the State Correctional
19 Institute at Graterford, and the lock down times of each
20 emergency.

21 Information received provided the lock down times
22 of only one of the seven incidents requested.

23 Further requests for log book entries went
24 unheeded. A second letter, mailed to the Department of
25 Corrections on July 8th, 1985, was not received until one day

1 after Superintendent Zimmerman's testimony began on July 15,
2 1985.

3 A second procedural concern involving the
4 proposed testimony of an inmate witness, Thomas Martin,
5 after an initial agreement to depose Martin fell through,
6 Martin submitted a statement mailed to the NRC on July 5,
7 1985, well before the July 8, 1985 deadline for pre-offered
8 testimony.

9 The Board has refused to accept his testimony,
10 stating that his testimony was not received until July 10th.
11 Another unusual delay in the routine mailing of First Class
12 Mail.

13 While inmate attorneys did not receive several
14 pre-offered testimonies until well after this date, those
15 testimonies were allowed into evidence.

16 Therefore, the only voice of the client's in this
17 case will not be entered into the record.

18 The final procedural concern involves the
19 normal time frames allotted interveners in the licensing
20 process.

21 While the inmates did agree to the expedited
22 schedule, they would like to point out that said schedule
23 has hindered their ability to put on the case. They note that
24 Rule 10 CFR 7.443B calls for proposed written testimony to be
25 submitted at least fifteen days in advance of the hearings.

1 In this case, the time frame was seven days.

2 A motion to compel discovery normally can be
3 filed within ten days of a refusal to produce evidence.
4 Inmates counsel did not know the extent of the Commonwealth's
5 lack of cooperation until July 15, 1985, the day the hearings
6 began.

7 The time frame normally allotted to interveners
8 under 10 CFR 2.754 for the submission of proposed findings
9 of fact and conclusions of law is forty days. In this
10 instance, we have been given less than 24 hours to complete
11 the task.

12 In order to receive a full power license, the
13 Applicant must comply with emergency planning requirements
14 of 10 CFR 50.47. These regulations were promulgated by the
15 United States Congress after the accident at Three Mile
16 Island plant in Harrisburg, Pennsylvania in order to
17 heighten concerns as to safety issues.

18 The Applicant, with the approval of FEMA, must
19 give reasonable assurances that their plans exist and will
20 work.

21 The burden is on those parties to prove their
22 case, and not on the inmates. It is our position that they
23 have failed to meet this burden. Their testimony is
24 incomplete, at times confusing, and inadequate.

25 With respect to the merits of these claims,

1 the inmates point out that with respect to the overall
2 estimated time of evacuation, its methodology, its
3 reliability, the inmates contend that the Department of
4 Corrections has not provided us with a reasonable assurance
5 that the ETE can be achieved, thus rendering it reliable
6 for decision makers use.

7 In support of this proposition, they point
8 out the following. Some four years ago an initial estimated
9 time of evacuation was presented. This document suggested
10 a time frame of five hours and thirty minutes if the
11 Graterford prisoners would be evacuated in the daylight.

12 This document was later superseded by another
13 document which was attached to the Applicant's first
14 request for an exemption as an exhibit. It was an affidavit
15 of a Mr. Schmidt and a Mr. Keyser, in which it contained
16 information.

17 It stated that the estimated time of evacuation
18 for the State Correctional Facility at Graterford is six
19 to ten hours.

20 During these hearings, we have heard testimony
21 from Superintendent Zimmerman that his estimated time of
22 evacuation, which was derived without input by Jeffries,
23 states eight to ten hours.

24 I further point out that it appears that these
25 two estimates were derived completely independent of each

1 other.

2 The plan itself contains no ETE and the Board
3 has stated that it must contain such an ETE, and the inmates
4 question which ETE will be used.

5 If it is Superintendent Zimmerman's ETE, then
6 we point out the following problems with his independent
7 analysis.

8 Initially he estimates that the vehicle entry
9 for the buses, vans, and other vehicles necessary to conduct
10 the evacuation will take approximately two to four hours.
11 The buses will be coming from 190 miles or less, using major
12 and secondary roads.

13 Mr. Zimmerman stated that he based his assumptions
14 upon assurances from the Department of Corrections that the
15 buses would be there in that time frame, and his reliance
16 upon PEMA.

17 Neither of these parties testified as to their
18 roles in the development of this aspect of the ETE.

19 End 3.

20 -Sue Wal fols.

21

22

23

24

25

#4-1-SueWal

Robert Morris, a traffic control expert, seriously questions their ability to perform the task within the four hours due to their failure to include accidents on the roadways, panic factor, wind conditions which may blow radioactive releases over a certain area, thereby closing certain evacuation routes and corridors, and other meteorological data.

With respect to the panic factor issue, Mr. Morris states that it is his belief that the outgoing general public evacuations may result in certain persons using the shoulders of the roads, as is often done in the normal traffic jam situations, and perhaps even crossing onto the incoming lanes, thereby reducing or even closing those lanes.

Mr. Morris states that the factors -- if these factors were worked into the time frame, it would be a considerably longer period of time due to the disruption caused by the outgoing vehicles to the vehicles entering the area.

Superintendent Zimmerman states that his time frames are based upon normal conditions and do not take into account any possible disruptions caused by outgoing traffic.

The inmates point out the problems the vehicles, buses, et cetera will face upon entry will also be encountered by the incoming manpower mobilized to conduct the evacuation. Unreliability of the commercial telephone lines may

#4-2-SueWall

render the call-up system inadequate, according to the testimony of Robert Morris. Superintendent Zimmerman states that the call-up system has never been tested during an emergency that effects both the prison and the surrounding communities.

Prior testimony before this Board by a Rick Brown, an AT&T technician, stated that dial tone delays were up to thirty minutes during the floods of Hurricane Agnes in 1972. Major Case has suggested that the overall estimated time of evacuation could just as easily be twelve to twenty hours.

This estimate was made during his deposition and was based upon all information available to him upon -- at that date. He expressed concern that without the inmates being orientated there was little chance of Zimmerman's estimates being met.

Surprisingly, Superintendent Zimmerman stated during his testimony that an addendum would be added to the inmate handbook as a possible solution to Case's concerns. He admitted that this was something that had just recently come up and hadn't been given any prior thought.

If the orientation is given and it includes a drill and periodic retraining, Major Case believes that the lock-down portion of the flow chart can be achieved within the thirty minute time frame suggested by Superintendent Zimmerman.

#4-3-SueWall

Prior lock-downs at SCIG do create another impression. The power failure of September 12th, 1983 took between two and eight hours before all of the cell blocks at Graterford were locked down. Superintendent Zimmerman testified that a subsequent power failure in February of '84 took approximately two hours to lock the institution down.

He cited the problems that resulted from these incidents could be avoided if there had been backup lighting situations which have currently been installed. An Inmate exhibit covering the hostage seige in October of 1981 indicates that the lock-down time during that incident was over two hours, and that the reason for such was that there was no loudspeaker system in the prison to communicate to the inmates who were at far locations.

So I assume that Superintendent Zimmerman would blame that one on the lack of a loudspeaker system.

Major Case states that Zimmerman's overall ETE is based upon ideal conditions. Mr. Otto has just suggested that Case's ETE is based upon inclusion of the Murphy's Law and a "Jesus" factor.

We will leave it to the Board's opinion whether the ETE should be based upon ideal conditions such as what routes -- what time it takes buses to come from one correctional facility to another, say, for example today; or whether the corresponding public evacuation and other such

#4-4-SueWal

considerations should be worked into the formula.

We also note the fact that Major Case is experienced in moving large numbers of persons as he did plan and direct a troop mobilization during the Korean conflict of three thousand individuals from the front lines to the rear, and that his estimates were in fact accurate when the evacuation took place.

Case has also stated that even with inmate orientation an estimated time of evacuation of twelve to eighteen hours can be expected.

The purpose of the estimated time of evacuation is so it can be used as a tool by emergency planners in decision making. As evidence of its unreliability, the inmates point to the fact that Skippack Township, the township in which the prison is located, has failed to approve a plan due to their unanswered concerns about the Graterford evacuation plan.

Superintendent Zimmerman's plan may also be mooted by the expected continued population increases in his and other prisons. Already more than one hundred persons are -- already the official estimates utilized in planning are exceeded by one hundred inmates. Population increases of thirty-eight percent from 1979 to 1983 have swelled Pennsylvania prisons and counties to their uppermost limits.

This population increase is not expected to level

#4-5-SueWal

off for some time now. We are just now seeing the effects of mandatory sentencing and sentencing guidelines in the continued growth of the population, the prison population. SCIG already has plans which are underway to build an additional five hundred persons cell block, which will be completed by 1987.

No mention has been made of any considerations for these additional persons.

Finally, there is no assurance that the civilians involved in this evacuation, i.e. the bus and ambulance drivers, will be adequately trained. To date, all that has been done in this area is to send out one form letter to six bus companies. Despite the fact that this was done on April 4th, 1985 no responses have been received to date, not even a phone call.

Given the twin dangers of nuclear radiation and the transportation of dangerous individuals, the inmates believe additional steps must be taken to insure that the training will, in fact, be offered. The possibility of financial incentives could help, according to Major Case.

Training on inmate custody and control will not be given to drivers, according to Mr. Taylor. Taylor also states that there is no need for any additional training, as the movement of inmates is no different than the movement of school children. We beg to differ and rely upon common

#4-6-SueWall

sense on that issue. No training has been offered to ambulance drivers to date.

FEMA has expressed little concern as to the motivation of civilian personnel to participate in this activity. FEMA also believes that training could be counterproductive and discourage participation of some civilians.

All in all, Major Case states there is no information available that indicates the bus companies will cooperate. Once again, we point out that the burden is not upon the inmates to prove that they won't cooperate but upon the Applicant and developers of the plans to prove that they will in fact be trained.

Ms. Ferkin, in her closing remarks, stated that no evidence has been given that the bus companies will in fact cooperate. I would like to point out that this is impossible to prove, as the bus companies' identities have remained confidential and are not available to myself or anyone else. So, it would be impossible to gauge their level of concern on this issue.

These facts lead us to conclude that the Department of Corrections, FEMA and PEMA have not carried their burden to provide a reasonable assurance that the ETE is reliable, that the methodology utilized will work, and that the civilians will be trained.

Thus, we request that you rule in our favor and

#4-7-SueWal

1 make sure that whatever offers have been made are in fact
2 carried out, whatever orientation plans have been discussed
3 will in fact occur, and that the training to be offered
4 will in fact be given.

5 Thank you.

6 JUDGE HOYT: Mr. Hassell, have you received your
7 papers yet?

8 MR. HASSELL: No, I haven't, Judge Hoyt. All I
9 can do at this point is ask leave from the Board to --

10 JUDGE HOYT: Yes.

11 MR. HASSELL: -- file it as soon as it arrives.

12 JUDGE HOYT: Yes. We will --

13 MR. HASSELL: The best information I have is
14 that it will arrive shortly. That's about all I can tell
15 you.

16 JUDGE HOYT: We will provide the time necessary,
17 Mr. Hassell.

18 I believe, however, there are two matters, Mr.
19 Love, that the Board cannot permit to stand and they are
20 on this record that you have raised in your oral argument.

21 One is the testimony of a Thomas Martin, an
22 inmate at Graterford. The testimony of Mr. Martin was
23 attached as submitted, will be attached to the docket of
24 this record. It is not before the Board as evidence.

25 MR. LOVE: I apologize. I do understand that. It

#4-8-SueWal

is not part of the record. However, it will be submitted --
marked and submitted as a document that was not accepted.

JUDGE HOYT: Yes. The second thing, Mr. Love,
that I would like to remind you of is the procedure that
is being utilized here; that is, that the oral arguments
were to be made at the conclusion of the testimony rather
than the submission of a written brief were agreed to at
the conference call of June 17th, 1985 and as memorialized
on Page 3 of the Order following on June 18th, and I quote
as follows:

"Further decision reached in this conference was
the Board's notice to the parties that it would not order
briefs at the conclusion of the hearings on the Graterford
contention. Rather the Board advised the parties that oral
arguments would be permitted and that any party wishing to
do so could file simultaneously with their oral arguments
written outlines of their findings of fact and conclusions
of law. This procedure by the parties, the Board believes,
is in keeping with the Commission's directions for expeditious
handling in this case. The Board now announces that it will
grant an appropriate of time not to exceed twenty-four hours
from the conclusion of the testimony to the beginning of the
oral arguments by the parties for review and/or preparation."

All right. We will recess for approximately ten
minutes, Mr. Hassell. Perhaps that will give you a chance to

4-9-SueWal

check on the arrival of it. If additional time is needed we will, of course, provide it.

MR. HASSELL: Okay. I will check on it. If it's not here, I'm still prepared to go forward.

JUDGE HOYT: Very well. You can go forward with the argument and we will keep the record open then until such time as they do arrive.

The hearing is in recess.

(Whereupon, the hearing is recessed at 2:10 p.m., to reconvene at 2:35 p.m., this same day.)

END #4
Simons flws

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Sim 5-1

JUDGE HOYT: The hearing will come to order.

Let the record reflect that all the parties to the hearing who were present when the hearing recessed are again present.

At the conclusion of the previous session Mr. Love had completed his oral arguments and we are now ready for that of the NRC Staff.

It is the understanding of the Board that the simultaneous filing of facts and conclusions of law will be forthcoming as soon as Mr. Hassell receives them from his office by electronic means.

Prior to your beginning of the argument, Mr. Hassell, let me inquire of you, your arguments, your findings of fact and conclusions of law, do you have those on the IBM disc in Washington?

MR. HASSELL: To be frank, I really do not know. I just don't know. I can check, but I just don't know.

JUDGE HOYT: Does the applicant have his written submissions on IBM disc?

MR. CONNER: No. I am informed that they are on Wang discs.

JUDGE HOYT: Is that compatible with IBM?

MR. CONNER: I haven't the foggiest idea.

JUDGE HOYT: I haven't either.

Well, let me explain why the Board mentioned that.

Sim 5-2

1 The Board with its word processing machine,
2 if the disc is available from the parties, we take the disc
3 and we can use that in setting up our decisions a little
4 bit quicker. It is simply instead of the old cut and paste
5 method, with the electronic systems of today and office
6 machinery you can do it that way. That is the only inquiry,
7 if you understood what I meant, Mr. Love.

8 MR. LOVE: Yes, I understand, and I would also
9 be happy to provide you with our disc if need be.

10 JUDGE HOYT: Do you have your arguments on disc?

11 MR. LOVE: It is on a disc. It is Compu Corp. I
12 believe disc.

13 JUDGE HOYT: Again, you will have to tell me
14 whether or not it is compatible with IBM because that is the
15 word processing machinery that the Board has available.

16 MR. LOVE: I will inquire as to that.

17 JUDGE HOYT: If you will, and I didn't realize
18 your arguments were on word processing. If it is, we would
19 be happy to have them as well.

20 Ms. Ferkin, I don't want to leave you out. You
21 don't have any proposed findings. All right.

22 Very well. If we can get them all in and feed
23 them into our word processing, it expedites the preparing
24 of the Board's decision.

25 I regret taking up so much time in that sort

Sim 5-3

1 of a discussion, but, Mr. Hassell, would you begin your
2 argument now, please, your oral argument,

3 ORAL ARGUMENT OF DONALD F. HASSELL

4 ON BEHALF OF THE NUCLEAR REGULATORY COMMISSION

INDEX

5 MR. HASSELL: Yes, Judge Hoyt.

6 If it pleases the Board, the Staff's principle
7 argument will be set forth in the Staff's written filing in
8 the NRC Staff's proposed findings of fact and conclusions of
9 law on the Graterford issues.

10 Here today I will just summarize the principle
11 points raised in that argument and emphasize some of the
12 evidence I believe that the Board should be directed to.

13 At the outset, however, I find that I really can't
14 go without commenting on something that was mentioned in the
15 Graterford Inmates' argument, and I believe it was the
16 proposition that the NRC Staff has a vested interest in the
17 outcome of this proceeding.

18 First of all, I believe this record is void of
19 any evidence or information whatsoever that would support
20 such a proposition.

21 The second part of my response would be that
22 the U.S. Congress took it upon itself to decide the question
23 of the promotional aspects of the Atomic Energy Commission
24 and abolished the Atomic Energy Commission and established
25 the Nuclear Regulatory Commission which has clearly a

Sim 5-4

1 mandate.

2 I don't believe there is anything on this record
3 that supports that the staff has discharged its responsi-
4 bilities inconsistent with the legislative mandate that has
5 been granted to the Nuclear Regulatory Commission.

6 I believe it is helpful at the outset to set in
7 context precisely the elements of the admitted contentions
8 which the Staff submits should govern the evaluation of the
9 evidence in this record.

10 In the Board July 12th order it admitted two
11 bases for the general contention that there is no reasonable
12 assurance that the radiological emergency reponse plans for
13 the State Correctional Institution at Greaterford will protect
14 the inmates of said institution in the event of a nuclear
15 emergency at the Limerick Generating Station.

16 With respect to the basis admitted for training,
17 there were several elements of that basis that were admitted
18 by the Board.

19 The first was that there is no reasonable assurance
20 that emergency response training will be offered, and I
21 underscore offered, to civilian bus and ambulance drivers
22 who will assist in evacuating the State Correctional Institution
23 at Graterford.

24 With respect to that particular element, I believe
25 the Grayterford Inmates have misconstrued the admitted

Sim 5-5

1 contention by arguing that there has been no assurance that
2 the drivers will be adequately trained. I don't believe
3 there is anything in the contention itself or the basis for
4 the training contention that offers that up as the subject
5 matter for this particular hearing.

6 Nonetheless, the Graterford Inmates have essentially
7 offered two concerns with regard to whether there is
8 reasonable assurance that emergency response training will be
9 provided. These concerns are principally reflected in the
10 testimony of Major John Case.

11 The first concern that he raised was whether there
12 would be a guarantee that there would be participation of
13 the civilian bus drivers and ambulance drivers in the training,
14 and a guarantee that they would be notified.

15 I submit to the Board that that is not the Board's
16 charge. The standard to be applied in the context of the
17 Commission's emergency planning proceedings is reasonable
18 assurance, and the cite for that of course would be at
19 10 CFR Section 50.47 and Appendix E to CFR Part 50 and NUREG
20 0654, FEMP Rep. 1, Revision 1 dated November 1980.

21 With respect to his second concern, which was
22 whether the civilian bus drivers and ambulance drivers would
23 accept training absent financial incentives, I believe the
24 record is essentially devoid of any basis for Mr. Case's
25 concerns.

Sim 5-6

1 I believe that the testimony of Mr. Taylor, the
2 Director of Training and Education for the Pennsylvania
3 Emergency Management Agency and the testimony of Mr. Asher
4 and Mr. Kinard establish that, No. 1, financial incentives
5 are not required to be offered under the Commission's guidance
6 in the emergency planning area and that, secondly, that the
7 absence of such financial incentives, based on the testimony
8 of Mr. Taylor, would not preclude the drivers from accepting
9 the training.

10 With respect to the second element that has been
11 raised in the Board's June 12th, 1984 order admitting the
12 contention, it dealt with the method by which the Commonwealth
13 seeks to offer such training, i.e., by letter to such civilian
14 bus drivers and ambulance drivers is inadequate because (a)
15 there is no guarantee that the employees will ever receive
16 any notice of the opportunity to avail themselves of the
17 training program and (b) the training envisioned by the
18 imates was a broader and more comprehensive training program
19 such as the training program offered to school bus drivers, and
20 there was a cite was to the third partial initial decision
21 describing the nature of that particular training.

22 I submit that there is ample evidence in this record
23 that establishes, first of all, that there is reasonable
24 assurance that the bus companies and ambulance companies will
25 notify the potential drivers involved and that training will

Sim 5-7

1 be offered.

2 This I believe is established by the testimony
3 of Mr. Taylor and by the testimony of FEMA. In fact, FEMA
4 explicitly testified that they had been given assurances
5 by PEMA that Mr. Taylor would make a direct personal visit
6 and I believe it is entirely reasonable for FEMA to rely on
7 such an assurance from a Government official. I don't think
8 there is anything in the record that establishes therefore
9 that there would not be reasonable assurance that the drivers
10 in question would be notified of the availability of the
11 training.

12 And again, I would like to make clear that the
13 issue here is not whether the drivers will be adequately
14 trained.

15 The third principle element related to the basis
16 for the training aspect of this contention concerned the
17 inmates' contention that the two-hour course to be offered
18 by PEMA is not as comprehensive as the one offered to the
19 bus drivers of the school children and is therefore inadequate.

20 With respect to this issue, if you review Major
21 Case's testimony there is very little, if anything, that
22 suggests that the course that will be offered by PEMA as set
23 forth in Mr. Taylor's profiled testimony and the Plan of
24 Instruction No. 7 attached to that testimony is not the
25 appropriate training that should be offered to these

Sim 5-8

1 particular bus drivers.

2 I submit that it is important for the Board to
3 keep in mind FEMA's testimony that the training, if any, that
4 is needed should be appropriate to the individual's expected
5 duty during that evacuation, and I submit that the record
6 demonstrates that the expected role of these drivers is an
7 extremely limited one and that the testimony indicates and the
8 evidence of records indicates that it does not include inmate
9 custody and control, and that the evidence of record supports
10 the proposition that therefore training in that particular
11 area as raised by the intervenors is definitely unnecessary.

12 So the Staff would submit in summary that with
13 respect to the elements of the basis for the training aspect
14 of the contention that there is ample support in the record
15 for this Board to find that there is reasonable assurance
16 that emergency response training will be offered to civilian
17 bus and ambulance drivers who will assist in evacuating the
18 State Correctional Institution at Graterford, and that there
19 is ample evidence in this record for this Board to find that
20 the method by which the Commonwealth seeks to offer such
21 training, i.e., by letter followed up with personal visits
22 by the Director of Training and Education for FEMA to urge
23 the companies involved and to have the employees avail
24 themselves of the training is sufficient for the Board to
25 find that the method that they are using to notify the

Sim 5-9

1 drivers of the training meets the reasonable assurance
2 standard called for by the Commission's emergency planning
3 regulations and guidance.

4 With respect to the second basis of the contention
5 that is of concern, the estimated time of evacuation of the
6 State Correctional Institution at Graterford, there were
7 essentially three concerns as set forth by the Board in its
8 order admitting the contention.

9 The first was that there is no reasonable assurance
10 that the estimated time of evacuation of six to ten hours
11 can be achieved.

12 Before I move on to the other two, I will address
13 that argument now very briefly.

14 The Staff essentially believes that any question
15 now about whether what I will call the original or Commissioner
16 Jeffes' estimate of six to eight hours, questions concerning
17 the adequacy of the basis or methodology for that particular
18 estimate are essentially moot.

19 The Bureau of Corrections has looked at that
20 estimate and they have independently, as I understand it
21 from the testimony in this proceeding and evidence in this
22 proceeding in conjunction with discussions with Commission
23 Jeffes, developed a what I will call a revised estimate of
24 eight to ten hours.

25 The Staff submits that that estimate is essentially

Sim 5-10

1 consistent with the first estimate and believes that based
2 upon the testimony of Mr. Lieberman and Mr. Urbanik and
3 Superintendent Zimmerman is consistent with NUREG 0654,
4 Appendix 4, which is the guidance that governs the development
5 of an evacuation time estimate for a special facility, and
6 that because the evidence demonstrates that, that therefore
7 there would not be any requirement for there to be any change
8 in the emergency planning or preparedness for the State
9 Correctional Institution at Graterford.

10 Given that in the Staff's view there would be no
11 such change and the evidence clearly doesn't support that
12 there would be such a change in the estimate, and given that
13 it has been clearly established that nothing in the Commission's
14 regulations or guidance requires that a particular ETE
15 developed for a special facility be achieved in a particular
16 period of time, that essentially questions concerning the
17 adequacy of the basis for the methodology for what I call
18 the original six to ten-hour estimate has in effect been
19 mooted because it is very clear at this point that the State
20 Correctional Institution at Graterford will be relying upon
21 the eight to ten-hour estimate developed by Superintendent
22 Zimmerman.

23 With respect to the second element that the Staff
24 believes was established by the Board in the basis for the
25 estimated time of evacuation portion of this contention,

Sim 5-11

1 it essentially provides that the inmates contend that the
2 failure to specifically address the estimated time of evacuation
3 if the plan fails to meet the criteria suggested by Appendix
4 4 to NUREG 0654, and specifically Section Roman numeral II-C
5 and Section Roman numeral IV-B.

6 There are essentially two propositions here.

7 First, there is no evidence in this record at all
8 that Appendix 4 to NUREG 0654 requires that an evacuation
9 time estimate for the special facility appear in the plan
10 itself.

11 Secondly, the Staff submits that as a legal matter
12 that the Commission's regulations -- that neither the
13 Commission's regulations nor NUREG 0654 or Appendix E to
14 Part 50 requires that such an estimate appear in the plant
15 itself.

16 and Sim
17 Joe fols

16

17

18

19

20

21

22

23

24

25

1 Thus, in any event, the Staff believes that
2 this portion of the inmates contention essentially is without
3 merit based upon the record of this proceeding, and
4 emergency plan regulations and guidance.

5 With respect to the third area that is raised
6 in the Staff's view by the Board's admission of the basis
7 for estimated time of evacuation portion of the admitted
8 contention, the inmates contend that a breakdown of the
9 various sequential events for the six to ten hour evacuation
10 time estimate is necessary, and that that breakdown was
11 not included in the evacuation time estimate as prescribed
12 by Section 4.B of Appendix 4 to NUREG 0654.

13 With respect to this particular area, the
14 evidence, the Staff submits, essentially shows that the
15 Intervener's concerns essentially fell in the area of raising
16 worst case scenarios with respect to the development of the
17 evacuation time estimate for the special facility.

18 We believe that the record clearly establishes
19 that Appendix 4 to NUREG 0654, based upon the expert testimony
20 of Dr. Urbanik, who was the principal author with respect to
21 that document , that worst case scenarios as he has explained,
22 as will be fully cited in our written submission, that
23 such worst case scenarios are inappropriate for use in
24 developing the actual evacuation time estimate for special
25 facilities.

1 The Staff also submits that neither Mr. Morris
2 nor Mr. Case has presented any site specific information
3 that would suggest in this instance why those particular
4 worst case scenarios that they present should be presented.

5 The only thing that, in the Staff's view, may
6 have been probative was with respect to the particular
7 blackout incidents that were mentioned during the course of
8 the examination of Superintendent Zimmerman.

9 The Staff submits that the evidence of record
10 shows that that problem has been rectified through the
11 addition of auxiliary power at the State Correctional
12 Institution at Graterford, and therefore, the record does
13 not establish that there are any special circumstances in
14 this case which would warrant the application of worst case
15 scenarios in a situation where they are clearly not
16 contemplated, required, or called for by NUREG 0654.

17 That is essentially the Staff's argument.

18 Therefore, the Staff believes that based on the
19 full record in this proceeding that this Board should
20 conclude that there is reasonable assurance that the
21 radiological emergency response plans for the State
22 Correctional Institution at Graterford would protect the
23 inmates at said institution in the event of a nuclear
24 emergency at Limerick Generating Station with respect to the
25 admitted contention in this proceeding.

1 I have nothing further.

2 JUDGE HOYT: That concludes your remarks?

3 MR. HASSELL: Yes, it does, Judge Hoyt.

4 JUDGE HOYT: Does the Applicant, Mr. Connors,
5 wish to go ahead at this point, or do you want to wait until
6 you have in hand the written findings of fact and conclusions
7 on law that Mr. Hassell will hopefully have available soon.

8 MR. CONNER: We are prepared to go ahead.

9 JUDGE HOYT: Very well. Proceed.

10 MR. CONNER: We have relatively few points to
11 cover, because Mr. Hassell covered many of the points that
12 we might otherwise have stated in his argument, so I will
13 try to skip through these as rapidly as possible.

14 On Mr. Love's point about vested interest, we
15 certainly take exception to that being brought in, given the
16 fact that there was absolutely no effort to show any bias
17 and prejudice on the part of any of the witnesses who
18 testified for the Commonwealth, for the NRC, or for FEMA.

19 And given that, it becomes gratuitous to suggest
20 that this is an appropriate consideration for this Board, even
21 if there were any basis for it, which there is not.

22 I would note as a general proposition, that based
23 upon our very quick review of the Intervener's proposed
24 findings of fact, that there are several points made therein
25 that are beyond the specified issues.

1 Many are redundant, and many are irrelevant.
2 I don't mean this as a criticism, but there are also some
3 typographical-type errors that would creep into anything
4 that might have to be prepared on short notice, and our
5 proposed findings are probably not free of them, but I
6 would note two points in that line very quickly.

7 On Roman I G, the transcript reference is to
8 page 21,001; not 20,001.

9 And on II H, in referring to comments by Major
10 Case, in the second line of that sentence, it said, 'could
11 cut' the overall E.T.E. The transcript at that point uses
12 the word, 'up' where 'cut' appears.

13 Now, I don't know.

14 JUDGE HOYT: I am sorry. Would you give us that
15 reference again.

16 MR. CONNER: II H.

17 JUDGE HOYT: Oh, II H. All right.

18 MR. CONNER: Yes. II Henry. I am not suggesting
19 that Mr. Love may not have intended to use the word, 'cut'
20 there, but at the transcript, the word, 'up.' U-p.

21 Addressing Mr. Love's findings seriatim, I F, we
22 submit, is beyond the issue in this case as to training
23 in inmate custody and control.

24 Likewise, J -- I am sorry, not J. It is K;
25 as to the financial incentives we would simply echo the point

1 that there is no regulatory requirement for financial
2 incentives in 0654 or otherwise.

3 In J, the point was involving civilian bus
4 drivers. It should be made clear that we assumed this
5 applies only to the ones for the Graterford potential
6 evacuation, and not relating to the transportation providers
7 which were discussed at length in PID 3, because of course
8 there are letters of agreement and so forth set forth there.

9 In II A, Roman II A, and B, really, these refer
10 to the early estimated time -- evacuation time estimates
11 and we would reiterate that the one submitted, which is the
12 document identified as Graterford Inmates No. 1, this was
13 not even a Commonwealth estimate. This was an estimate
14 we made in response to the NRC's request, and was nothing
15 but an estimate made in 1980.

16 We note again that in F of that section, the
17 fact that the Graterford plan does not, itself, give an ETE
18 is irrelevant. Not required.

19 On H, I think the Board would be well
20 disposed to look carefully at the reference there, because
21 as we read that part of the transcript, the purport of Major
22 Case's testimony is that, as we read it, that with the
23 education provided, this would validate the Superintendent's
24 time estimates.

25 On the point on Mr. Morris' ideas of how 0654

1 should have been written to include worst case and panics,
2 we submit that the decision in the 3rd PID fully deals with
3 that and is controlling.

4 We do not believe that J is correct in alleging
5 that the eight to ten hour estimate is based on ideal
6 conditions. The word, 'ideal' is incorrect. Actually it
7 is based on realistic conditions and existing experience.

8 Similarly, with K, it is not fair to read the
9 finding as worded as suggesting that there is anything in
10 the record of this particular proceeding on the Graterford
11 contentions to suggest that Skippack Township has refused
12 to approve an emergency response plan.

13 The situation considered in the 3rd PID, that
14 Shippack is waiting until the routes have been established
15 is the only reference and only information in the record on
16 the point.

17 Looking at 3 G, the fact that -- well, reading
18 F and G together, about the addendum to the handbook having
19 been developed only in the last few weeks is a 'so what'.
20 It is irrelevant how it was done. Major Case at page 20,941
21 in response to a question by Mr. Otto, recalled that
22 indoctrination of the prisoners is something that had been
23 discussed last March.

24 On Roman Number IV C, that finding standing
25 alone is incorrect in its implicit assumption that the

1 Graterford plan should have considered corresponding public
2 evacuation.

3 Actually, the Graterford plan has, indeed, been
4 coordinated as the record shows with PEMA to assure that
5 what is done there will not interfere, or be interfered
6 with by the plans for the general public.

7 Again, G in that section is Mr. Morris' idea
8 of how o654 should be written to include panic.

9 There are, among others, O and F refer to
10 commercial telephone lines and so forth, which are not
11 pertinent here, which were rejected in the 3rd PID, and
12 has no record basis by anything produced by the Graterford
13 prisoners as to the P on the Hurricane Agnes in 1972.

14 Commenting quickly on Roman Numeral V, it is
15 important to note that this document which was produced
16 by the prisoner -- Prison Committee -- discusses the general
17 system for the State, not necessarily Graterford.

18 In fact, I don't know that it discusses
19 Graterford individually from what three pages we have seen.

20 Therefore, it is important to emphasize that
21 D there, which suggests that inmate population is expected
22 to keep ahead of additional capacity, would not apply
23 necessarily to Graterford. It applies only to whatever
24 it means for the entire Commonwealth.

25 And Superintendent Zimmerman noted that the

1 Staff and support resources would keep pace with any
2 population increase at Graterford.

3 There is no record in the evidence that
4 Graterford's population is not expected to level off.
5 Actually, Commissioner Zimmerman indicated he did not think
6 it would get too much larger, or words to that effect, which
7 he gave on cross examinatiin.

8 I think those are the only comments we feel
9 need be made, recognizing that our comments were not intended
10 to be comprehensive on each of the Intervener's findings,
11 but merely illustrative.

12 JUDGE HOYT: Does that conclude your remarks,
13 Mr. Conner?

14 MR. CONNER: Yes, it does.

15 JUDGE HOYT: Let me go off the record a moment
16 here.

17 (Off the record discussion ensues.)
18

19 End 6.

20 -SueWal fols.

21

22

23

24

25

26
27

#7-1-SueWall

JUDGE HOYT: The hearing will be on the record at this point. During the off-the-record period, the Board and counsel for all parties had discussions concerning the various exhibits that had been attended here, the status of whether or not some of these exhibits had been admitted or had not been admitted.

We made several suggestions as to how the accountability for these documents could be made at this time. The parties have agreed that they would do so. And the first counsel that -- let me first inquire, do all the parties agree that that's roughly what occurred during the off-the-record conference?

MR. LOVE: Yes.

JUDGE HOYT: Very well. I have affirmative noddings of head from all counsel and will so consider that there are no objections to that description.

Mr. Love, you have at various times here identified five exhibits for the Graterford Inmates that have been marked GI Exhibits 1, 2, 3, 4 and 5.

Would you at this time indicate to the Board how you wish to dispose of those exhibits?

MR. LOVE: Yes, I would, Your Honor. I would move 1, 2, 3 and 5 into evidence, or request that they be moved into evidence and would withdraw 4.

JUDGE HOYT: Very well. Exhibits 2, 3 and 5 will

#7-2-SueWal,

be received into evidence. Exhibit 1 for identification will be, as it had previously been rejected, attached to the record of these hearings.

(Graterford Exhibits 2, 3 and 5 for identification are received into evidence as Graterford Exhibits 2, 3 and 5.)

INDEXX

Mr. Conner?

MR. CONNER: As we indicated off the record, given the fact that 3 and 5 are excerpts from what purport to be State official documents we do not object to them for the purposes that they were used on cross-examination subject to the State counsel notifying us tomorrow if contrary to my expectations they are not State documents.

We object only to that part of 2 -- the parts of 2 which go beyond anything that was used for cross-examination purposes.

JUDGE HOYT: Very well. The Board's recognition of these three exhibits, Graterford Inmates 2, 3 and 5, and particularly 3 and 5, are provisionally admitted into evidence depending upon the notification to the Board of the accuracy and correctness by the counsel for the Commonwealth of Pennsylvania.

Ms. Ferkin, you and Mr. Otto will have twenty-four hours in which to accomplish that.

7-3-SueWal

MS. FERKIN: Yes.

JUDGE HOYT: Now you have the Exhibit 1 for the Applicant.

MR. CONNER: That was admitted.

JUDGE HOYT: That had been previously admitted.

MR. CONNER: Yeah.

JUDGE HOYT: I beg your pardon. I believe that that takes care then of all the exhibits.

MS. FERKIN: Judge Hoyt, with one exception.

JUDGE HOYT: Very well.

MS. FERKIN: Previously the Commonwealth had identified an exhibit, G-1. The Commonwealth withdraws that exhibit at this time.

JUDGE HOYT: Very well. Thank you. Then, all exhibits offered and not withdrawn have been ruled upon by the Board.

Any others not accounted for will accordingly be rejected.

Mr. Hassell.

MR. HASSELL: The staff would like to distribute copies of a document entitled "NRC Staff Proposed Findings of Fact and Conclusions of Law in the Graterford Issues."

JUDGE HOYT: Very well. We wish to afford the counsel for the opposing parties and all other parties an opportunity to examine this document prior to closing the

#7-4-SueWal

record.

(Mr. Hassell distributes the document to all
counsel and the Board.)

JUDGE HOYT: Very well. We will go off the record.

(Off the record.)

JUDGE HOYT: The hearing will come to order. Let
the record reflect that all the parties to the hearing who
were present when the hearing went into its momentary off-the-
record period for the purpose of counsel examining the Find-
ings of Fact and Conclusions of Law as submitted simultaneously
with Mr. Hassell's argument on behalf of the Nuclear Regula-
tory Commission staff.

Have you had ample opportunity, Mr. Conner?

MR. CONNER: Yes.

JUDGE HOYT: Mr. Love?

MR. LOVE: Yes.

JUDGE HOYT: Ms. Ferkin?

MS. FERKIN: Yes.

JUDGE HOYT: And that is as well for Mr. Otto?

MR. OTTO: That's correct.

JUDGE HOYT: Mr. Hassell.

MR. HASSELL: Yes, Judge Hoyt. The staff would like
to make one formal correction in those findings.

JUDGE HOYT: Very well.

MR. HASSELL: For the record, thanks to the review

#7-5-SueWall

by Applicant's counsel they pointed out to me that on Page 17 of the document, the finding denotated by Paragraph 50 -- and I might digress here a bit, the particular person who typed this is so used to being involved with Mr. Anthony being an active participant in Limerick that she has the wrong name here. It should be Mr. Morris, not Anthony. So, if you would strike Anthony, the word should be M-o-r-r-i-s. The last name should be M-o-r-r-i-s.

JUDGE HOYT: I'm glad you only brought that up on the last day of the hearing, Mr. Hassell.

(Laughter.)

MR. HASSELL: No. I don't think it's denigrating. I think it's accurate, you know.

In any event, I would like to make that formal change.

JUDGE HOYT: Would all the parties and the Reporter make that correction in the record. For the Reporter's benefit, that's on Page 50 -- correction, 17, and Finding Number 50 in the very first line of that Findings of Fact and Conclusions of Law as submitted by the staff. The words, "Finally, Mr. Robert Anthony..." should be deleted to that extent and insert Mr. Robert Morris, M-o-r-r-i-s.

Very well. Anything else? Does counsel for any party have any other matter prior to closing this record?

MR. LOVE: No.

#7-6-SueWall

JUDGE HOYT: Very well. None having been heard,

the hearing has been concluded. There is no additional
evidence to be taken.

And the hearing and the record on this matter is
closed.

(Whereupon the hearing is adjourned at 3:35 p.m.,
Wednesday, July 17, 1985.)

* * * * *

ENDDDDD

CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

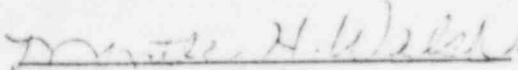
NAME OF PROCEEDING: PHILADELPHIA ELECTRIC COMPANY
(LIMERICK GENERATING STATION)

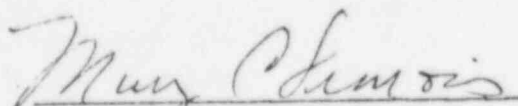
DOCKET NO.: 50-352
50-353

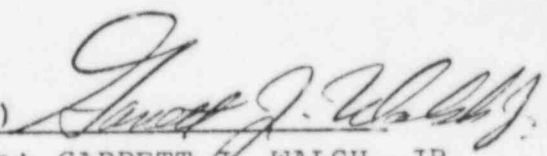
PLACE: PHILADELPHIA, PA

DATE: Wednesday JULY 17, 1985

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission.


MYRTLE H. WALSH
Official Reporter
Ace Federal Reporters


MARY C. SIMONS
Official Reporter
Ace Federal Reporters

(sigt) 
(TYPED) GARRETT J. WALSH, JR.

Official Reporter

Reporter's Affiliation
Ace Federal Reporters